

This book brings together recent international scholarship on the links between education and health, and recent research evidence evaluating the processes and outcomes of health promoting schools initiatives.

The book arises out of the *Education and Health in Partnership* conference, which took place in Egmond aan Zee, the Netherlands in September 2002. The key aims of the conference were to focus on effective partnership working for health in schools and to consider the evidence base for health promoting schools programmes. A significant outcome of the conference was the *Egmond Agenda*, which outlines the principal components for success in establishing health promoting schools.

Contributors from across Europe, the United States, South Africa and Australia present findings from national health promoting school projects, with a particular emphasis on the promotion of mental health.

The volume will be of interest to all education and health professionals interested in the contributions of schools in promoting health, empowerment, action competence and wellbeing of young people.

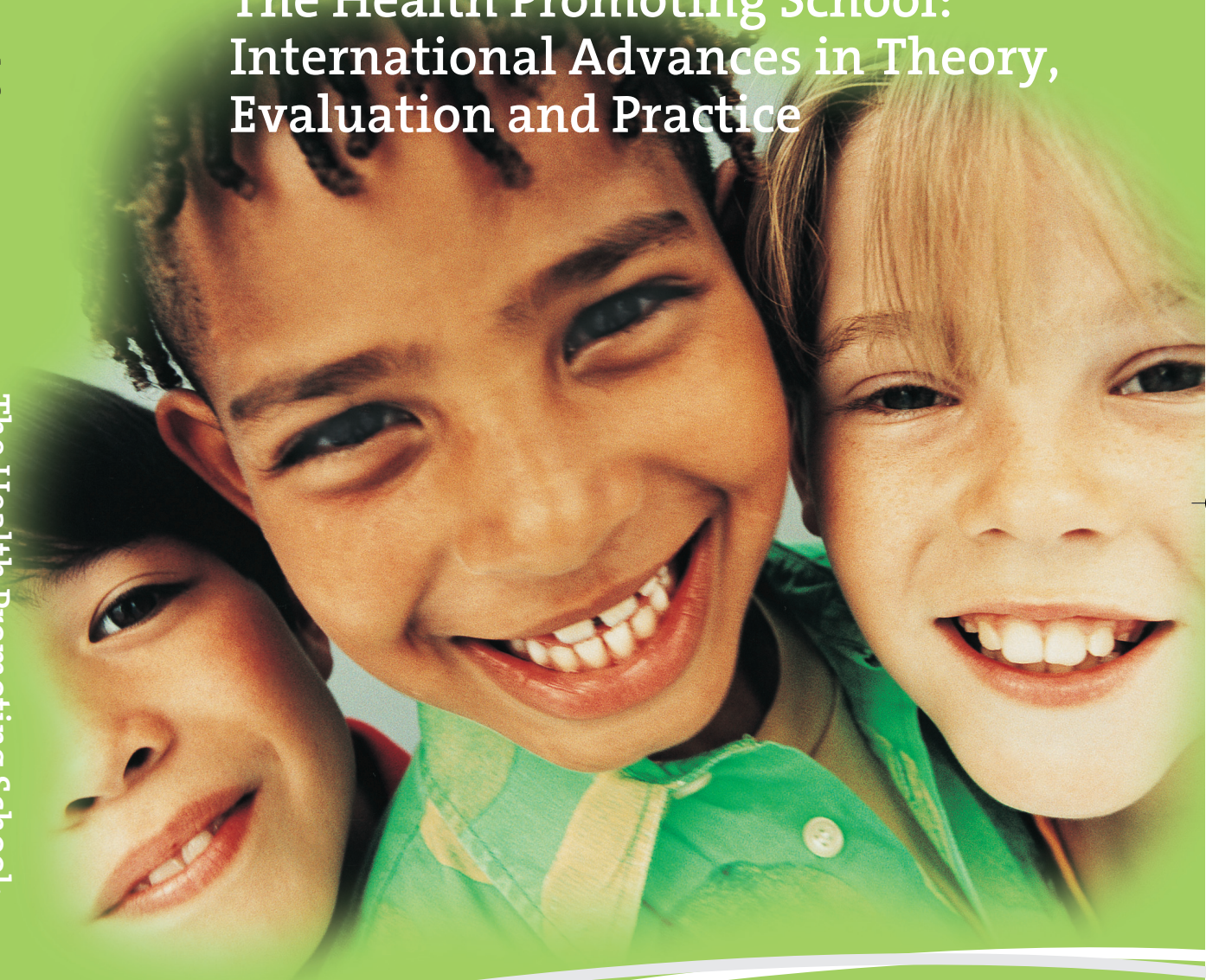


Stephen Clift  
Bjarne Bruun Jensen (Eds.)

The Health Promoting School:  
International Advances in Theory,  
Evaluation and Practice

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# The Health Promoting School: International Advances in Theory, Evaluation and Practice



Danmarks Pædagogiske  
Universitets Forlag  
Danish University of Education Press



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## **The Health Promoting School: International Advances in Theory, Evaluation and Practice**

Editors: Stephen Clift and Bjarne Bruun Jensen

Research Programme for Environmental and Health Education at the Danish University of Education

Published on behalf of the European Network of Health Promoting Schools by Danish University of Education Press

The views expressed in this publication are those of the author(s)/contributors and do not necessarily represent the decisions or the stated policy of the participating organizations of the European Network of Health Promoting Schools

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Typeset and Cover: Schwander Kommunikation, Copenhagen  
Printed in Denmark by: Reproset, Copenhagen

1. edition, 1. impression  
ISBN 87-7684-012-3

Danish University of Education Press  
54, Emdrupvej  
DK – 2400 Copenhagen NV  
forlag@dpu.dk  
www.dpu.dk/forlag

### *How to buy:*

National Library of Education  
P.O. Box 840, DK – 2400 Copenhagen NV  
www.dpb.dpu.dk  
bogsalg@dpu.dk  
T: +45 8888 9360  
F: +45 8888 9394

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# Foreword

*Vivian Barnekow Rasmussen*

The European Network of Health Promoting Schools was established in the early nineties by Council of Europe, the European Commission and WHO, Regional Office for Europe as an outcome of a series of workshops and conference focussing on the setting approach as a tool to develop health promotion in schools.

Over time countries active in the network have developed comprehensive programmes involving both health and education sectors. As the two sectors were often using different terminology and tools for evaluation, it soon became a challenge to provide evidence and proof of effectiveness, which would be useful to both health and well being perspectives as well as to academic achievement; the health promoting school had to prove its usefulness to all partners involved.

The European Conference on linking education with the promotion of health on schools was held in Egmond an Zee in September 2002. One of the key aims of the conference was to focus on education and health in partnership as well as on the evidence base for health promoting schools programmes.

The conference offered a series of workshops looking into different issues such as the effectiveness of school based health promotion indicators for success, and evaluation approaches and methods. A large number of papers were presented during the conference, all peer-reviewed in order to ensure high quality.

One outcome was the Egmond Agenda, a tool for programming which has a high emphasis on evaluation perspectives, and one of the follow ups from the conference was to start the process of collecting and consolidating the evidence base of health promotion in the school setting.



As a result of this participants who had presented papers at the conference, as well as national coordinators and through them also national researchers involved in health promoting schools approaches, were invited to contribute to this book. All contributions were peer reviewed and a final selection of relevant input to the book was chosen.

We have no intentions of claiming that this book represents the full picture of the evidence base for health promotion in schools; the publication is to be seen as stepping stone in building the evidence base, a contribution to the professional and expert literature linked to health promoting schools approaches. We sincerely hope that the book will not only be helpful to experts working in the field of school health promotion, but that it can also be used to inform policymakers on decisions to take to support HPS developments.

It is also our hope that this book will encourage researchers and other resource people working with health promotion and schools to make publicly available the results of their research to strengthen the evidence base for health promoting school approaches.

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# Introduction

*Stephen Clift, Bjarne Bruun Jensen and Peter Paulus*

## The Health Promoting School Vision

School health promotion has made a considerable progress since its beginnings in the early nineties of the last century. Expanding the traditional approach of health education in schools, which aimed at influencing knowledge, attitudes and behaviour of pupils it reached its final and elaborated conceptualization in the settings approach of the health promoting school. This approach, which links democracy, participation and health, has gained acceptance as one of the most powerful approaches to promoting health, empowerment and action competence in and with schools.

In 1992 the European Network of Health Promoting Schools started with pilot schools in four countries: Czech Republic, Poland, Slovak Republic and Poland (Stewart Burgher et al., 1999). Today more than 40 countries are members of this network. Several initiatives planned and negotiated with partners by the Technical Secretariat of WHO Europe in Copenhagen have stimulated the development of the network and strengthened its capacities. One event was an international workshop on 'Health Education and Democracy' held in Copenhagen in 1994 (Jensen, 1995), involving 65 participants from 30 countries' health promoting school networks. A later major event was the first Conference of the ENHPS in Thessaloniki-Halkidiki (Greece) (WHO, 1997). The theme of the conference 'The Health Promoting School – an Investment in Education, Health and Democracy' pointed in a direction we are still going. School health promotion has to be integrated in the educational agenda of the schools and has to be seen as contributing, through strategies such as participation, action competence and empowerment, to democratic development

in general and in schools in particular, to minimize the unequal distribution of health risks and learning opportunities in our societies. The resolution of that conference put up ten basic principles and targets that are needed in Europe to make it possible that every child has the opportunity to attend a Health Promoting School.

More than ten years of piloting, further developing and evaluating this approach in the school setting in different countries produced a wealth of results and experiences. Denman et al. (2002) summarized the policy, research and practice of the health promoting school movement. It complements the publication of the International Union for Health Promotion and Education (IUHPE, 1999), which gives a comprehensive overview about the evidence of effectiveness of health promotion and school health promotion in particular. Publications of the research results on 'Health Behaviour of School-aged Children' (HBSC) a international project run by WHO-Europe in more than 30 countries worldwide completed the picture of school health especially from the perspective of pupils (King et al., 1996; Currie et al., 2000; Currie et al., 2004). As a result we know today a lot more about the structures and processes in and outside the school that support the development of a health promoting school. We also know more about the basic principles that underlie current perspectives on school health promotion: participation, empowerment and networking. We also know more about what can be expected as outputs and in the longer term as outcomes from school health promotion initiatives.

The European Network of Health Promoting Schools has contributed significantly to the development of evaluation and research focused on health promoting schools. In three workshops organized in cooperation of the Technical Secretariat of ENHPS and the Swiss Federal Office for Public Health, which took place in Switzerland between 1998 and 2004 (ENHPS, 1998, 2001, 2004) National Coordinators and researchers from more than 40 countries in the network had the opportunity to focus on processes of evaluation to clarify what works and why and to assess the effects of the health promoting school for different groups in the school

## Origins of This Book

This book arises out of the conference 'Education and Health in Partnership' which took place in Egmond aan Zee, The Netherlands in September 2002

(Young, 2002). For the conference, which was attended by more than four hundred and fifty delegates from all over Europe and the rest of the world, a scientific committee was formed. The task of the committee was to peer-review all the abstracts sent in for paper and poster presentations. At this time it was obvious that the quality of papers was of such a high standard that it would be worthwhile to pursue the possibility of publishing the best contributions in a book.

Following the conference, the Secretariat of the European Network of Health Promoting Schools invited Stephen Clift, Canterbury Christ Church University, and Bjarne Bruun Jensen, Danish University of Education, to work together as editors of this publication. The main idea of the publication was to bring together recent and significant scientific work on the Health Promoting School, both in developing conceptual and theoretical frameworks for understanding their operation and in producing evidence to assess and evaluate the processes and outcomes.

An internationally renowned Editorial Board was established to assist the editors (all of whom were members of the organising committees for the Egmond Conference), and all submissions were subject to rigorous review. The members who included the editors of the journals 'Health Education' and 'Health Education Research: Theory and Practice' were:

- Derek Colquhoun (UK)
- Carl Parsons (UK)
- Peter Paulus (Germany)
- Jörgen Svedbom (Sweden)
- Keith Tones (UK)
- Katherine Weare (UK)
- Barbara Woynarowska (Poland)

Through the journal 'Network News', direct e-mails and the business meetings the National Coordinators within the European Network of Health Promoting Schools people were invited to encourage relevant resource people and researchers to send in articles for the publication. Furthermore, conference attendees outside the European Network of Health Promoting Schools (e.g. from other countries or from other networks) were contacted directly and invited to send in contributions.

Submissions for the book were reviewed independently by at least two members of the Editorial Board. The reviews were carried out on the basis of

agreed criteria reflecting the guidelines that were circulated to potential authors. Many of the papers accepted for publication have been through a dynamic process involving the authors, the editorial board and the editors. We have found this process stimulating and fruitful and we do hope the authors feel likewise.

In the guidelines the authors were invited to take account of the Egmond Agenda, which was the overall outcome of the 'Education and Health in Partnership' conference (Young, 2002). In addition to this, and on the basis of the conference declaration from the first European Conference of the European Health Promoting Schools in 1997 (WHO, 1997) the authors were encouraged to take notice of the following statement:

A Health Promoting School embodies practical and conceptual links between education, health and participatory values. It relies on input, experiences and decisions at local levels, yet learns from and contributes to wider goals, objectives and developments. There will always be new challenges to be faced. An HPS programme can never be complete, or stop learning from others.

The book, with its 42 contributors and 24 chapters, reflects these aspects and illustrates the cultural diversity and pluralism existing within the Health Promoting School 'movement' according to methods, health concepts and understanding and interpretation of 'evidence'. We hope this variety will be considered and received as a great inspiration for further developments at all levels.

## Issues Addressed

Contributions to this volume fall readily into three groupings – those which discuss some aspects of the theory or practice of health promoting schools, or raise important questions to do with the focus and process of health promotion in school settings – those which present qualitative case studies of health promotion initiatives in schools – and those which report the results of comparisons between health promoting and non-health promoting schools in terms of outcome measures.

Section I, *Concepts and Theory*, begins with Keith Tones outlining the major ideological and socio-cultural influences on the school curriculum understood in its widest sense, and outlining the key values inherent in health promotion.

Tones provides a valuable context for all contributions which follow in presenting the settings approach to health promotion and the key requirements of a Health Promoting School. The key issues he identifies – the creation of ‘a school climate in which good relationships, respect and consideration for others flourish’, and the promotion of opportunities which ‘actively develop pupils’ self-esteem and self confidence, enabling them to exercise responsibility for their own and others’ health’ – are to be found reflected in the contributions throughout this volume.

In the following chapter, Derek Colquhoun continues the critical theme. He makes an appeal for recognising the complexity of school settings and the need to ensure that this complexity is taken into account in any attempts to evaluate health promoting school initiatives. Schools he believes should be active partners in a research process designed to help them reflect critically on their aims and achievements – research that is ‘with and by’ schools – rather than being the object of detached scrutiny from health researchers pursuing their own agendas.

The tensions between education and health implicit in Colquhoun’s account are further addressed by Peter Paulus. He outlines recent developments in Germany on the need to address the significance of health for educational success and integrate this issue with concepts of the health promoting school. His suggestion that the ‘healthy school’ needs to be replaced by the idea of the ‘the good and healthy school’ will surely have wider resonance in other national contexts, where concerns with educational standards per se are high on political agendas. So too will the suggestions by Charles Viljoen and his colleagues that the development of good and healthy schools and their evaluation is facilitated by having a clear set of indicators. Useful work has already been undertaken with the European Network of Health Promoting Schools on developing a framework of indicators, but the continued relevance of this issue is clearly demonstrated by the fact that indicators are the focus of a forthcoming evaluation workshop to be organized by European Secretariat November 2005. Viljoen et al. are surely right in emphasising that indicators need to be relevant to developments and structures within each national context.

The following contribution by Mariken Leurs and colleagues provides an account of the development of a particular approach to health promotion in The Netherlands, which clearly has particular implications for the development of criteria for evaluating process and outcomes. SchoolBeat is a ‘bottom-up’ approach for school health promotion which has ‘a strong focus on the

establishment and monitoring of sustainable intersectoral collaborative support for comprehensive school health promotion.’ In addition, a new model for evaluating the collaborative aspects of this approach has been devised – and provides an excellent example of an approach to evaluation that is ‘with and by’ schools, as advocated by Colquhoun.

The need for capacity building in schools if they are to make best use of existing research evidence in developing health promotion programmes is addressed in the next contribution by Cheryl Vince Whitman. Writing from a foundation of considerable experience in the United States context, the chapter argues that if education policy makers and teachers are to assess research evidence on the effectiveness of interventions, they need to have ‘a basic understanding of the language and concepts of social science research and evaluation, as well as basic knowledge from the fields of public health, diffusion of innovation and organizational development’. Whitman goes on to offer guidelines on what needs to be done ‘to advance the research-to-practice process in schools’

Chapters in Section I then move to a more detailed consideration of knowledge construction and pedagogy within schools. Jörgen Svedbom writing from a Swedish context raises interesting issues at the level of formal curriculum structure and the place of teaching about health. He highlights the struggles for space and time in the curriculum that can arise between areas such as health and environmental studies, and what may be regarded as mainstream concerns of schools as educational institutions – and makes an appeal for recognising the value that can come from curricular integration rather than division. If teaching about health and about the environment are potentially in competition for space in school timetables, it would perhaps be sensible to recognise their commonalities and pursue an integrated approach.

In the first chapter Tones highlighted the need for ways of working with young people in schools, which help to develop their self-confidence and skills in addressing health issues, and the following two chapters address such pedagogical issues in more detail. Aldinger and Whitman review a large body of theory and research that provides a rationale for the benefits and uses of skills-based health education. Such education, they argue, should ‘enable young people to apply knowledge and develop attitudes and life skills to make positive decisions and take actions to promote and protect one’s health and the health of others.’ Research evidence on the critical factors that lead to positive outcomes from health education is usefully reviewed, and the authors provide valuable



guidance on the range of issues that need to be addressed to ensure that health promotion can be effective in schools settings.

Venka Simovska provides a more fine-grained analysis of the role of young people's participation in actively learning about health – developing not simply knowledge of health issues, but also the sense of being able to take action in promoting their own health.

The importance of understanding young people's perspectives on health is further reinforced by Bjarne Bruun Jensen and Bente Jensen's account of their innovative studies of young people's beliefs about health inequalities. Their rhetorical question 'Do young people have an opinion?' is answered with a clear 'yes!' and their work serves to remind us – if we need reminding – that a sound understanding of young people's views are an essential foundation for the development and delivery of any effective educational endeavour – and not least in the area of health.

Section II, *Case Studies*, presents insights into health promoting initiatives from a wide range of countries. Katherine Weare describes a project to introduce the idea of the health promoting school into two large districts in Russia, through a sponsored programme of teacher training and in-school consultation and support. The chapter provides a fascinating insight into the cultural and institutional assumptions embodied in the philosophy of the European approach to health promoting schools and the extent to which they are accepted or otherwise in the Russian context.

Rolf Lander and Lena Nilsson address related issues in their discussions of school based health promotion initiatives in Sweden and the extent to which organizational and professional constraints serve to compromise otherwise good intentions. As Lander notes: 'Health promotion in schools is an endeavour framed by the institutional and professional forces at work within the social organization of schools, and it will not be successful in the long run if it does not build on an understanding of such forces.' His case studies provide illuminating illustrations of the 'political' dimensions of innovation in educational settings. Nilsson focuses on the possibilities for real dialogue in schools, which offers opportunities for all participants to share their perspectives. In an ideal dialogue, she argues '... different voices must be invited to participate and different ways of communicating must be permitted. This sort of dialogue is marked by a climate of open participation and guided by a spirit of discovery and its tone is exploratory and interrogative.' The case studies show that while the schools investigated tried to establish such dialogical patterns, they had 'not

yet fully grasped the strategies needed to make all pupils participate and feel secure in dialogue and to be aware of the learning opportunities that such dialogue provides’.

Kerttu Tossavainen and her colleagues provide a further illustration of issues raised in Section I by Derek Colquhoun and explored by Kathy Weare – namely the role of teachers in the approach adopted in evaluating health promoting school initiatives. In Finland, a clear commitment was adopted to a collaborative model both in developing and evaluating the impact of innovation in schools – but this process, as they show, has brought substantial challenges. As they note: ‘...the results of our study showed that schools seemed to lack a clearly defined, shared collective health promotion policy that would have been implemented and everyone’s responsibility’ and a lack of such consensus inevitably interferes with a collaborative approach to evaluation.

The following two case studies – by Bjarne Bruun Jensen and Venka Simovska on *Young Minds* and Marco Franze on *MindMatters* have two common features – they draw on experiences of projects involving international collaboration, and also provide insights from both teachers and pupils of the projects they were engaged in. The idea of a European Network of Health Promoting Schools is built on a commitment to the importance of sharing ideas, experiences and good practice – of individuals in different countries learning from one another – and so it is encouraging that we were able to include these case studies which represent cross-national sharing of information and on-going collaboration at the level of work in schools. These studies also illustrate an important principle that the views of different groups of participants and stakeholders should be sought in the evaluation of an initiative. It is a particularly strong feature of both studies that they include accounts from both teachers and pupils of the projects described.

The case study presented by Kristina Egumenovska continues the theme of cross-national collaboration in her account of the application of the action competence model developed in Denmark, within a Macedonian context. Her account is particularly valuable for highlighting how young people’s experience of working together towards an agreed goal brings its own benefits, irrespective of whether the collaborative action is successful at the end of the day. She illustrates in a concrete way the claim sometimes made in health promotion that it is process that is valuable and not just the outcomes.

Teachers and pupils are central characters in the educational process in schools, but not the only significant figures, and two papers from Finland

remind us of the key role that nurses and parents play in relation to the health of children and young people. Raili Välimaa notes that ‘school health nurses have a ringside seat in observing health issues at school’ and for that reason their accounts of the problems young people bring to them provide important insights – not least into the changing pressures young people experience. Hannele Turunen and her colleagues report a study of parents’ views of ‘how they support the healthy growth of their children’ and the most striking feature of their results, is that ‘parents lacked knowledge of many common issues related to maintaining adolescents’ health and well-being’ – suggesting that the school has a role to play in helping parents understand some of the key health challenges facing young people.

Section III, *Comparative Studies*, reports studies on the effects of health promotion initiatives in schools in various national contexts, which focus on outcomes assessed in standardised ways. Mary Byrne and colleagues report an evaluation of the impact of the Irish *Mind Out* programme designed ‘to provide opportunities for young people to promote their own mental health through an exploration of stress and coping, sources of support, emotions, relationships, and supporting others.’ This programme was substantially based on the Australian *Mind Matters* materials discussed in the earlier chapter by Marco Franze. A sophisticated design was employed to assess whether the programme had effects over and above a more general health education programme, and to control for the possible effects of baseline assessment. Broadly speaking the results were positive showing that young people following the *Mind Out* programme showed greater compassion and understanding for people experiencing depression, were more aware of services available to young people and were able to suggest positive steps for people needing to seek help.

Two further controlled studies in the Czech Republic reported by Miluse Havlinova and Michal Kolar and in Latvia by Silva Omarova and colleagues, focus on issues of school and classroom environment and highlight the problem of aggression and bullying among pupils in schools. Strikingly, while both studies supported expectations that health promoting schools would provide evidence of more positive social environments, more specific expectations that young people would report less bullying were not supported. In both accounts the authors interpret their findings in a favourable light – suggesting that pupils in health promoting schools showed higher awareness to the problems and were more willing to disclose and challenge such behaviours.

The only contribution in this collection to address issues of sexual health follows in the chapter by Christiane Thomas and colleagues, who consider the contribution that visiting health professionals can make to health promotion activities within schools. The primary aim of their study was ‘to evaluate the effectiveness of the gender specific sexual health program by female physicians in changing emotional knowledge associated with sex and sexuality.’ Young people in grades 6 and 9 participated in the study and their sexual knowledge was judged to be quite limited prior to a 90-minute intervention – but significantly improved two weeks later.

Finally, the chapter by Kate Lemerle and Donald Stewart provides some counter-balance to the weight of contributions focusing on young people’s health in considering the important issue of teachers’ well being. There is little doubt that teaching is a demanding profession, and if schools take seriously the health promoting school philosophy, the health and well being of teachers – and other members of staff in the school – should be explicitly addressed. Detailed findings of a large-scale survey of teachers are reported, and the key message is clear: teachers in health promoting schools reported ‘significantly lower job-related stress, and significantly better self-rated mental health.’

Taken together, we hope that the contributions to this volume provide the reader with a picture of some of the recent international developments in the theory, evaluation and practice of health promotion in schools. The book does not provide a comprehensive account of all the research and evaluation that has been undertaken, or is ongoing, on health promoting schools and health promotion initiatives in schools. The reader will be aware, for instance, that not all countries in the European Network are represented here. We hope, nonetheless, that this volume will make a valuable contribution to the continuing effort to establish some of the necessary conditions for effective health promotion in school settings, not least for the benefit of future generations of young people.

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**Section I**  
**Concepts and Theory**





## 1

# Health Promotion in Schools: The Radical Imperative

*Keith Tones*

## Introduction

This chapter will argue that the symbiotic relationship between health education and healthy public policy is at the very heart of health promotion. It will assert that the most important function of health education is essentially radical and political and this should be reflected by what is taught in schools. First, though, it will be useful to give some thought to the major factors that determine the structure and operation of the curriculum in general.

## Influences on the Curriculum

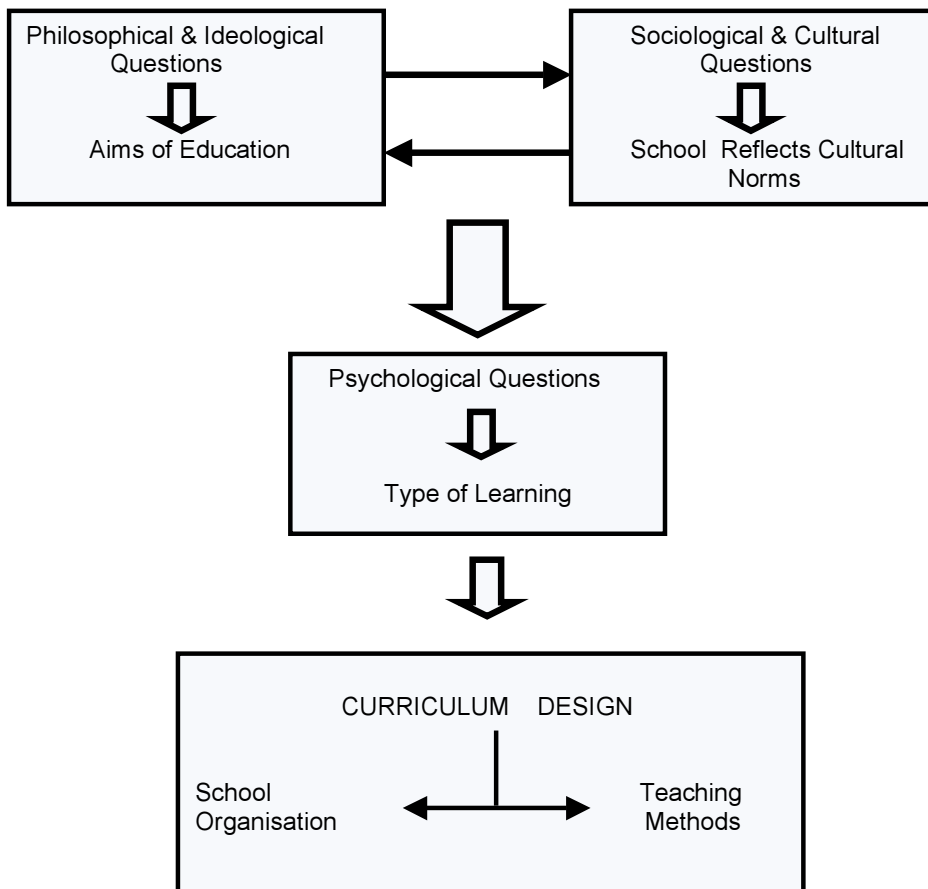
One of the key features of the Health Promoting School initiative is its acknowledgement that the curriculum does not merely define what is taught but rather comprises the whole school experience – including its organizational structure and ethos – and the kinds of alliance established with the community and other external organizations.

Ultimately the design of the curriculum results from the interaction of three main influences:

- Ideologies – the values underpinning the curriculum.
- Sociological and cultural factors.
- Psychological factors.

The dynamics of their inter-relationship is shown in Figure 1 below.

**Figur 1.** *Influences on the Curriculum (After Tones and Green, 2004)*



### Philosophy, Ideology and Values

Schools cannot teach everything. Decisions must be made about what is most worthwhile in a particular culture and a choice must be made. The result of that choice is the curriculum – which is grounded in ideological and philosophical values. For instance, a particular government might be driven by an economic imperative and insist that its schools should ensure that pupils acquire the

skills and motivation needed for a successful enterprise culture. On the other hand, an educational philosopher might assert that the main purpose of schooling is to nurture children's creative urges and to ensure that teachers foster young people's mental, physical and social growth and development.

Interestingly for those of us committed to health and social education, many educational philosophers have asserted that education must by definition be entered into voluntarily: i.e. it involves helping people make rational decisions based on critical understanding – otherwise it is mere instruction, or training, – or worse – brainwashing!

The concept of ideology is open to a number of interpretations; it is generally, however, considered to be much more emotionally charged than philosophy. A more complete discussion of this notion is not possible here [see Tones and Green (2004) for an extended review in relation to health promotion]. In the context of the present chapter and its emphasis on the importance of empowerment, it is worth noting Giddens' (1989:727) comment about ideology:

Ideologies are found in all societies in which there are systematic and engrained inequalities between groups. The concept of ideology connects closely with that of power, since ideological systems serve to legitimize the differential power which groups hold.

Eagleton (1991:xiii) not only reminds us about the relationship between ideology and power but emphasizes the insidious way in which this power is exerted:

The most efficient oppressor is the one who persuades his underlings to love, desire and identify with his power; and any practice of political emancipation thus involves that most difficult of all forms of liberation, freeing ourselves from ourselves.

Perhaps the most obvious example of this phenomenon is where an inequitable caste system characterizes a religious system. Where the process of indoctrination has been an integral part of primary socialization, lower castes will accept their inequality as right and proper – and a sign of 'God's' love. There will be no need for religious education in school to do anything but remind pupils of the situation and indicate the implications!

### **Sociological and Cultural Factors**

As figure 1 demonstrates, Ideology is intimately related to Culture. The term socialization defines the process whereby the values and norms central to a particular culture or sub culture are transmitted. Indeed it is useful to view the school as a socialization agency that – consciously or unconsciously, formally or informally – seeks to instil beliefs and values that are central to the ideology of a given culture. These may reflect the dominant national and/or religious culture; they may contradict local cultures [thus creating culture clash]. Moreover, each school will have its own culture which may mirror, to a greater or lesser extent, dominant cultures; alternatively, schools may question or challenge cultural values. Indeed, one of the most important dimensions of the process of socialization is whether it is essentially conservative or creative. In fact, a major contention of this chapter is that schools should be creative rather than conservative agencies. In those political systems, which claim to be democratic, the school curriculum should, therefore, be designed to constantly challenge the status quo and promote democratic values. They should, therefore, routinely question cultural values in general and, more particularly, appraise them in the light of health promotion values [which are, incidentally, consonant with democratic values].

### **The Values of Health Promotion**

Ideology and culture determine the way health is defined [and even the interpretation of the determinants of health and illness]. Now, it is difficult and sometimes unwise to pontificate about the core values of health promotion but since most nations at least pay lip service to the canons of World Health Organization, we may confidently identify the following key values:

- Health is holistic and not solely concerned with disease and its prevention.
- Health is about equity and social justice.
- Health is about empowerment.

The values mentioned above are also fundamental to the Health Promoting School.

### **Psychological Factors, Curriculum Design and Educational Methods**

If we refer again to figure 1 above, we can see that ultimately the translation of ideological and philosophical debate into practice involves rather more

technical developments, which involve a kind of ‘psychological task analysis’ based on appropriate learning theory. Whatever its goals, an essential feature of a successful educational enterprise involves providing the conditions necessary for efficient learning. This, in turn, would typically require an efficient analysis of the *types* of learning involved in achieving valued goals. Educators must also take account of the motivational factors that may influence pupils’ attitudes and commitment to action – and they must, of course, consider the developmental stage of the learners. For instance, it is self evident that providing knowledge about the effects of alcohol differs from creating responsible attitudes to alcohol use, which also differs from providing the social interaction skills needed to refuse alcohol – and the ‘psychomotor’ skills involved in providing first aid for friends who have over-dosed on drugs!

Of course, learning theory is not completely neutral. Whatever teachers or psychologists may think, it is often permeated by ideological and cultural factors – for example, beliefs about the characteristics and capabilities of adolescents frequently reflect cultural expectations and prejudices. And the types of teaching methods used to achieve learning objectives are frequently governed by philosophical views about the nature and central purpose of education. On the other hand, it is important to recognize that ideological or philosophical commitment will not magically result in the relatively permanent changes in disposition or capability that characterize learning.

Additionally, curriculum design requires decisions about, for instance, the logistical matters involved in creating a ‘whole school approach’ that ensures that the organization and ethos of the school is consistent with the principles and values of health promotion and the learning tasks addressed in the ‘taught curriculum’. Again, an understanding of the requirements of health-related learning should, ideally, result in the adoption of teaching methods designed to achieve learning goals with maximum efficiency – and, where necessary, the provision of appropriate teacher training in those methods with which they may be unfamiliar.

## Health Promotion: A Contested Concept

Health promotion is one of those concepts open to multiple interpretations. This is by no means helpful for planners and practitioners since some of these interpretations may be diametrically opposed! There is certainly agreement

that health promotion involves action – rather than, for example, being a purely academic subject. However, it is the nature of the health promotion action that may prove controversial. Two underlying reasons for the controversy may be identified. The first of these centres on different interpretations of health: accordingly some would argue that health promotion is primarily concerned with the prevention of and control of premature death, disease and disability. On the other hand, it might be argued that it should primarily be about achieving positive outcomes – such as ‘well being’, or a sense of coherence and control. Or again, some may believe that health promotion should seek to achieve both of those goals.

A second difficulty derives from different assessments of the *causes* of health and ill health. Four main influences have regularly been identified: genetics, health services, individual life style and the environment in which we live, work and play. Arguably, the main source of controversy has been between, on the one hand, those who advocate major social and environmental change as the only effective means of promoting health and, on the other hand, those whose attention is focused on *individual* lifestyle change. In recent time, it is probably true to say that advocates of environmental change have been more vocal in their accusations that the individual focus is a form of ‘victim-blaming’ – a view that is consistent with the pronouncements of WHO. A third question should also be raised: where does health education feature in the debates and discussion about health promotion?

### **Health Education and Healthy Public Policy: A Symbiotic Relationship**

The following ‘formula’ is helpful in identifying the part played by education in the health promotion enterprise:

$$\text{Health Promotion} = \text{Healthy Public Policy} \times \text{Health Education}$$

The ‘formula’ acknowledges the fact that education alone is unlikely to achieve major changes – unless it is supported by health and social policy measures. An obvious example would be teaching about the importance of using contraceptives in circumstances where these were too expensive or not readily available. On the other hand, what has frequently been ignored is the fact that without education, many policy measures will simply not be implemented [see



earlier comments about ideology]. Consider also current concerns about the increase in obesity in children and their parents – at least in wealthier nations. It is possible to teach pupils and their parents about good nutrition such that they can correctly score at least 9 out of 10 in a knowledge test by reiterating the importance of avoiding saturated fats, salt, and fizzy drinks – and listing the benefits of eating fruit, vegetables and fibre. However, even if, in addition to *knowing* what they ought to eat, they have a positive attitude to healthy eating there is typically a number of social and environmental barriers to their actually adopting a healthy diet. For instance, lack of access to healthy food in school, at home and in local shops may well prevent positive attitudes being translated into practice – unless there is a serious attempt to create ‘healthy public policy’. All of this explains the current emphasis by public health planners on implementing healthy nutrition policy by such measures as food labelling, and restricting the advertising of unhealthy food on children’s television.

However, as nutritionists and health promoters know to their cost, achieving policy changes is usually problematic. A powerful food industry – and its political allies – will not willingly surrender its profits by changing its products and reducing its advertising. It will assert the freedom of individuals to choose whether they want to eat healthy or unhealthy food. Unfortunately, as a result of a complex of psychosocial and socioeconomic factors, many individuals are not free to choose! Consequently, health education has a new role. Its prime concern is no longer with trying only to persuade individuals to adopt a healthy lifestyle; rather its new role is to influence policy makers by adopting a political stance and a revolutionary brand of ‘radical’ or ‘critical’ education.

### **Radical-Political Health Education**

The term ‘critical health education’ has been used to refer to the use of tactics involving critical analysis of social and political factors that militate against health followed by action to tackle those factors. The term ‘radical-political’ is used here since it emphasizes that action is first of all based on analysis of the roots of health problems – and when these roots are social, cultural, environmental and socio-economic, political forces are marshalled in order to bring about social change. As Signal (1998:257) points out:

Health promotion is an inherently political enterprise. Not only is it largely funded by government but the very nature of its activity suggests shifts in power. Its recognition that peace, shelter, food, income, a stable

ecosystem, sustainable resources, social justice and equity are basic pre-requisites for health implies major redistribution in power and wealth.

Although it has not been popular – for obvious political reasons – radical or critical education is not a new phenomenon. For instance in the 1960s, Hansen and Jensen (1969) produced *The Little Red School Book* in order to politicize pupils and help them challenge the very structure of their schools (in an assertive rather than aggressive manner!). The following extract provides a flavour of their approach:

Grown-ups do have a lot of power over you: they are real tigers. But in the long run they can never control you completely: they are paper tigers... Children and grown-ups are not natural enemies. But grown-ups themselves have little real control over their lives. They often feel trapped by economic and political forces.... Cooperation is possible when grown-ups have realised this and have started to do something about it. If you discuss things among yourselves and actively try to get things changed, you can achieve a lot more than you think. We hope that this book will show you some of the ways in which you can influence your own lives...

Again Postman and Weingartner (1969) argued that education should be an essentially 'subversive activity'. It should, for instance, challenge religious dogma:

... irrevocable commitment to any religion is not only intellectual suicide, it is positive unfaith because it closes the mind to any new vision of the world. (1969:19)

Furthermore, Wren's discussion of Education for Justice is based on a radical-political perspective which also happens to be entirely compatible with WHO's commitment to tackling inequity:

Justice calls for the establishment of a society in both a global and national scale where each person has an equal right to the most extensive basic liberties compatible with a like liberty for all, where social and economic inequalities are so arranged that they are to the greatest benefit of the least advantaged, and where they are linked with position

and appointments which are open to all through fair equality of opportunity. (Wren, 1977: 55 in Tones and Green, 2004)

More recently Fien (1994) advocated a 'critical theory' approach having direct relevance to health education. His focus was on environmental education, which should not be merely teaching young people *about* threats to the environment but actually involving them in becoming '...agents of social change and sustainable development.' And so a class of children might carry out a survey of pollution to local water supplies or take part in identifying threats to pedestrians in their local streets (using the occasion also to learn about appropriate statistical techniques). They might then analyse the results and lobby the local mayor and councillors. Such an event is newsworthy and local press and television reporters are eager to interview the children and their parents – and confront the mayor! As will be noted later, the school is thus at the centre of community health promotion and has become involved in 'media advocacy' – a mainstay of critical, radical health education and promotion.

### **The Health Promoting School and The Empowerment Imperative**

As noted above, the notion of empowerment is central to the ideology of health promotion. It has frequently been described by WHO in terms of helping people gain control over their lives and their health. It comprises two related notions: i) individual or self-empowerment and ii) community empowerment. A full discussion of these concepts is not possible here (see Tones and Tilford, 2001 and Tones and Green, 2004 for a more comprehensive account). Suffice it to say that self-empowerment involves having a relatively high degree of control over one's life and, therefore, one's health. The following definition is from Tones and Tilford (2001:40):

Self empowerment is a state in which an individual possesses a relatively high degree of actual power – that is, a genuine potential for making choices. Self empowerment is associated with a number of beliefs about causality and the nature of control that are health promoting. It is also associated with a relatively high level of realistically based self esteem together with a repertoire of life skills that contribute to the exercise of power over the individual's life and health.

An empowered community fosters self-empowerment; self-empowered people contribute to an empowered community. A community without empowerment is fatally handicapped and is unlikely to take the kinds of political action necessary to create 'healthy public policy'.

## Strategies and Methods for Empowerment and Social Change

### The Settings Approach

As Tones and Green (2004:270) have noted,

A key feature of the settings approach is that it involves ensuring that the ethos of the setting and all the activities are mutually supportive and combine synergistically to improve the health and wellbeing of those who live or work or receive care there. It involves integrating health promotion into all aspects of the setting and including within its remit all those who come into contact with that setting.

These fundamental characteristics of a health promoting school are noted throughout this book. I will merely reiterate here the importance of this requirement for empowering pupils, teachers – and families. The following two of the 12 key goals originally identified by the European Network of Health Promoting Schools relate directly to empowerment – and are still central to current thinking:

- Create a school climate in which good relationships, respect and consideration for others flourish.
- Actively promote opportunities which develop pupils' self-esteem and self confidence, enabling them to take initiatives, make choices and exercise responsibility for their own and others' health.

(HEA, 1996)

A second key feature of the 'eco-holistic' model of the Health Promoting School (Parsons et al., 1997) is its insistence that the school should be an integral part of the local community: it should not only use community resources but should also contribute to the community – and, as with the above example of environmental education, *take 'political' action to change it.*

### **Pedagogy: Teaching Methods for Empowerment**

Clearly, many teachers might be rather apprehensive about espousing a critical, radical approach to health promotion. This is understandable – especially in those circumstances where government exerts a close – and even repressive – control over the curriculum and where this is the case, the major concern becomes one of influencing government policy through advocacy and related political measures.

Teachers may also feel uncomfortable, or just unfamiliar, with the teaching methods and approaches that are necessary to achieve the goals of the radical imperative. Accordingly I will now give some brief consideration to strategies and methods.

### **Critical Consciousness Raising: the Approach of Freire**

Paulo Freire is arguably the best-known advocate of a radical, empowering approach to education. His philosophy was essentially humanistic and concerned with human dignity. He fought oppression and poverty – and the helplessness and alienation resulting from those ‘social pathogens’. Oppression, he argued, could be political or religious – and as he put it, ‘Sectarianism, fed by fanaticism, is always castrating.’ Oppressed people resort to ‘magical’ explanations of their lives and their world (Freire, 1972:132). As an example of the de-powering effect of religion, he quoted the words of a Chilean priest who visited him in 1966:

... I went to see several families living in shanties in indescribable poverty. I asked them how they could bear to live like that, and the answer was always the same: ‘What can I do? It is the will of God and I must accept it.’

The ‘empowering’ teaching techniques adopted by Freire centred on critical consciousness raising (*conscientizacao*) which involved learning to recognise social, political and economic realities and thus challenge the perceptions of the world that resulted from ideological ‘brainwashing’. A central feature of Freirean education is encapsulated in the concept of *praxis* – the interactive process of action and reflection. Action without reflection is mere activism; reflection without action may involve mere detached intellectualism (see also Mogenson’s (1997) description of *praxis* and critical thinking in environmental education).

The pedagogical ‘technique’ employed by Freire was small group discussion using a visual aid to trigger debate and critical thinking. It is, therefore, apparently not dissimilar to approaches used in a large number of health and social education ‘teaching packs’. However, it differs significantly from those activities in which pupils seek desperately to guess the ‘right answer’ to what they think the teacher wants to know! Note Freire’s specification of the requirements of a culture circle:

In order to be able to be a good coordinator for a ‘cultural circle,’ you need, above all, to have faith in man [sic], to believe in his possibility to create, to change things. You need to love. You must be convinced that the fundamental effort of education is the liberation of man, and never his ‘domestication’. You must be convinced that this liberation takes place to the extent that man reflects upon himself in relationship to the world in which, and with which, he lives... A cultural circle is a live and creative dialogue, in which everyone knows some things and does not know others, in which all seek, together, to know more. This is why you, as the coordinator of a cultural circle, must be humble, so that you can grow with the group, instead of losing your humility and claiming to direct the group, once it is animated. (Freire, 1972: 61)

Clearly teachers may have their doubts about the relevance for schools in developed countries of a teaching method developed to counter the effects of oppressive South American cultures. It can, however, be argued that people in the ‘modern’ western world need to be liberated – e.g. from the victim blaming ideology! Moreover, many teachers will know at first hand the perilous state of many depressed inner city neighbourhoods which can indeed be dangerous and where alienation is certainly common. For instance consider the following example of a version of the culture circle used by peer facilitators. It centred on alcohol problems in ethnic minority groups in a U.S. city. A four-minute trigger film depicted the life of an Indian woman who visited an emergency centre drunk and who had been raped. The acronym ‘SHOWED’ was used to guide discussion (Wallerstein and Bernstein, 1988:386 cited by Tones and Green, 2004:233):

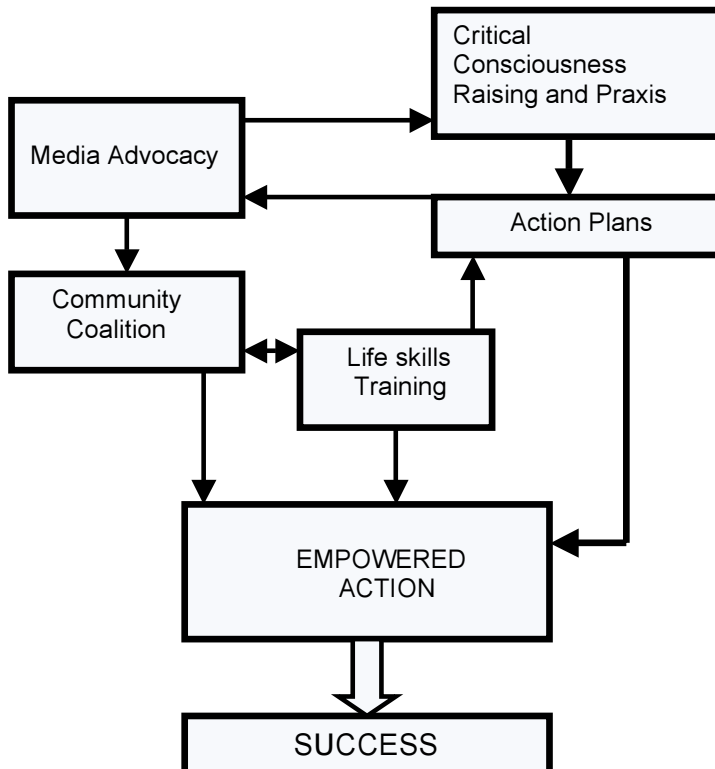
- S     What do we See here?
- H     What is really *Happening*?

- O How does her story relate to *Our* lives?  
 W Why has she become an alcoholic?  
 E How can we become *Empowered* by our new social understanding?  
 D What can we *Do* about these problems in our own lives?

### Freirean Approach: Limitations

Apart from the real threat of physical danger in some oppressive circumstances, there are limitations to Freire's pedagogical approach if applied in its 'pure form'. These relate to the relative effectiveness of the strategy, which may lack the power to tackle serious political barriers. In short we have proposed the supplementation of the critical consciousness-raising core of Freire's formulation with two complementary strategies. These involve i) equipping learners with 'life skills' to enable them to carry out the radical agenda and ii) the establishment of 'coalitions' of the great, good – and relatively powerful to achieve political goals. Figure 2 below summarises the key features of the approach.

Figur 2. *Creating Empowerment for Social Action*





The key features of empowerment depicted in figure 2 above may still appear somewhat alien to teachers who are used to the traditional school system. However, it is important to note that the 'settings approach' fostered by WHO emphasises that the school setting should work closely with parents and the local community – as illustrated above with reference to environmental education. The collaboration may originate with the school or with parents or one or more other agencies in the community seeking to address key health issues. In other words a community coalition can develop and media advocacy may be a useful device in critical consciousness-raising. Again critical consciousness raising and praxis can originate within the school setting or from the heart of the local community. However, what is frequently ignored – and doubtless contributes to the failure of many projects – is the pedagogical understanding that teachers will ideally possess. For instance, the school is ideally placed to provide social interaction skills training as part of what some education systems describe as 'personal and social education'. Some brief observations on life skills training should clarify their importance for radical health promotion.

### **Life Skills: Training for Action Competence**

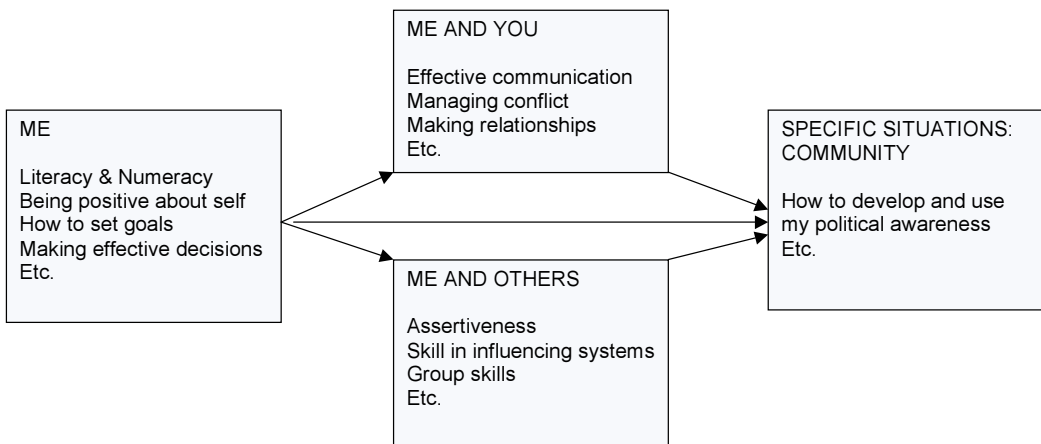
The teaching of life skills was popular in Britain in the early 1980s as part of 'personal and social education'. Advocates of life skills teaching were concerned to make education more relevant to the major social issues and problems facing young people. Hopson and Scally (1981) were key figures in this movement. They argued that the central purpose of life skills teaching was empowerment. Their following introduction to a series of curriculum materials reveals this philosophy and summarises key elements of the skills in question:

... a school should provide a basic survival kit for young people ... they need to be taught skills like values clarification, decision-making, how to cope with crises, intellectual and emotional problem solving, helping, assertiveness, relationship building, how to find appropriate information and use personal and physical resources which are available in the community. They need to be made aware of themselves, others and the world around them, in order to become more self-empowered people.

In Denmark, Jensen has developed a very similar approach in his focus on action competences (see for instance, Jensen (2000) and Jensen, et al., 2000). Indeed the term is virtually synonymous with life skills. Logically it might be more appropriate to see ‘action competence’ as an outcome that results from successful life skills teaching: these outcomes might range from specific capabilities – such as leading a political group to more general outcomes such as empowerment which, would lead to the end point of achieving social and political goals.

Figure 3 below presents a selection of key life skills following Hopson and Scally’s category system.

**Figur 3.** *Life Skills and Community Action (after Hopson and Scally, 1980)*



Essentially, Hopson and Scally argued that the life skills curriculum should provide three kinds of skill: individual skills; ‘dyadic’ social interaction skills (‘me and you’) and skills that helped individuals interact in groups. While ‘me and you’ and ‘me and others’ skills, focussed primarily on social interaction, ‘me’ skills not only included direct health related dispositions and capabilities, such as self esteem, but also acknowledged the importance of cognitive competences such as thinking, literacy and numeracy (note for instance the argument that much violent and self destructive behaviour stems from poor self esteem derived from illiteracy and innumeracy and subsequent problems

in getting a job). The fourth category identified by Hopson and Scally was not so much a group of life skills as an application of clusters of life skills to real life situations – e.g. working productively as a group and deploying assertiveness skills to influence the media and local politicians to tackle environmental problems.

The acronym adopted by Jensen and colleagues as a framework for the achievement of action competences (IVAC) reveals key aspects of radical and empowering education. *Investigation* emphasises enquiry-based learning; *Visions* can be likened to the Freirean notion of praxis after critical consciousness raising; *Action and Change* focuses on the importance of social action for individuals and communities. Both the IVAC analysis and the specific skills shown in figure 3 above are of course central to related notions of political education. Crick and Lister use the term ‘political literacy’ to describe the objectives of political education:

The ultimate test of political literacy lies in creating a proclivity to action not in achieving more theoretical analysis. The politically literate person would be capable of active participation (or positive refusal to participate) ... The highly politically literate person should be able to do more than merely imagine alternatives ... The politically literate person must be able to devise strategies for influence and for achieving change. (Crick and Lister, 1978:41, cited by Fien, 1994:53).

Simovska and Jensen (2003) provide a valuable and practical example of the application of the principles mentioned above in their work on alcohol with young people. Their action research demonstrates not only successful democratic education but also participation and international collaboration using Internet links. They remind us of WHO assertion of the central purpose of the health promoting school, which is by definition:

...founded on democratic principles... [it] improves young people’s abilities to take action and generate change... Young people’s empowerment, linked to their visions and ideas, enables them to influence their lives and living conditions. (WHO, 1997)

## Conclusion

It would not be surprising if many teachers (whose work in health education has previously centred on, preventing diseases and has concentrated on problems such as drug abuse, preventing unwanted pregnancies and sexually transmitted diseases) were puzzled or even dismayed at the assertions made in this chapter – and elsewhere in this book. They may even be inclined to reject these assertions – especially if ministerial curriculum guidelines are essentially concerned with preventive medicine. It is not possible to explore this situation in depth at this point. However, it is important to reiterate a number of key points:

While it is certainly possible – and in some cases desirable – to use a specific health or disease topic as a starting point for exploring underlying causes, limitations on time and space typically make it impossible for the school curriculum to deal with *all* currently important diseases. This often results in schools focusing on issues that are currently causing political problems for government and dealing with those topics in a superficial and ineffective manner.

As has been vigorously asserted in this chapter, the main sources of disease are social and environmental: accordingly addressing socioeconomic problems such as inequity and inequalities will provide a more effective and economic strategy for dealing with a wide range of specific medical problems. It follows, then, that schools should ideally avoid ‘vertical’ programmes (dealing with particular and specific health issues) but should adopt ‘horizontal’ programmes that address underlying causes. In short, a democratic empowering strategy involving radical-political activities should be the main concern of the health promoting school.

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## 2

## Complexity and the Health Promoting School

*Derek Colquhoun*

### Introduction

My role is to raise questions in an effective, genuine way, and to raise them with the greatest possible rigour, with the maximum complexity and difficulty so that a solution doesn't spring from the head of some reformist intellectual or suddenly appear in the head of a party's political bureau. The problems I try to pose...that concern everyday life – cannot easily be resolved. ...I take care not to dictate how things should be. I try instead to pose problems, to make them active, to display them in such a complexity that they can silence the prophets and the lawgivers, all those who speak for others or to others. In this way it will be possible for the complexity of the problem to appear in its connections with people's lives. (Foucault, 2000: 288 cited in Rhedding-Jones, 2003:10)

These comments by Foucault underscore very real concerns that I have felt about health promoting schools for many years. The health promoting school movement has been advocated vociferously by many individuals and organizations (myself included!) across the globe, yet in my view, we still don't really understand why or how health promoting schools do or do not work. The relationship for example, between children's health and academic achievement is one that continuously perplexes me, yet it is a goal for so many – a goal which is often unattainable because of factors in children's lives outside of their school life. Indeed, measuring whether or not health promoting schools 'work' has taxed researchers and evaluators for many years. Often these research projects and evaluations define out, simplify, or edit out 'complex

variables', relationships, structures and processes in an attempt to gain insight into the complex organizations that are schools. This chapter will address some of these issues and by using the metaphor of schools as complex adaptive systems, will begin to ask whether we can, or need to, understand health promoting schools in a more sophisticated way – a way that celebrates complexity rather than trying to control for it as in typical research and evaluation projects. My emphasis on this use of metaphor owes much to Morgan's (1997: 4) argument that 'all theories of organization and management are based on implicit images or metaphors that lead us to see, understand, and manage organizations in distinctive yet partial ways'.

There are several reasons for me wanting to write this chapter. The first is a very real frustration with the way some school communities are treated by, in particular, some health-based researchers. Some health-based researchers appear to see school communities simply as sites for data gathering. I accept there may be different perceptions of this relationship in different countries, but in my experience as a parent, teacher, school governor and researcher, the experience is very much one of 'being researched on.' There is often very little commitment by researchers to the professional development needs of the different members of the school community. Some teachers have commented to me that feel they have been 'plundered' – all of their good practices, policy developments and subject specific knowledge have all been 'taken' by researchers to meet their own needs yet little or no feedback is given to teachers. Rightly, in my view, many head teachers are now demanding that researchers provide feedback to school communities as a condition of their entry to the school.

Second is an on-going sense of disbelief that all actors or agents in school communities are not represented one way or another in project reports and evaluations of health promoting school activities. School communities are often the last to be consulted over the nature and form of evaluations located within their communities.

Third, as an evaluator who is responsible for significant evaluation projects, is a concern that evaluations of health promoting school projects should consider the messiness or complexities of school communities and develop evaluation designs to take these into account. Even case studies of health promoting school communities often fail to represent the full breadth, depth and richness of their activities. In raising this as an issue I also hope that research and evaluation funding bodies will begin to stipulate to researchers

and evaluators that they need designs to grapple with complexity. I will return to this point in more detail later in the chapter.

Fourth, is the recognition that school communities find themselves in a context that is dynamic, changing and evolving. This dynamic environment includes policy, organizational and structural changes at local, regional, national and international levels. For instance, in England currently there is a massive re-alignment occurring between education, health and social care policy at local and national levels. This re-alignment will have a dramatic effect on the nature of schooling for many young people as well as the services provided to them. School communities are not isolated islands or structures: rather they are bounded with other systems and structures in a way that is changing day by day.

So, at one level, this chapter is a political task for me: political in the sense of wanting to position school communities in a much more empowered location within research and evaluation, specifically as they relate to health promoting school projects. In addition, the chapter should also be a signal to health based researchers that they need to develop a greater understanding of school communities, not as is often the case and as I mentioned earlier, to attempt to control the activities of school communities to gather 'better' data, but rather to celebrate their complexity and messiness.

Complexity is the 'new business buzzword' in the US, where its 'big attraction' is its 'recognition' of the unpredictable, messy and complicated nature 'of the world, of human beings and of organizations'. (Illing, 2002:32. Cited by Kelly and Colquhoun, 2005 in press) It goes without saying that contemporary western schools and education systems are becoming more and more complex as they attempt to cater for their increasingly diverse students and populations. There are greater demands on all actors within schools: teachers, head teachers, children, parents and support workers. There is a greater (unfortunately) climate of surveillance and control (especially in England), imposing more and more demands on all staff in schools. Schools are also coming under increased societal (and media) pressure to solve all the ills of modern society. Work-life balance is becoming a pipedream for many workers in schools as demands increase – demands not only from others in the education system but also from workers now in other systems such as health, social care (or welfare), and environment. This inter-relatedness between systems will only increase as we go further into the second half of the decade and beyond.



The aim of this chapter is to help us to begin to understand health promoting schools as complex adaptive systems. This metaphor enables us to view health promoting schools through a more sophisticated lens which allows us to identify the many features of health promoting schools that are often neglected, ignored or marginalised in research and evaluation projects.

Throughout the chapter I will be drawing on my extensive experience with health promoting schools in Australia and as a manager of several evaluations of healthy school schemes in England. I will also illustrate the chapter with examples from a large research project investigating the relationship between the provision of free healthy school meals to primary age children in a city in England with their educational attainment/achievement, health and social capital.

## Health Promoting Schools as Complex Adaptive Systems

According to Plesk and Greenhalgh (2001: 625) a complex adaptive system is a collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's actions changes the context for other agents. The notion of different ecosystems comes to mind and we can think of such examples from the animal world as nests of termites (or ants) and coral on the Great Barrier Reef. In the human world just about any group of workers or relatives living or working together could be considered a complex system. Within any complex system, such as a school, there may be several other systems – such as departments, year groups, classes, even committees and working parties.

I have found Plesk and Greenhalgh (2001) particularly useful in simplifying the notion of complex adaptive systems! They suggest there are several basic concepts that help us to understand complex adaptive systems. Later in the chapter I try to illustrate these principles with examples from health promoting schools projects.

### **Fuzzy Boundaries**

Unlike traditional machine metaphors where input is linked to output, and form, structure and processes are pretty well defined, schools as complex adaptive systems have fuzzy boundaries. In Victoria in Australia for example, 'school community' is a term used to describe a broader understanding of the

different agents involved in and across schools (although in my experience of schools in England the involvement of 'broader' agents, even parents, is often resisted by many schools). However, we have no universally accepted definition of what a school community is, nor a deep conceptualisation of the benefits of using the term. For example, there are very real and significant differences in definition of a health promoting school between the National Healthy Schools Standard (England), the Australian Health Promoting Schools Association and the European Network of Health Promoting Schools. In addition, a term currently in vogue is 'whole school approach'. Yes, we have different models of what this means for health promoting schools (see NHMRC, 1996) but examples of how these models have been used in practice are few and far between (largely because of all the issues I mentioned earlier).

Of significance in England at the moment is a move to establish Departments of Children's Services which will incorporate Departments of Education, Social Care and even Health. This is a significant departure from traditional discipline boundaries and the real effects of this are yet to be seen or felt. However, what is clear at this stage is that there will be new ways of working for all those from education, social care and health. There will also be new funding streams, projects and initiatives emanating from Departments of Children's Services – all of which will impact on the fuzziness of the boundaries between these three areas. This will of course, impact significantly on health promoting schools in particular as the new model of Children's Services will mean that schools will be involved in direct service provision for children in and outside of school.

### **Actions based on internalised rules**

Complex adaptive systems involve agents' actions based on internalised rules. As with most systems schools often do not make these internalised rules explicit: teachers, children and parents are often expected to acquire these rules by acting like sponges and soaking up these rules. Not only are rules often internalised but so too is language (which can be a form of rule), and there is an expectation that the 'right' language (and often acronym!) is used in the 'right' place across the system. A difficulty facing new or probationary teachers, for example, is that often they do not understand or appreciate these internalised rules and do not anticipate their importance.

**Agents and systems are adaptive**

Plesk and Greenhalgh (2001) also suggest that agents and systems are adaptive. By this they mean that actors (e.g. administrators, teachers, children and parents), continually change their behaviours and actions to suit the context within which they find themselves.

**Systems are nested within other systems and co-evolve**

Systems according to Plesk and Greenhalgh (2001) are embedded within other systems and often co-evolve. As I mentioned earlier, in England there currently is a move nationally with respect to children's services to join education, social care and even health. From our experience with our different research and evaluation projects different models for this are evolving across the country at different rates with different levels of success. Several things are certain: England will end up with non-educators managing education in many of its Local Education Authorities; teachers and school managers will have new demands placed on them as the different systems co-evolve together; and schools will be expected to design, fund and deliver a variety of activities otherwise unknown or not very common within a school's current remit.

Schools in England are also closely connected to the university system through various accreditation processes. For example, many schools are heavily involved in the education of teachers through the Graduate Training Programme – a programme of school-based training that is often validated by universities. In our experience schools also are coming under increased pressure to be members of Learning Networks and even Federations. These often involve schools working together for a common aim, project or even whole school reorganization or restructuring.

**Tensions and paradox are natural features of complex adaptive systems**

Complex adaptive systems, as they interact with other systems, often produce tensions and paradox. Different systems may have different expectations, understandings of each other, ways of working, language, aims, targets, practices, internalised rules and so on. Partnership working, which in England is seen as the way forward for many organizations (including schools and universities) is fraught with possibilities for difficulties, competition and, co-operation! It is tempting for a manager to try to control out these tensions and paradox. However, I would urge us to resist this temptation and instead celebrate these tensions and look for opportunities to use these tensions in a fruitful and productive way.

As health promoting schools interact with other systems they also become involved either by accident or design with a whole range of partners. For example, we are currently evaluating one Healthy School Award Scheme in England which involves 29 'official' partners (ranging from the police, health departments, head teachers associations, employment services, school nurses, youth associations, youth offenders team, drug prevention agencies and even the museum service) and countless other unofficial partners. As we have found throughout the evaluation, the degree to which these partners explicitly or implicitly support the aims of the health promoting schools award scheme vary enormously from having a policy where health promoting schools are central to everything the partner does, to not having a policy at all and no reporting structures or processes for their partnership working. In addition, each of these partners brings with them a myriad of policies (and different language) within which the health promoting schools scheme needs to sit if the partnership is to prosper and develop. It goes without saying that health professionals and education professionals use a very different language. Part of the problem with partnership working is for all the partners to come to an agreed language that all partners are familiar with and can use productively. The language difficulties encountered in one of our evaluations of a health promoting school scheme involved such terms as: service level agreements, steering group, joint commissioning group, interventions, strategy, action plans, outcomes, task force and action zones. Such terminology can cause significant difficulties for health promoting schools as they struggle their way through the maze of policies.

### **New and novel behaviour**

Health promoting schools as complex adaptive systems continually emerge and exhibit novel behaviour. One feature of the definition of health promoting schools, which is different to initiatives in other curriculum areas is that there is almost universal agreement that health promoting schools are continuously evolving. Indeed, they can evolve in unique and novel ways: one health promoting school might take an initiative and develop it one way whilst another health promoting school might develop the same initiative in a completely different way. Health promoting schools are able to develop differently in different countries. In Australia for example, there is not the same sense of control and surveillance on health promoting schools as there is in England. This diversity of the concept and its malleability should be celebrated

and encouraged. This is very difficult within a system of standards, control, certification and award schemes, and suggests that those in control fail to trust their complex adaptive systems to emerge and evolve in ways that would be useful to *them*.

### **Health promoting schools are messy and non-linear**

Health promoting schools can be very messy. For example, planned activities often do not happen (for all sorts of reasons) – research interventions are sometimes forgotten as schools struggle to achieve (yet) another target, teachers sometimes change their lesson plans at the last minute to capitalise on another learning opportunity and so on. This not a criticism but a fact. I certainly am not suggesting that we try to clean up this messiness, rather we should try to understand why and how this messiness is occurring and how it impacts on health promoting schools and vice versa. Traditional understandings of schools (often promoted by policy makers) rely on a linear model of input and output. However, spending five minutes talking with a teacher or head teacher will reveal how complex schools actually are. Decisions by a head teacher for example, do not necessarily lead to changes in staff or student behaviour, while an incident in the playground might have more effect than any decision made by a head teacher.

### **The unpredictable nature of complex adaptive systems**

With this in mind it is easy to see how health promoting schools understood as complex adaptive systems, can be highly unpredictable. In one project I am involved with, there were a series of unintended outcomes as a result of a particular intervention through the provision of free healthy school meals for primary age children. These included:

- A perceived diminished trust by members of the public over the source of the funding for the project
- Not all schools were able to start the initiative at the same time (meaning different types of intervention were eventually implemented)
- More canteen supervisors and road crossing personnel had to be employed by schools, and there were more volunteers in schools
- The school day for some schools had to be lengthened to cater for more children having lunch at school (some schools had to have 2 sittings for lunch)
- Some children who qualified for free school lunches refused to have the free healthy school lunch, and finally

- Some head teachers saw the intervention as yet another budget they had to manage.

So what was a good idea at the time provided school communities with many unforeseeable consequences.

### **Complex adaptive systems have inherent patterns**

Despite having commented on the non-linear and unpredictable nature of complex adaptive systems, many schools still do have identifiable patterns! The obvious one in schools is the timetable, which regulates everyone's behaviour. Working within, between and beyond the timetable is a challenge some schools are beginning to grapple with as they try to apply the health promoting school concept to their own context. Other initiatives such as the 'creative school' are also encouraging schools to go beyond the traditional restrictions of the timetable.

### **Different actors in complex adaptive systems have different characteristics**

As I mentioned earlier health promoting schools involve interactions between many groups of actors – not least of which are the children themselves. All the professionals working within health promoting schools have different needs and wants (such as professional development needs) and children equally have different needs and wants depending largely on their stage of development, learning styles, ability and background. Understanding this means that a 'one size fits all' approach to curriculum or other health promoting school activities could be unproductive. Recognising diversity will be one of the biggest challenges facing health promoting schools in the next decade.

Tsoukas and Hatch (2001) incorporate and extend most of the principles and basic concepts of complex adaptive systems suggested by Plesk and Greenhalgh (2001) when they outline what they call the 5 'universal' priorities of complex systems. These include:

- Complex systems are non-linear
- Complex systems are fractal (they present irregular forms or shapes)
- Complex systems exhibit recursive symmetries (there may be 'turbulent' systems within broader systems)
- Complex systems are sensitive to initial conditions (development of the agents and the system is dependent on the initial reason for the system in the first place), and

- Complex systems are replete with feedback loops (causing constant change and development of the agents and the systems).

Papaioannou and Pashiardis (2004) also suggest that we need to consider different dimensions when we consider schools as complex adaptive systems. These include: horizontal differentiation (the number and type of subject specialisations in the school and the number of school objectives), vertical differentiation (the number and type of formal and informal hierarchies), spatial differentiation (an understanding of place and space), and knowledge complexity (the qualifications of the staff and the types of subjects taught).

## A Comment on Evaluation

As I mentioned in the introduction to this chapter, evaluation related to the health promoting school concept has been a source of frustration for me for many years. In my view some health based researchers, using the ‘plundering’ model I mentioned earlier, either deliberately or sub-consciously set school communities up to fail, largely as a result of any real engagement of these school communities with the evaluation, design, planning, implementation or dissemination/ feedback. I try to think of research on a continuum:

Research                      ON – IN – THROUGH – WITH – FOR – BY                      Schools

With ‘research on’ school communities being typical, and ‘research by’ school communities an example of an empowered school community able to recognise, understand and use the complexities of their own school community.

To grapple with some of these complexities across health promoting school communities we are using Realistic Evaluation (Pawson and Tilley, 1997) as our framework. Central to such an approach is answering the question ‘what works for whom in what circumstances?’ More specific questions could include: ‘does the health promoting school work’, ‘under what circumstances does the health promoting school work’, ‘how do health promoting school programmes work’, and ‘for whom do they work?’ Within such an approach, history and contextuality are seen as key sources of influence on programme outputs and effects, not sources of variation to be ‘controlled for’ as in traditional experimental designs.

For those working within a Realistic Evaluation framework, the key to understanding how programmes work lies in identifying the 'Context Mechanism Outcome Configurations' (often referred to as the 'CMO' configuration) that are present within them. In other words, specific impacts, outputs and outcomes arise only in specific sets of circumstances. Learning more about these circumstances, and the causal influences within them, is what may lead to useful knowledge for the fine-tuning and scaling up of programmatic initiatives. Such understanding is of clear policy relevance for the longer-term development of the health promoting school concept and for what Pawson and Tilley (1997) call 'enlightenment' between research and policy. Using this approach with three different health promoting school programmes we've been able to examine how different contexts have different mechanisms working within them and how the interaction of these two produce different health and education outcomes.

## Conclusion

At a metaphorical level an understanding of complex adaptive systems gives us new way insights into health promoting schools. We can appreciate their fuzzy boundaries, internalised rules, adaptive nature, embeddedness within other systems, tensions and paradox, novel behaviour, inherent non-linearity, unpredictability, the different characteristics of the different actors within them and their patterning.

The implications of seeing health promoting schools as complex places are many and varied. For instance, we need to, in the first instance, understand and describe health promoting school initiatives through a complex adaptive systems lens (perhaps starting by using the principles outlined by Plesk and Greenhalgh). Second, we need to appreciate how policy and practice 'fit' into our model of complex adaptive systems as applied to health promoting schools. As I have argued elsewhere for example (Kelly and Colquhoun, 2005), the management of teacher stress could be seen as a management response to the increasingly complex demands placed on teachers and in fact may even be seen as an individualised response by teachers to a complex and messy working environment. Third, we need far more sophisticated and sensitive evaluation and research methodologies that take into account programme and school complexities and which do not attempt to edit out variance and messiness.



Finally, how can we use our heightened awareness of health promoting schools as complex adaptive systems to bring about structural, policy, organizational and programmatic change or transformation?

## Acknowledgements

I would like to thank the editors of this book for their helpful and thoughtful comments. Some of the ideas in the chapter were developed as a result of discussions with Steve Allender, Pat Downes, Peter Kelly and Nigel Wright.

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## 3

## From the Health Promoting School to the Good and Healthy School: New Developments in Germany

*Peter Paulus*

### Introduction

At the 1<sup>st</sup> International Conference of the World Health Organization (WHO) on Health Promotion, that took place in Ottawa (Canada) in 1986, a charter was passed that pointed the way ahead for health promotion, including the central importance of 'settings' (WHO 1992). It took some years to develop a settings approach to health promotion for schools, but in the early 1990's various countries in Europe joined the European Network of Health Promoting Schools (ENHPS), to promote the idea of the Health Promoting School. The progress of this movement and the variety of implementation processes and structures is documented in several publications (Piette, Tudor-Smith, Rivett, Rasmussen and Ziglio 1995; Parsons, Stears, Thomas, Thomas and Holland 1997; Stewart-Brown 2001; Tones and Green 2004). These reports show that the structures of existing educational and health systems and the location of a national support centre, are of utmost importance for the further development of health promoting school initiatives.

In Germany the national support centre was imbedded in the educational system. The Ministries of Education and the highest authorities of the senates have since 1990, carried out three pilot tests in schools within the education sector in the Federal Republic of Germany, supported by the Bund-Länder Commission for educational planning and research promotion. During the final phase of the last project about 500 schools were involved.

- 'Gesundheitsförderung im schulischen Alltag', ('Health promotion in daily school routines') 1990-1993, limited to Schleswig-Holstein (Barkholz and Homfeldt 1993)

- ‘Netzwerk Gesundheitsfördernde Schulen’, (‘Network of health promoting schools’) 1993-1997 (Barkholz and Paulus 1998)
- ‘OPUS – Offenes Partizipationsnetz und Schulgesundheit. Gesundheitsförderung durch vernetztes Lernen’, (‘Open network of participation and health in schools. Health promotion by net-based learning’) 1997-2000 (Barkholz, Gabriel, Jahn and Paulus 2001).

Since 1993 Germany has participated in the second two pilot tests as a member of the ENHPS, which comprises 41 different country networks, in order to implement the innovative idea of a health promoting school at that time. Nowadays, in the course of the current discussions in terms of educational policy and pedagogy of reforming the education system, a new phase of work on health promotion in schools has begun, focusing on the conception of a ‘good and healthy school’ as a further development of the settings approach of the health promoting school. This kind of school strives for improving its educational success by focusing on the implementation of a good school that takes advantage of specific health interventions.

### Previous Developments: From Health Promotion in Schools to Health Pro-moting Schools and its Networks

The Health Promoting School has become the main concept of WHO strategies of health promotion within the education system. Compared to the traditional health education and also to approaches of training ‘life-skills’, this strategy is more effective since it is able to integrate health topics in schools with a lasting influence (Parsons et al., 1997; Stewart Burgher, Barnekow Rasmussen and Rivett 1998; International Union for Health Promotion and Education 1999; Denman, Moon, Parsons and Stears 2001).

The settings approach of health promotion in schools may be defined as follows: The health promoting school declares health to be its most important goal by introducing a process in schools with the objective to create a setting that on the one hand contributes to fostering life skills of school children with regard to health, and on the other hand promotes health for all participants of daily school life referring to schools as a work and study place at the same time. The overall target is the improvement of educational quality within schools (Paulus 1995; Paulus and Brückner 2000).

During the last ten years new approaches to health education in schools have been developed and successfully been tested by applying the above-mentioned approach. In Germany, the changes may be summarized in eight trends that have primarily been determined by the three pilot tests referred to above (Paulus 1998):

1) *From the mission of 'health education' to the one of 'health promotion'*

Today, the traditional notion of health education as a curriculum subject has been replaced by the broader more holistic concept of 'health promotion,' which finds current expression for educational systems in the concept of a health promoting school.

2) *From the biomedical concept of organism to human beings understood as individuals and to health as integral part of it*

Classical health education tended to be informed by a bio-medical model of health, which understood the body as a complex machine. This approach has been replaced by a view of health as a construction involving an inter-play of physical, psychological, social, ecological and spiritual dimensions making up a complex whole.

3) *From school children to school community and school development*

Whereas traditional health education life skills training were focused on young people, the health promoting school concentrates on all participating groups involved in the life of the school in its local community. It emphasizes that health within schools is a matter for everybody. From this perspective schools as institutions are seen as having a significant potential influence on health and that health-promoting structures can be strengthened within schools by appropriate organizational, personnel and curriculum development.

4) *From the setting of the school to an open participative network of schools and cooperation partners*

Health promotion as a setting approach is not just reduced to the individual school. The resources arising from the participative networking of schools and external cooperation partners are also considered important. The health promoting school benefits on all levels from the exchange of experiences and joint developments which external partners and networks make possible

5) *From risk orientation to a concept focused on Salutogenesis*

Whereas traditional health education concentrates on risks, health promotion in schools, in line with approach of life skills training is orientated towards protecting and improving health. It mainly focuses on health resources and sources of health that is on what Antonovsky (1997) refers to as Salutogenesis (as opposed to Pathogenesis, or processes leading to a breakdown of health). Autocratic forms of pedagogy symbolized by a raised forefinger and deterrence didactics has not proved attractive for young people and have gained little success. Moreover, the pedagogical value is very doubtful, because it demonstrates only a negative point of view of reality for young people. While the world is full of risks, it is important to stress that the world is full of hope as well, and to highlight pleasure and optimism in life for young people (Schneider, 1993).

6) *From individual health behaviour to healthy lifestyle committed to socio-cultural factors*

Health promotion in schools understands itself as a social and socio-political project. The socio-cultural lifestyles of young people, of teachers, of other workers in the school and members of the local community definitely ranks higher within the framework of health promoting schools than within the traditional approach to health education as a curriculum subject. Health promotion in schools is an approach that is able to link people within and outside schools in solidarity and counters negative approaches that can be called 'victim blaming'.

7) *From individual health behaviour to a setting related healthy lifestyle*

Health promotion in schools increasingly takes the environment and the living circumstances of people into consideration. In addition to the community (Healthy City), the workplace (Workplace Health Promotion) and the hospital (Healthy Hospital), the school is such a setting. This orientation favours a rejection of health education, which is fixed on the individual behaviour of young people and tends to negate social causes of health problems and may regard them as a matter of individual behaviour to be addressed through medication.

8) *From a concept of norms and disciplines to an explicitly democratic and emancipatory concept involving participation and empowerment*

Health promotion in school is dedicated to the credo of support for self-determination over the conditions of health and the strengthening of health. It rejects traditional paternalistic training concepts. Active participation and responsibility, as well as refreshing self-determined energies are the central strategies (Haug 1991).

The international experience with this settings approach led to systematic descriptions of activity characteristic of this approach (Weare, 2000; St.Leger, 2000). Table 1 provides an overview of such a systematic framework highlighting factors both within (numbers) and outside the school context (letters).

**Table 1.** *Field of action (inside) and principles (outside) of the health promoting school*

Salutogenesis (e)				
Participation/ Empowerment/ Legal commitment (d)	Teaching, learning Curriculum (1)		School culture Environment of schools (2)	Internal/ external networking (c)
		Health promoting school		
	Services Cooperation Partners (3)		Health management in schools (4)	
Integral concept of health and influencing factors (b)				
Sustainable initiatives for school development (a)				



The fields of action may be characterized as follows:

*Teaching and learning:* this field concerns both health as a topic of teaching and learning as well as a health promoting didactic and methodology of teaching and learning: (e.g. integral learning, with all senses; movement and learning; classes with rhythmic; significant learning).

*School life and environments of schools:* this field appeals to both health as a principle of school culture and as a principle of structural modifications in schools (e.g. psychosocial climate; school playgrounds as a living place and place to spend free time; relaxing area and area of retreat; classes as places of movement; lights and colours as creative elements to promote well-being).

*Cooperation and services:* this field involves the integration of external partners and psychosocial/ medical services in order to strengthen health promotion (e.g. psychological services in schools, public health departments, paediatric help, youth welfare, health insurance companies).

*Health management in schools:* this field deals with the development and application of principles and strategies of health promotion in school organizations. The system of health management in schools is a systematically implemented management integrated in schools, which contains different quality indicators. It consists of elements of management, structure, process and quality of results (Bertelsmann Foundation und Böckler Foundation 2000), each of them referring to the other in the perspective of the school as an organizational institution. Management style, school culture and climate, working attitude and satisfaction as well as organizational learning are some of the most important fields.

**The principles mentioned in the outside boxes:**

*Sustainable development initiatives of school development:* health promotion in schools must be understood as an impulse for development of schools. It strives for being part of school development and not for being initiated as single event that takes place in an isolated way without having a sustainable effect on the school.

*Integral idea of health:* following the health definition of the WHO (1948), health within the health promoting school is considered to be integral as a physical, psychological, social, ecological and spiritual balance of well-being. By emphasizing the subjective factors of health and by stressing the state of being healthy, the subjective character of a human being is involved. One of the most important targets of health promotion is the integration of the individual person in processes of change.

*Variety of health determination:* being healthy may be determined by various factors. It is not just influenced by behaviour, but depends as well on genetic factors, on socio-cultural conditions (e.g. the education system of the school) and on the health system. Finally, all these conditions are linked with each other and influence each other.

*Self-determination, participation and empowerment:* the school itself decides about the health problems it deals with and it wants to work on. Ideally, each group within a school (schoolchildren, teachers, parents, personnel outside the classroom) is involved with its requirements and expectations.

*Salutogenesis:* the orientation towards Salutogenesis (Antonovsky, 1997) is a further central characteristic of the health promoting school. The main principles are to strengthen people within schools, to support them in finding and keeping self-confidence (feeling of feasibility), to help make their lives worth living and meaningful (feeling of usefulness), and to help them to understand the world around them (feeling of comprehension) (Bengel, Strittmatter and Willmann 2001).

Within the context of the three pilot tests outlined at the start of this chapter, together with other projects, (e.g. the Lions-Quest program 'To Become an Adult', and the programs 'Class 2000' and 'Fit and strong for Life') considerable contributions in the field of teaching, learning, and curriculum development have been made (e.g. Burow, Aßhauer and Hanewinkel 1998; 1999; Hollederer and Bölcskei 2000; Medusana Foundation 2002).

However, it is important to highlight two explicit and obvious deficits of the health promoting school perspective in order to consider how the approach might be improved, and to examine other perspectives that promise a greater

success for health promotion in schools on a long-term basis without renouncing the achievements of previous developments:

### **Slow growth of health promoting schools**

Although, except from Bavaria, all Federal states participated in the last two pilot tests of the Bund-Länder Commission, just a few have implemented the setting concept systematically apart from those schools integrated in the OPUS network of North-Rhine Westphalia. Even supposing that most of the schools are not able to cope with the high challenge of implementing the concept, it is remarkable that the majority of them did not take up the concept as a first approach and incorporate it as one dimension of their schools' conception. Therefore, it must be pointed out that the concept up to now has not achieved the desired effect. The target programmatically demanded in the resolution of Thessalonica (1997) that: '...each child within Europe must have the right to visit a health promoting school', has not yet been successful (WHO 1997; Paulus, 2000). In the face of the existing health problems in schools we are just mentioning, (e.g. Bundeszentrale für gesundheitliche Aufklärung 1998; Currie, Hurrelmann, Settertobulte, Smith and Todd, 2000; European Commission 2000; Etschenberg, 2001), the achieved stage is far away from the required one.

### **The lack of attention given to health promotion in current debates about educational policy and pedagogy**

Current debates in Germany of educational policy and pedagogy in reforming and improving schools are notably lacking in references to health promotion (e.g. Flitner 1996, Hentig 1993; Voß 1996). While these debates raise important questions of strategy in implementing efficient, modern, innovative and exemplary schools and are already providing a basis for concrete programmes of implementation, such initiatives are proceeding largely without reference to experiences gained in the development of health promoting schools (e.g. Eikenbusch 1998; Rolff, Bühren, Lindau-Bank and Müller 1999; Schratz, Iby and Radnitzky 2000).

This unfortunate development cannot be explained by blaming superficial phenomena, such as an inadequately developed approach to advocating health promotion. The reasons are more profound. The main reason is that the approach of a health promoting school did not originate from the school sector itself in response to demands for educational improvement. Rather it was initiated by external health-focused interests, which sought alliances in the

schools sector. The main thrust for the development came from concerns among health professionals to find ways to secure better population health. On the European level, the main driving forces were the World Health Organization (WHO), which runs the technical office of the European Network of Health Promoting Schools in Copenhagen and the European Commission, promoting the international network and projects through activity programs of the community in the sector of public health. The central targets were focused on health, referring to epidemiological knowledge of the health status of children and young people, and to the results and challenges of research for prevention and health promotion (e.g. International Union for Health Promotion and Education 1999). In this respect schools are considered to be institutions that are able to reach young people across all social strata. Social fringe groups that are mostly burdened with higher health risks may thus be appealed to without counter-productive stigmatization (Paulus 2002; additionally see the policy paper of the Central Association of health insurance companies of June 21, 2001).

### Consequences: Health Promotion in Schools Revised from Top to Bottom – A New Paradigm

In the face of insufficient developments in implementing the concept of health promoting schools, the time has come to propose a new approach. In the remainder of this chapter, such a new approach is outlined, which examines the problem of health promotion in schools from an educational perspective and proposes appropriate strategies for action on that basis. The starting point is no longer the question of how school can promote health or how schools can become healthier but rather, whether health promotion is able to contribute to the improvement of education quality in schools in order to enable schools to fulfil their primary tasks in the field of learning and teaching. While the previous approach expected schools to be responsible for health, the revised view presented here considers health as a factor which can offer 'added value' to schools, and help to make 'good schools' in a specifically educational sense. The key question is whether schools a pedagogical institutions, can strengthen their task in the field of learning and teaching through better health? This perspective motivated by pedagogical factors means that health is not considered an additional theme that schools have to deal with. Rather, it promises to be helpful for managing the main task of schools. If health promotion

in schools fulfils this promise, it will surely be respected in schools, since it contributes substantially to the central purposes of schooling.

### **The good school**

Drawing on the work of several contemporary educationalists (s. z. B. Fend 1986; 1998; Aurin 1991; Meyer and Winkel 1991; Brockmeyer and Edelstein 1997; Schratz and Steiner-Löffler 1999; Stern 1999), good schools can be characterized by a range of indicators:

- Positive life expectations and intellectual challenge with regard to schoolchildren and teaching staff
- Transparent coherent system of regulations easy to calculate
- Positive school climate involving schoolchildren
- Schoolchildren assume participation and responsibility
- Teachers combine cooperation and pedagogical assent
- Low fluctuation of teachers and schoolchildren
- School headship is orientated towards concrete targets, communication and assent
- Extensive school life
- Internal further training of teachers
- Integration of parents
- Support by School authority

Table 2 shows a summary of the quality dimensions and criteria, based on the International Network of Innovative School Systems (2002).

The dimensions are explained in brief as follows in order to give a first impression of this system (Stern, Mahlmann, Vaccaro and Wilbert 2002):

*Education and teaching task:* This field copes with the results of teaching and learning processes and therefore represents the most important dimension of the evaluation of schoolwork. Attention is basically paid to the target that all quality efforts are concentrating on learning results and pedagogical effects of schools. It must be stressed that other competences have the same priority as learning results within special subjects.

*Learning and teaching:* Learning and teaching is the core area of action of schools. It represents the core business in which schools are competent, since

**Table 2.** *Quality dimensions and criteria of good schools*

Quality dimensions and criteria of good schools (International Network of Innovative School Systems, 2002)				
(1) Education and teaching task	(2) Learning and teaching	(3) Supervision and management	(4) School climate and culture	(5) Satisfaction
Specific competences	Strategies of learning and teaching	Principles and ideas of development	School climate	To meet the requirements of school children (perception of schoolchildren)
Social competence	Balanced classes	Decision-making	Relations within school	To meet the requirements of school children (perception of parents)
Competence of teaching and methods	Marking of the schoolchildren's work	Communication	Relations of schools to external partners	Satisfaction of teachers
Competence of self-control and creative ideas		Operative management	Promotion of positive behaviour	
Practical competence		Motivation and support	Support system for school Children	
To fulfil the expectations of those schools accepting new staff		Planning, Implementation and Evaluation		
To meet the challenges of the professional world		Development of staff		

education and teaching are the central targets of schools, which should primarily be reached within the classes.

*Supervision and management:* Professional management behaviour results in a cooperative perception of the overall responsibility and therefore in satisfaction for all people concerned of school life. By delegating tasks according

to efficient plans, the self-effectiveness of employees and the identification with schools will be strengthened.

*School climate and school culture:* The climate or culture of a school is one of the most important prevailing conditions for the core business of learning. A positive school climate offers the emotional and physical security school children are in need of, because school is not just a place for learning but a living place as well.

*Satisfaction:* Apart from the task in the field of teaching and education this dimension also refers to the results of processes taking place in schools. It symbolizes a traffic light because it demonstrates disorders in other fields. This is why satisfaction runs diagonally to the other criteria and must always be reflected in reference to them.

## Interim Balance. The Health Promoting School and the Good School

As an interim conclusion of the previous explanations, Table 3 compares the activity fields of the health promoting school to the dimensions of the exemplary school, representing the innovative school.

Comparing the fields of action of a health promoting school and the dimensions of a good school, a high degree of similarity appears. The settings approach of health promotion in schools and the exemplary schools are mainly working in the same fields. The main difference is that they are based on different perspectives and that they strive for different targets. The health promoting school brings health to school with the target to keep it healthier on all levels of the organization. It is concerned with targets of health promotion for young people, but is also concerned with the health of teachers and the organizational structures and daily routines of the school (e.g. breaks with exercises; healthy breakfast in schools; relevant health topics as a subject of discussion of practical life, disputes settlement machinery, management of stress and time for teachers, decrease of noise, health promoting attitude towards security risks, teamwork, supervision, design of classes and work places). As a long-distance target, the improvement of education quality of schools is loosely linked to it.

**Table 3.** *Action areas of the health promoting school and dimensions of the good school – a comparison*

Dimensions of a health promoting and good school		
Health promoting school	School	Good school
Teaching, learning, curriculum		Tasks in the field of teaching and educating
		Learning and teaching
Health management in schools		Supervision and management
Services, cooperation partners		
School culture, scholarly environment		School climate and school culture
		Satisfaction

In comparison, the good school pursues targets in the field of education and teaching directly and explicitly within the demonstrated dimensions in order to achieve a quality improvement of its work.

Both approaches have the same strategies of achieving their targets through the development of schools, whereas the health promoting school takes advantage of special variants, made for its individual requirements (Paulus 1995; Barkholz, Israel, Paulus and Posse 1998).

Although obvious similarities have been stated, there is little cooperation between the approaches and their advocates. The different perspectives are obviously accompanied by different points of views on schools, which lead to a



separation of research approaches, and to institutions of research promotion on national and international levels operating independently of each other.

## The Good and Healthy School

In the approach of a good school, these two different developments must be harmonized. The good and healthy school is a school clearly committed to the quality dimensions of an exemplary school, which applies special health interventions in order to implement those tasks in the field of education and teaching that result from this commitment. The target is the long-lasting efficient increase of teaching and education quality in schools. It also illustrates the evaluation criteria taken into account. In this approach, a considerable orientation towards educational targets takes place. Health targets are intermediate targets.

Two strategic starting points seem reasonable which I would like to describe as 'Health qualification through education' and 'Educational qualification through health'. They are explained as follows.

*Health qualification through education:* This means the overall health education defined in Germany in November 1992 in the *Report of the Conference of the Ministers of Education and Cultural Affairs referring the situation of health education in Germany*, which is still valid. Among methodological-didactical questions and questions concerning an integral conception, the report identifies topics a school has to deal with in terms of context: nutritional education, hygiene and dental hygiene, sex education and AIDS-prevention, prevention of addiction, first-aid topics as well as sports and exercise education. An interesting question must be the form of preparing these topics in order to achieve the quality the exemplary school is committed to. Do schools dispose of good material concerning these topics? Which fields and which school forms and graduates need to be developed further?

*Educational qualification through health:* This means the sector in schools which deals with the improvement of educational work at schools through health intervention. It also refers to the teaching level of schools and does not only refer to health education. Basically the school as an organization strives to establish a health-management system. Public health insurances, (§ 20, Code of social law V) and of the *Association of Local Accident Insurances* (§ 14, Code of social law VII) play an important role for the implementation of prevention

tasks. The labour protection law, which also provides a company medical service for educational institutions like schools, is of central importance as well. They are relevant for the health care of employees of schools, primarily for the health of teachers and the dangers and resources their job is subject to.

In 2002, the Bertelsmann Foundation initiated a pilot test for schools following exactly this understanding of a good healthy school. It is called 'Anschub.de' (Paulus, Gröschell and Bockhorst 2002). The project was developed (a) against the setting of the currently critical health situation of schoolchildren, teachers and the school as an organization, (b) against the backdrop of the current situation of school health education and promotion within the different federal states (c) following the two pilot tests of the Bund-Länder Commission Network of health promoting schools (1993-1997) and OPUS (Open participative network and Health in schools – health promotion by net-based learning, 1997-2000), (d) against the setting of discussions of reforming the school system, getting a new dimension by publishing the PISA-results, and (e) following the last two World Conferences of the World Health Organization on Health Promotion in 1997 in Jakarta and in 2000 in Mexico.

With this project, the Bertelsmann Foundation wants to stimulate innovative long-lasting impulses for the development from the health promoting school to the exemplary healthy school. The target of the first phase (January 1, 2002 – December 31, 2003) was to develop some evidence-based strategies (modules) together with cooperation partners, which are based on defined health problems of schoolchildren, teachers and the general organizational character of the school. These strategies are to enable schools to improve the quality of their educational work significantly. The joint development and implementation of the second phase of the pilot test (2004-2008) takes place in form of health promoting alliances with the cooperation partners at federal level with respect to different projects. By this means, projects on a regional and local level are to be provided with more specialized and sustainable resources. First results of the ongoing evaluation are expected in 2007.

## Conclusion

In future, each school must be a 'good healthy school.' Health in order to improve the educational work will be obligatory for schools in future. The evaluation of experiences, made in pilot tests on health promoting schools not

only in Germany, but in the European Network of Health Promoting Schools as well, which also involves Switzerland (Stewart Burgher, Barnekow Rasmussen and Rivett 1998; Barkholz, Gabriel, Jahn and Paulus 2001), justify these expectations. Health makes a difference that means an increase in quality. In Germany the project 'Anschub.de' will be able to give important impulses within the association of various national-working partner organizations in the context of a pilot test. The requested cooperation with the Federal Office of Public Health in Switzerland, which is to be followed by other international cooperation, will also strengthen the idea of an exemplary healthy school on the international level. The second conference of the European Network of Health Promoting Schools that took place in Egmond in the Netherlands in September 2002 has already blazed a trail indicating that the much-implored 'Alliance of education and health' (Stewart Burgher, Barnekow Rasmussen and Rivett 1998) will be newly defined in the international network. The concept of health promoting schools will then be reserved for schools, committed to the health topic as a specific mark in order to differ from other schools, e.g. schools they compete with on the educational market. They follow the tradition of the basic idea of Health Promoting Schools, propagated at the beginning of the 90th by the World Health Organization and which since then has been considered the most innovative form of health education in schools for a long time (Paulus 1995). But schools are confronted with new times and challenges and this is why health promotion in schools demand new developments. The good healthy school is a promising demanding approach for higher quality educational work than could probably be achieved with a school still based on the traditional approach of health promoting schools.

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## 4

## Towards the Development of Indicators for Health Promoting Schools

*Charles T. Viljoen, Tiaan G.J. Kirsten,  
Bo Haglund and Per Tillgren*

### Introduction: The Need for Indicators

A major theme in recent debates on the Health Promoting School (HPS) is the search for indicators (Pattenden, 1998; European Network for Health Promoting Schools, 1999; Stears, Holland and Parsons, 2000; Denman, Moon, Parsons and Stears, 2002). Through the development of indicators, it is argued, the ideal of the school as a health promoting setting could be achieved.

There is a need to develop a set of indicators to know how best to implement health promotion programmes in educational systems and this should be done in consultation with all stakeholders (Konu and Rimpelä, 2002; Deschesnes, Martin and Hill, 2003). Indicators would also provide an instrument in assessing and monitoring the development of the health and well-being of all stakeholders in the educational endeavour.

Indicators are used as markers of progress towards reaching objectives and targets. To be defined as a Health Promoting School, the school has to portray certain features, which will be judged by the requirements and the implications of the broader concept of health promotion. On the biophysical level indicators for a HPS would show, for example, that children are physically well and have good nutrition, that a school has a working relationship with local health services and that the School Nurse is a regular visitor to the school. On a psychosocial level, indicators for a HPS would show for example, that peer group support is in place and learners are socially supported and that families are involved in school activities. A characteristic of indicators is that they can measure visible things – like features, and invisible things, like characteristics.



As schools are complex phenomena, a set of indicators has to be developed to measure the distinct components of the system implied by the HPS concept. A set of indicators will also provide information about how the individual components work together to produce the overall effect. Shavelson et al. (1991) state that the purpose of an indicator is to characterize the nature of a system through its components – how they are related and how they change over time. The information can then be used to judge progress towards some goal or standard, against some benchmark, or by comparison with data from some other institution or country.

Further uses of indicators are to serve strategic planning, policy development, management and decision-making. They can motivate people to action, indicate direction and speed of change, help in the identification of priorities, stimulate action, challenge assumptions about strategies and targets, and encourage policy-makers and managers to rethink appropriate strategies (WHO, 1981; Corvalan et al., 1997).

In other literature concerning HPS, indicators are referred to or can be described in terms of checklists, or indices. The *US Health Index for Physical Activity and Healthy Eating* for example, was designed:

...to help schools to identify strengths and weaknesses of their health promotion policies and programs, develop an action plan for improving student health and to involve teachers, parents, students, and the community to improve school services. (US Department of Health and Human Services, 2000:6).

In summary, indicators can be seen as a set of characteristics and processes, which a school has to possess to be defined as health promoting. The needs of a school will define the focus of its programmes and will determine the types of indicators employed to monitor its functionality. A set of indicators can be qualitative, in the sense that they indicate which characteristics have to be possessed in order to be health promoting. Indicators can also be quantitative, in the sense that they measure the extent to which processes or activities contribute to the overall goal, which is health promotion.

## The Meaning of Health and the Development of Indicators

The way in which health is conceptualized will have an impact on how indicators are formulated. The 'pathogenic' perspective on health, for example, defines health as the 'absence of disease' and the processes entailed in meeting the objective of being healthy are focused on the treatment and prevention of disease. This approach stands in contrast to a 'salutogenic' perspective in which an effort is made to move beyond medical and disease models to construe health as states of wellness rather than the absence of illness.

Because wellness and the promotion of wellness is not about an achieved state of being, for instance being symptom-free or problem-free, but rather a continuous and dynamic process, it is important to recognise that wellness and illness are end-points on a continuum (Edelman and Mandel, 1994; Kirsten, 1994; Kirsten and Viljoen, 2002).

Wellness can be promoted regardless of the particular point on the wellness-illness continuum that a particular person might find themselves – in other words not only maintaining the health of those who are well, but also, or especially, promoting wellness amongst persons with distress, disability or illness. The promotion of wellness is also directed to more than the attainment of a neutral or symptom-less state, it should reach beyond mere management towards attaining the highest possible level of functioning in all aspects of life.

Human wellness is about the mind and body and their interconnections, and positive human health is best construed as a multidimensional dynamic process rather than a discrete end state. That is, human wellness and positive health is ultimately an issue of engagement in living, involving expression of a broad range of human potentialities: intellectual, social, emotional, physical and spiritual. This 'committed living', according to Ryff and Singer (1998) is universally expressed in leading a life of purpose; in deep and meaningful connections to others, and in a sense of self-regard and mastery.

A holistic view of health is also reflected in the model presented by Jordaan and Jordaan (1990; 1998), Kirsten (1994; 2001) and Kirsten and Viljoen (2003), which proposes five contexts of human existence. The biological, intra-psychic and spiritual contexts (and more specifically the processes involved) constitute a living person as a bio-psycho-spiritual being. This implies that the biological, intra-psychic and spiritual contexts are intra- and interdependent. The living person is placed within two outside contexts – the total living and non-living physical environment as well as the symbolic cultural environment. The five

contexts of human existence are in theory separable, but in practice inseparable. It would be impossible for a person to live without being a bio-psycho-spiritual entity, and also impossible to take a person out of their physical and cultural environment.

This systems perspective on health has a very important meaning for the development of health programs, as the whole school community forms part of the socio-ecological system. Noack (1987) states that coping with adverse environmental conditions is not limited to individual activity, but involves social action and interaction. The community approach is congruent with the socio-ecological model of health promotion. The conceptual model draws together a range of disparate elements to do with health and health promotion in a framework that can be used as part of a comprehensive and coordinated approach to planning and development (Denman, 1999).

A realistic aim of health promotion would be to help people to interact with their environment so that they can reflect on and attempt to modify health-related values and practices; develop more adequate social skills, and strengthen emotional and social ties with other people. To improve health potential, health promotion may help people in analysing their lifestyle and the systems in which they live, and in changing their patterns of life in a health conscious way (Noack, 1987). One of the key tasks of a health promoting school is thus to ensure that young people become health literate and develop 'action competence' (Jensen, 1997).

Practical experience shows that the biomedical and socio-ecological paradigms can be integrated in health promoting schools, in the sense that a focus on both prevention and health promotion can co-exist in a school. Numerous developing and developed countries take a disease or substance abuse as a point of departure for the introduction of health promoting programs. It will be the school's view on education and the development of suitable content and method, which will ultimately qualify the health program as empowering or disempowering. The worst-case scenario would be that a school's program can be exclusively biomedical, the school's educational role negated and that the school serves as a health clinic where pamphlets and tablets are handed out. Another impeding factor could be a moralistic presentation (Jensen, 1997:419) of a healthy lifestyle, which can be sublimated by schools motivating teachers to adopt democratic strategies in health education.

These statements have an important implication for indicator development, as indicators that monitor the quality of programs are developed within a particular paradigm of health and education.

## Towards the Development of Indicators for the Health Promoting School

In the development of health promoting schools, a set of indicators has to be developed in every stage of program formulation, implementation and evaluation. The purpose of this section is to present a number of important issues that need to be taken into account in the development of indicators for health promoting schools, drawing on material from a variety of national contexts.

### **Contextualisation**

While different countries may follow the same broad formulation of aims for health promotion, within specific localities the notion of the HPS requires contextualisation to address the specific needs that arise within specific communities (Deschesnes et al., 2003). Two examples from China and Papua New Guinea (see Table 1) illustrate this point very clearly.

Table 1 shows that although the programmes took physical needs as the point of departure, other dimensions of wellness were integrated in the process. These examples serve to illustrate the dynamic and integrative nature of 'wellbeing'. In the Chinese example, helminth infection was taken as the entry point to foster health promotion in schools. This did not limit the program to a disease oriented understanding of health promotion, however, as the strategy undertaken involved family members and a key element in the program was that mutual respect was fostered between parents, teachers and children.

A national audit of health promoting schools in Australia has shown that individual school factors are more significant than state and regional factors in shaping the health promoting school opportunities for students (Northfield et al., 1997). The audit also showed that while the physical environment of schools was regarded as important, greater emphasis was placed on the fostering of social relations to promote the psychosocial dimension of wellness.

The most commonly valued programs and structures were those which served to improve relationships between students within schools through

**Table 1.** *Health Promoting School initiatives in China and Papua New Guinea*

Dimensions of wellness	China (Long-Shan et al., 2000)	Papua New Guinea (Tetaga, 1993)
Physical	<p>Focuses on the reducing of helminth infections.</p> <p>Contamination was lowered and the physical environment improved by building of latrines.</p> <p>Health services for school and personnel were established.</p>	<p>Building of new, practical classroom instead of the use of old traditional hut with circular frame and made of bush grass improved ventilation and improved the learning environment.</p>
Psychological, social, spiritual and emotional	<p>The relationship between the school and the community was improved, because families were involved in the projects</p>	<p>A positive Influence on the morale of teachers and children to be in new classroom came about.</p> <p>There was a communal consent as to the aims of the HPS.</p>
Intellectual	<p>An identification and prioritisation of problems were done.</p> <p>Health related policies were established.</p>	<p>A comprehension of the aims by the community brought them to a cooperation to accept the new type of building structure and they raised money to build it.</p> <p>Proper training of staff led to further empowerment and promotion of the HPS principle (one teacher was able to launch a HPS in another region, because of her experience).</p> <p>The involvement of the whole community in problem identification and the launching of action to address problems which was marked by a cognitive process integrate other dimensions of well-being.</p>

developing friendships and a feeling of belonging or connectedness via peer education, buddy systems, cross age tutoring home groups and mentor schemes. Similarly valued were pastoral structures, which enabled students to develop close relationships with certain teachers over their school years. (Northfield et al., 1997)

In the Macedonian context, the focus of health promoting schools is on factors that influence behaviour, rather than on behaviour itself. The factors named are – young people's knowledge, attitudes, beliefs, perceptions, values,

skills, self-confidence and self-esteem, as well as the physical and psychosocial environment. The aims are to develop the individual's responsibility toward her/his own health by promoting healthy lifestyles, as well as on developing environmental care and the care for the community (WHO, 1988).

Active learning principles (called the IVAC – information – action – change approach) are recommended by the Macedonians and serve as a valuable method to change behaviour. In Australia too, students favoured active learning and the opportunity to influence what would be covered in health classes. In a number of schools, groups of students were active in promoting special health events and they saw strong links between health classes and the opportunity to become health promoting within the school and its community (Northfield et al., 1997:25)

### **Training, partnerships and community involvement**

It is necessary that resources within the community have to be identified and empowered to meet the needs, which have been identified. The training of all stakeholders, like teachers and family members will make the program sustainable. Teachers are more confident in teaching health content and knowledge than they are helping students to develop health-related skills. This has implications for curriculum design, resource development and teacher professional development (Northfield et al., 1997).

Teachers do not necessarily accept the notion of the health promoting school and they can easily regard implementation as an extra task and an aggravation of their burden. However, the claimed link between health and learning is an important element that helps to market the health promoting school concept. Ownership by participants is essential if progress in health promoting school initiatives is to be made, and the importance of teacher attitudes should not be under estimated (Northfield et al., 1997).

The specific tasks of schools and of local initiatives will be eased when national and international systems are in place. The Quality Initiative in Scottish Schools for example, sets its goal to foster collaboration and partnership between health inspectors, education authorities and schools. This has resulted in the development of a coherent and shared national approach. The approach is to place schools at the centre of the drive to improve standards and quality and to meet realistic and challenging targets (Scottish Executive, 1999).

Linking diverse stakeholders from a range of sectors including public and private agencies and organizations is increasingly being recognised as a feature

of best practice in contemporary health promotion. Health promoting schools represent a complex array of issues, and bring together the major sectors of health and education and other related support groups.

Community approaches in health promotion aimed at young people have been shown to hold the greatest potential for success in changing health behaviour. The concept of the health promoting school is an all-embracing approach, which utilises all the opportunities that a school presents in enhancing the health and well-being of children and adults in the community of the school. The community approach is congruent with the socio-ecological model of health promotion. The conceptual model draws together a range of disparate elements to do with health and health education in a framework, which can be used as part of a comprehensive and co-ordinated approach to planning, and development (Denman, 1999:217).

Involvement of parents and family members has been reported to be effective in changing behaviour in rural China (Long-Shan et al., 2000). The Macedonian Network of health promoting schools, in following the European model for health promoting schools, accentuates the stimulation of individual and communal problem solving to take responsibility for change, which they set as the objective of education. They identify the democratisation of learners, and by implication the community, as the ultimate objective. In the evaluation process the demand for empowerment still directs the process.

## Conclusion

At the outset of this chapter it was stated that the aim was to outline contours for indicator development for Health Promoting Schools (HPS). Throughout the world, the school is seen as a significant setting for delivering key health messages to young people and for directly influencing their health related behaviour. The nature of the school as an educational setting combines health with educational opportunities and it is the synergy of the school as a place of learning and health enhancement, which has to be employed to its optimal capacity. To be viewed as health promoting, a school has to portray certain features, which will be judged by the requirements and the implications of the broader concept of health promotion. Some of these features include:

- The acceptance of a holistic model of human health and the health promoting school paradigm as a framework on local, regional, national and global levels.
- The recognition that health promoting schools can promote the health of its members, wherever it is starting from on the wellness-illness continuum.
- The recognition that specific contextualised local needs will determine the selection of policies, priorities, programmes, content, strategies, methods, procedures, etc. within specific school contexts.
- The use of the contextualised model as a guide to the selection of relevant indicators against which the policies, programmes, curriculum content, structures, outcomes, processes and partnerships, of a school can be monitored and evaluated.

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## 5

## The Tailored Schoolbeat-Approach: New Concepts for Health Promotion in Schools

*Mariken T.W. Leurs, Maria W.J. Jansen,  
Herman P. Schaalma,  
Ingrid M. Mur-Veeman and  
Nanne K. De Vries*

### Introduction

The first developments in school health promotion in many European and English-speaking countries date from early 20<sup>th</sup> century. Developments in the area of school-wide health promotion are now widespread, especially in the English-speaking countries (e.g. Kolbe, 1986; Rogers et al., 1998; Marshall et al., 2000; Goffin, 2004). However, the inclusion of comprehensive health promotion in school policies remains a challenge as education and not health is the core business of schools (St.Leger and Nutbeam, 2000).

As a member of the European Network for Health Promoting Schools since the mid 1990s, the Netherlands developed a national action plan on school health promotion over a number of years. This plan focuses on the three 'historical' domains: classroom health instruction, school health services and a healthy school environment (Buijs et al., 2002). Results so far are limited: school health promotion and preventive youth care in the Netherlands are fragmented, supply-driven, primarily focused on individual pupil care and address the specific needs of a school and its population rarely directly (Veen et al., 1998; Pijpers, 1999; Paulussen, 2002). As is the case in other countries, few health promoting school (HPS) interventions have been evaluated and even fewer have proven to be effective (Schaalma et al., 1996; Cuijpers et al., 2002; Lier et al., 2002). This is changing with recent increases in the number and breath of evidence-based school-based prevention programs and effectiveness research becoming a central focus of research activity in this area (Greenberg, 2004). Hence, it came as no surprise that the effectiveness of specific HPS-interventions was marked as the number 1 priority of the international HPS-

research agenda at the 18<sup>th</sup> World Conference on Health Promotion and Health Education in Melbourne in 2004 (Leurs, 2004).

Recently, a bottom-up approach for school health promotion was initiated in the Netherlands. This article describes this bottom-up approach, dubbed 'schoolBeat' ['schoolSlag' in Dutch]. The approach has a strong focus on the establishment and monitoring of sustainable intersectoral collaborative support for comprehensive school health promotion. This is one of the key-strategies advocated recently by Deschesnes and colleagues (2003) to enhance broad implementation of comprehensive approaches to school health. Additionally, schoolBeat aims to develop and introduce a specific tailored approach to comprehensive school health promotion, involving – in first instance – school staff, pupils and parents. The coalition-partners take responsibility for disseminating congruent messages into the surrounding community. Hence, a multifaceted approach to multiple determinants will be created. As this is a complex HPS initiative, its evaluation will be challenging (Stewart-Brown, 2001). This article includes a description of a new model for evaluating the collaborative aspects of our approach – the DISC-model – as part of this evaluation process.

## The Schoolbeat Approach

The development of schoolBeat commenced in 2001 when five regional health-promoting agencies joined forces in the south of the Netherlands. The five key-players came from the areas of addiction, mental health, public health, youth care and social welfare. With the recruitment of a project manager and researcher, financed by a national four-year grant, the project advanced in Spring 2002.

In ten years, schoolBeat aims to reduce risk behaviours among youth (4-19 years) in the Maastricht region. The projects midterm objectives (2005) focus on establishing sustainable collaboration among schools, health promoting agencies and local authorities. The number and quality of tailored health promotion activities should also be increased in this period. In order to pursue these objectives a systematic plan of coordinated support for tailored school health promotion policy was developed. The plan is based on the principles of intervention mapping (Bartholomew et al., 2001) and tailored to the possibilities and pitfalls of the educational system and the health system in The Netherlands.

Forms of action research were used in combination with literature reviews and expert consultations (Peters, 2001; Leurs et al., 2002; Peters and Keijsers, 2002). However, programs cannot be developed based on expertise and authority alone. It requires full participation of all stakeholders (Wallerstein, 1992). Hence, the development of schoolBeat includes participation of stakeholders from the health, welfare and education sectors. This is a common type of collaboration in school health promotion (e.g. St.Leger and Nutbeam, 2000; Jones et al., 2002; Lee et al., 2003; Goffin, 2004).

As part of the process, new concepts were introduced in the area of (1) participation of the entire school population in HPS, (2) quality assessment of HPS- interventions, (3) workload sharing among regional support organizations, (4) linking school health promotion to individual pupil care and (5) diagnoses of the development of sustainable collaboration using the newly developed DISC-model (Buijs et al., 2004; Leurs et al., 2003; Leurs et al, 2005; Peters et al., 2004). An in-depth description of each specific innovation is beyond the scope of this general introductory article.

SchoolBeat-study I, accompanying the development-phase of schoolBeat, spans the first four years of development, preliminary implementation and adjustments of the approach, primarily using action research.

Before describing the steps of the schoolBeat approach, including the introduction of new concepts where appropriate, the main planning-principles of 'Intervention Mapping' will be outlined. These principles are widely applicable to health promoting school developments.

### **Intervention Mapping Principles**

A sound Intervention Mapping process provides program planners "with a framework for effective decision making at each step in intervention planning, implementation and evaluation" (Bartholomew et al., 2001), with interventions being defined as a "planned combination of theoretical methods delivered through a series of strategies organized into a program". The specific focus of Intervention Mapping is the evidence- and theory-based development of health education and promotion using a socio-ecological approach to health. This is in line with the holistic approaches to school health promotion, popular since the mid-eighties (Allensworth and Kolbe, 1987; St.Leger, 1999). Basically, both paradigms focus on the wide picture of interrelationships among individuals with their personal characteristics and their environments. Intervention Mapping identifies the most effective points and accompanying strategies for

interventions in this complex picture and eliminates the use of an ineffective trial-and-error approach. It is a comprehensive and pragmatic step-by-step approach to the development, implementation and evaluation of health education and promotion interventions. A form of needs assessment precedes the Intervention Mapping steps. Intervention Mapping starts with (1) a specification of evidence-based program objectives regarding behaviour and environmental conditions. This is followed by (2) the selection of intervention methods and strategies with a sound theoretical base and (3) program design, pretest and production. Additionally, (4) adoption and implementation plans are developed integrally with a focus on sustainability. This all should be supported by (5) an evaluation plan (Bartholomew et al., 2001). This evaluation is not only meant to judge the planned intervention on effectiveness, but also to facilitate understanding of all stakeholders (Judd et al., 2001). Overall, Intervention Mapping is an iterative process. New insights gained along the way, will adjust choices made in previous or future steps resulting in an adjusted, more effective program. As a planning model, Intervention Mapping builds strongly on previous models by Green and colleagues (Green and Lewis, 1986; Green and Kreuter, 1999).

To engage successfully in Intervention Mapping, insights are required into the needs and capacities of the intended target group (individuals and communities) and into the current state-of-play in health education and promotion evidence and theories (Bartholomew et al., 2001). As far as school health promotion is concerned, it is important to take into account differing objectives of the health promotion agencies (i.e. health) and schools (i.e. education) prior to engaging in any intervention mapping process regarding HPS-interventions (St.Leger and Nutbeam, 1999). Or, as stated by Green and Kreuter (1999, p392):

Experiences around the world have taught planners this lesson: failure to acknowledge and address the perceptions and feelings held by administrators, teachers and parents, however difficult those sentiments may be to quantify, can stop the best-designed, well-intended program dead in its tracks.

Therefore, it is important to be aware of the existing evidence regarding the potential positive impact of school health promotion on school curricula and knowledge of pupils (e.g. Lister-Sharp et al., 1999; St.Leger and Nutbeam, 1999).

The schoolBeat approach is based on the Intervention Mapping steps described. This will be illustrated by outlining the approach using the IM steps described in the next section.

### **The schoolBeat-steps towards a Healthy School**

The systematic schoolBeat approach includes coordinated support of schools during – what is defined from the perspective of schools – the ‘schoolBeat-steps towards a Healthy School’. This support takes in the form of account managers (mostly health promotion professionals) with advisory tasks on behalf of the collaboration. They are called ‘schoolBeat-advisors’. This concept implies workload sharing among the collaboration partners in attracting and supporting schools. It requires regular consultation between the schoolBeat-advisors as well as educating the advisors regarding the schoolBeat-approach and the fields of expertise of the different collaborating partners. This is done to pro-actively deal with possible difficulties due to a lack of understanding among the partners of how sectors work and function as suggested by the findings of school health promotion programs with a major partnership component (St.Leger and Nutbeam, 1999).

The first two steps in the schoolBeat-approach are the prerequisites for the application of intervention mapping principles from step 3 onwards. Hence, the ‘schoolBeat-steps towards a Healthy School’ come down to a specification of the intervention mapping principles to the school setting, extended with two ‘preparation’ steps. Regarding schoolBeat, it should be noted that the ‘schoolBeat-steps towards a Healthy School’ focus on the school-based process, without taking full account of the back-office structure and activities of the collaborating partners supporting this process. The schoolBeat-steps can be described as follows:

#### *1) Determining the health needs of the school*

The health needs of a school cannot be based on available epidemiological data regarding the health status of students alone (Rissel and Bracht, 1999; Bartholomew et al., 2001). In the Netherlands, and possibly elsewhere as well, there is a tendency among regional public health institutes to do just this, as this data is relatively easy available. However, it is important to also include data on the educational performances of students, registration of absence due to illness among students and staff sick leave, issues coming up in staff and parent meetings regarding school health policies and information on the



current status of the school's organization, housing and activities with a possible impact on school health (Nutbeam et al., 1989). A schoolBeat advisor is available to assist schools in clarifying and interpreting these types of information. It is preferable that at least one partner-organization has the capability, expertise and personnel to compile school health profiles for each school within the HPS-scheme. It is important to stress that this information is compiled with the school instead of for the school, as the most important source and data interpreter needs to be the school itself. It was found to be extremely important that the major stakeholders in a school recognize themselves in the data provided and that they be able to complete the picture with internal data sources and interpretations. By the major stakeholders we mean school administrators, prevention and care coordinators, teaching staff, students (especially in secondary schools) and parents. Involvement in this needs assessment process, which continues in the next step, by stakeholders is likely to increase awareness, create "ownership" of the program and build commitment (Rissel and Bracht, 1999).

In many of our schools this step included the installation of a school health promotion team with representatives of the major target groups in schools. This could be a new team or an extension of an existing school team, for example a working group on the prevention of substance abuse in school. This school-based health promotion team (some schools refer to this team as the 'schoolBeat-team') is related to the school care team in order to maximize opportunities regarding an integrated approach to school health, based on an extended comprehensive view on shared care (Leurs et al., 2003a). It links health promotion to other school-based interventions. According to St.Leger and Nutbeam (2000) and Greenberg (2004), this link is one of the priorities in school health promotion that needs to be pursued in the coming decade.

## *2) Setting health promotion priorities*

Based on the information described in step one, a school can determine its school-health priorities, including health promotion. Schools are advised to limit their priorities to around six or eight items and to have them recognized by the school board.

As described in step one, participation of students, staff (educational as well as support staff) and parents can be achieved by organizing a school health team. In practice, this means a school care team and a school health promotion team as two separate but linked entities. As the introduction of specific teams

limits the level of active participation to a restricted number of stakeholders, other participation strategies for the selection of health promotion priorities are welcome.

While working with schools, the knowledge of school-based stakeholders regarding the activities their own school undertakes in the area of health promotion and the information upon which choices are based were found to be limited. This was supported by previous findings of Marshall and colleagues (2000). Hence, we were not surprised at the limited support for school health promotion. To raise support for school health promotion and increase general knowledge on the possible choices and current actions in school health promotion, a healthy school priority-workshop was adopted. Originally, this workshop was developed for staff and parents of primary schools (Boerma and Hegger, 2001). To be applicable to students, parents and staff in secondary education the workshop needed adjustments. Based on expert consultation, explorative research among the three target groups (i.e. students, staff and parents) and pilots in different settings (i.e. classroom setting, parent evenings, mixed meetings of staff and parents and mixed meetings of students, staff and parents) an adjusted workshop was developed specifically for secondary education schools (Buijs et al., 2004). This adjusted workshop differentiates the priorities based on the components of the Comprehensive School Health Program (Kolbe, 1986; Marx and Wooley, 1998). After conducting the schoolBeat-workshop, stakeholders reported an increase in internal support for school health-promotion activities and an increase in knowledge regarding school health promotion among workshop participants. They perceived the results of the workshop as being relevant for tailoring school health promotion to the demands of their own school population. Joint actions have not yet been reported. However, one should take into account that these findings are preliminary and might be biased, as they are not based on rigorous research.

### *3) Assessing the important and changeable determinants*

Even though the Intervention Mapping protocol includes the setting of health promotion priorities and the selection of important and changeable determinants in step one (Bartholomew et al., 2001), we separated these two aspects in distinct steps. This is done to emphasize the importance of a clear analysis of the situation instead of implementing projects that seem to address the health promotion priorities set too quickly, without further analysing whether these projects focus on the most important and changeable determinants of the

priorities set. This step is very much a task for the experts of the support organizations in their role as school health advisors. For example, when a school sets a priority regarding the promotion of safe sex among students, the advisor looks for the different determinants of safe sex among adolescents. This may be knowledge regarding the risks of acquiring sexually transmitted diseases or getting pregnant. Other determinants are skills of students to acquire condoms and the availability of condoms in 'safe' places for students like school toilets. Based on this analysis, the advisor will look at the importance of the different determinants with regards to expected effects on the set priority. Additionally, the level of changeability of this determinant will be assessed in order to provide schools with realistic advice.

#### *4) Compiling the school health plan*

The fourth schoolBeat-step corresponds with step two in Intervention Mapping: 'selecting theory-based intervention methods and practical strategies' and compiling them into a whole-school plan. Evidence-based interventions are rare, so the choice for 'theory based' is a logical one. However, little has yet been reported on the theoretical basis of most school health interventions. In this respect, the Dutch situation seems common worldwide. This led to the development an instrument for assessing the quality of school health promotion interventions (Peters et al., 2004). It is assumed that the use of a specific quality check based on quality criteria from the health promotion *and* education domains would improve overall quality of a comprehensive school health promotion plan in terms of the effectiveness and adaptability within the school of selected prevention programs. The schoolBeat quality-instrument is based on consultations of experts from both fields (health *and* education) and a review of other possibly relevant quality indicators (e.g. Vandenbroucke et al., 1995; Ader et al., 2001; Cameron et al., 2001; Molleman et al., 2003). Table 1 presents the nine criteria on the checklist. Each criterion is operationalised by a set of items, differing between two and ten items per criteria. Scoring is done per item on a three-point scale.

In order to structure the program and activity choices, the American Coordinated School Health Program (Marx and Wooley, 1998) was adapted to the Dutch situation. Proposals for changes were based on the health and education structure and priorities in the Netherlands and sanctioned by the managers of the collaborating schoolBeat partner-organizations. This process

**Table 1.** *Criteria of the SchoolBeat quality-checklist 1.0*

1. Effectiveness proven
2. Well planned
3. Efficiency for support organization
4. Efficiency for school
5. Meeting educational needs
6. Participation
7. Environmental awareness
8. Quality of support
9. Ethical principles

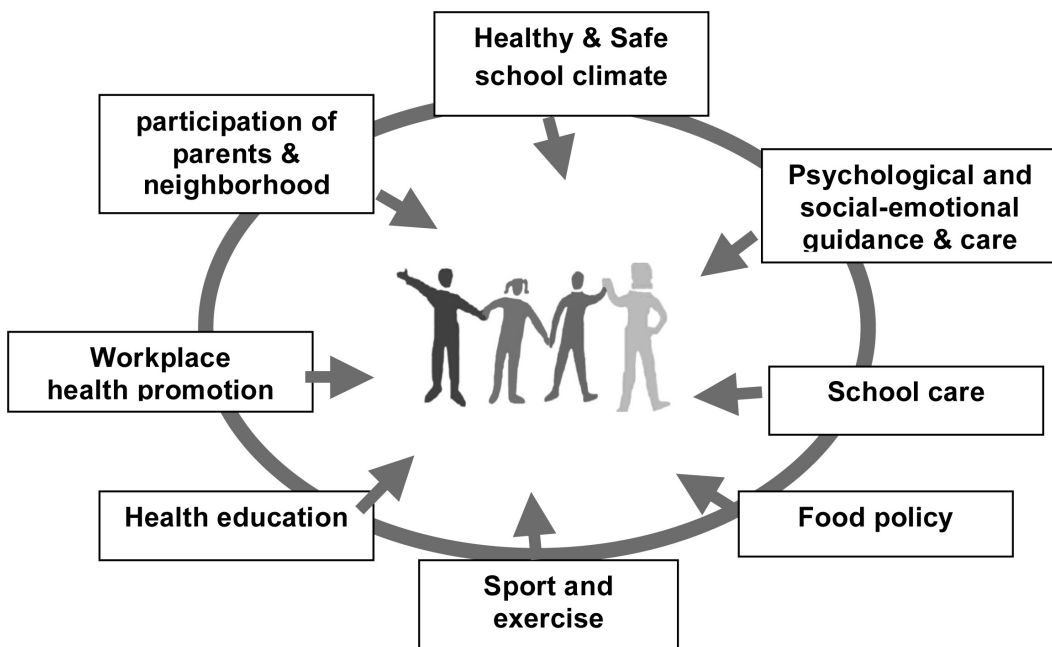
yielded a slightly adjusted 'Healthy School Model' (Leurs, 2003), as illustrated in Figure 1.

To assist schools, we use a matrix with the different target groups (i.e. students/classes, teachers, parents) on one axis and the selected health priorities on the other. Filling in the different cells, it became clear that secondary schools focus mainly on interventions targeting healthy student behaviour in the first three curriculum years. This was an eye-opener for schools, because they did not yet have a clear view of their overall input in school health. It became a challenge for the schools to fill in the cells for the other target groups. Schools decide themselves what to do. It appears that they have several relatively simple and often sound ideas on how to achieve progress in some of the areas. Support organizations come in with additional advice on effective approaches and solutions that suit the implementation possibilities of schools.

##### *5) Realizing the school health plan*

As with the other steps, the adoption, implementation and sustainability of the school health plan is the responsibility of the school itself. Health promoters may play a supportive role, where necessary and desired by the school. Schools have a long tradition in developing annual and long-term school plans. A school health plan should be very much an extension of this school plan. Where

**Figure 1.** *The schoolBeat-interpretation of the Healthy School Model (adapted from Marx and Wooley, 1998)*



possible, it should be included in the school plan as an integral part of school policy. Thus, linking school health promotion once again with other school-based activities as stressed by St.Leger and Nutbeam (2000). This step contains a lot of useful information that health promotion agencies – regional and national – may be able to learn from schools. Their support ought to be adjusted accordingly. This may strengthen the expertise and skills already present in schools and fill existing ‘gaps’ that appear.

This fifth schoolBeat-step coincides with the fourth Intervention Mapping planning phase (planning program adoption, implementation and sustainability). Special attention needs to be paid to the commitment of all stakeholders in the realization of the plan, not only in the planning phase but also in the implementation phase. Those involved in the planning phase must be informed about progress and possible outcomes. If possible, they should be able to experience certain aspects of the entire school health-promotion plan themselves.

### 6) *School-based evaluation*

Evaluation is an element of the schoolBeat-methodology which needs to be considered right from the very start as evaluation not only deals with the effects on health and behaviour, but also with the process of school health promotion. Specifically, in the first years of introducing and implementing a systematic tailored whole-school approach, it is the process evaluation, which needs attention. When taking an action-research approach, the newly gained insights may be used directly to adjust processes, where needed. Anchors for effect evaluation in later years should not be forgotten. Attitudes, knowledge and satisfaction regarding the new approach, especially of school staff and administration, are important indicators to take into account. They are the main gateway to the wider school population: students, other teaching and support staff and parents. To limit the research burden on schools we ensured that instruments used for needs assessment purposes can be used for evaluation purposes as well. Support organizations with tasks in the area of epidemiology can assist schools in this area as well.

The two latter schoolBeat-steps have not yet been described in detail as we do not yet have the necessary field-experience with the implementation of these steps. In future publications this omission will be rectified.

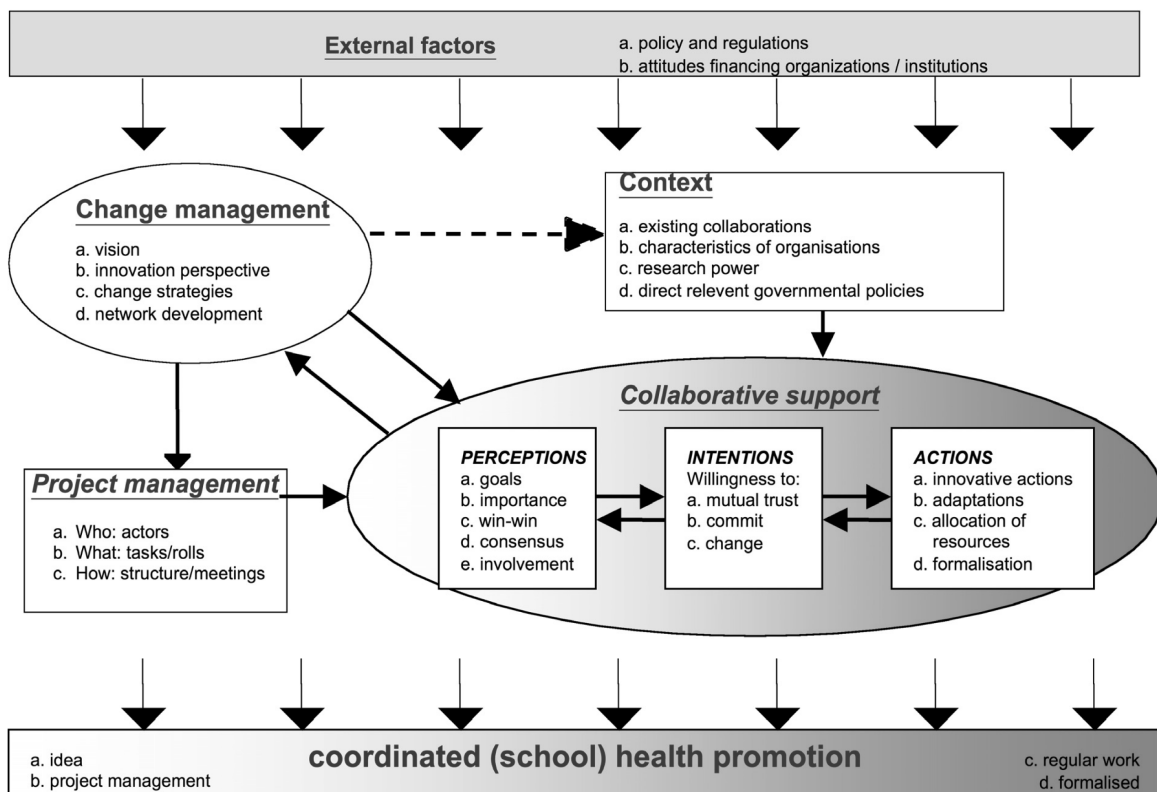
## Evaluation

The evaluation of the schoolBeat-approach – the schoolBeat-collaboration and its account managers and the school-based schoolBeat-steps – focuses on the extent to which coordinated and tailored school health promotion is realized in the Netherlands in 2010 and the results it yields in terms of the levels of healthy behaviour and healthy schools. This includes research into the collaborative aspects of this comprehensive working procedure, which has much in common with the apparent increasing worldwide interest in productive partnerships (e.g. Prat et al., 1998; Walker, 2000; Peters, 2001; Greenberg, 2004).

In order to monitor and evaluate the collaboration process and to be able to adjust procedures where required, we have developed a model for ‘*DI*agnosis of Sustainable Collaboration’ (DISC) (Leurs et al., 2003b). By doing so, we went beyond the more traditional evaluation models used in health promotion focussing primarily on the implementation and effects of single intervention

programs. The DISC-model is based on the WIZ-model used for coordination and integration of health services and reviews into networking, collaboration and implementation in the area of health promotion (Mur-Veeman and Raak, 1994; Raak et al., 2003; Peters, 2001; Ravensbergen et al., 2003; Ruland et al., 2003). The DISC-model focuses on the interaction between the project management and the perceptions, intentions and actions of the collaborating partners together (the project-support group), the project organization and factors in the wider context. The DISC-model links the collaborative approach directly to the real-life context in which the approach develops, making it appropriate for case study designs (Yin, 1994).

**Figure 2.** *Diagnosis of Sustainable Collaboration (DISC) model*



Process evaluation of the schoolBeat-approach using the DISC-model is done by means of a survey among stakeholders from the collaborating partners (schools, municipalities and health promotion organizations) followed by in-depth interviews. The survey was piloted in a nearby region using the regional youth prevention network as a test case. Preliminary results indicate that especially municipalities and schools perceive schoolBeat as a new intervention, not differentiating it from interventions like substance-abuse prevention programs for schools and bullying preventions plans. They do not seem to perceive schoolBeat as an advanced working procedure aimed at improving the match between interventions and the needs of a school. Additionally, local authorities fear the costs of schoolBeat following the development phase, which is financed by a national grant, as the coordinating costs are no longer covered. However, right from the outset of the schoolBeat-development municipalities have made clear that the working method to be developed should not add costs to current investments in health promotion. Although, the collaborating partners have developed the project with this in mind, municipalities do not seem convinced. The outcomes call for additional and more focussed communication. Within the schoolBeat project-management structure, this will be a challenge for the schoolBeat communication group to address.

At the national policy level in the Netherlands there is a focus on investing in young people in order to reduce inequalities in health and to increase safety levels in society. It is a challenge for all health promotion professionals to profit from this – in DISC terms – ‘external factor’ on behalf of the health promoting schools

The DISC-model only serves as a diagnosis-tool. Actions to be taken to improve the diagnosed situation have to be decided on collaboratively. For example, “the Partnership Analysis Tool: for partners in health promotion” (McLeod, 2003) may be used to support the decision process when progress is needed at the level of the initial health promotion partners. In this initial phase, it should be decided on within the project management structure. This evaluation and adaptation process ought to involve the key-stakeholders in meaningful ways. This fits the contemporary community-evaluation principles as formulated by Goodman (1998). In due time the project management structure it to be phased out, once the schoolBeat method has been adopted as part the regular working procedure of health promoting agencies and schools. It should be replaced by a sustainable network-structure or integrated in an



already existing collaboration. These issues require communication efforts of the collaborating partners, supported by the schoolBeat coordinator. Studies on applications of this model should indicate the added value of the model as a diagnosis instrument for health-promotion collaborations, if present. Hence, it is also possible that the model itself will need to be adjusted and will 'change colour' as well.

## Concluding Remarks

The schoolBeat-approach is made up of six – relatively easy to apply – steps as part of a coordinated support of tailored school health promotion. Field experience with these steps is still limited. From other studies, it is widely accepted that general community programs take many years to produce results (Goodman, 1998). Hence, little can be said about its proven effectiveness as yet.

During the initial development of the schoolBeat approach some shortcomings were identified, which were addressed as well. As some of the introduced new concepts in school health promotion deal with one or more of the priority areas for enhancing the effectiveness of school health promotion, it seems worthwhile to take a long-term perspective with this approach. In the meantime, some of these new concepts have been lifted from the regional level to the national level to facilitate long-term regional implementation. For example, application of the schoolBeat quality-checklist to nationally available school-based health promotion programs does not fit fully with the set tasks of regional health promotion agencies. On the other hand, application of the checklist and making assessment results publicly available does fit with tasks set by the National Government for National Health Promotion Institutes to support regional and local health promotion.

Based on theoretical planning, formative research and preliminary fieldwork, we have high expectations of the added value of the 'schoolBeat quality-checklist' and the 'DISC-model' in the field of school health promotion. The use of the quality checklist and the diagnosis-model in other countries and cultures is welcomed in order to gain a wide spectrum of field experiences and insights into possible points for improvement.

## Acknowledgements

The authors wish to thank the schoolBeat coalition partners (schools, municipalities, health promotion and welfare organizations: Bureau Youth Care Limburg, RIAGG Maastricht, Mondriaan Zorggroep, Trajekt, Maastricht Public Health Institute, NIGZ and Maastricht University) for their constructive advice and support in developing and realizing the schoolBeat approach. Thanks also to Justin Winton for his help in the preparation of this manuscript.

The schoolBeat study is supported by a grant from ZonMW Healthy Living (project 4010.003) and from the OGZ Foundation (project p342).

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## 6

## Implementing Research-based Health Promotion Programmes in Schools: Strategies for Capacity Building

*Cheryl Vince Whitman*

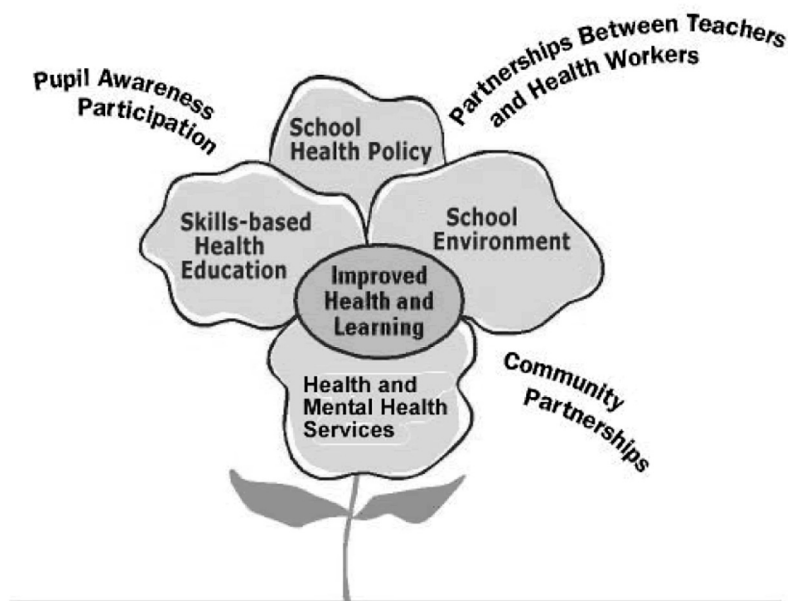
### Introduction

Health and education are interdependent (UNESCO and WHO 2001). Studies worldwide report the impact of student and teacher health status on student academic performance, teacher morale and absenteeism. The school environment, quality of teaching and years of schooling also affect student health status (WHO 1996).

Over the last 15 years, policy and advocacy movements, such as the one which resulted in the Ottawa Charter, argued that, 'Enabling people to learn, throughout life, to prepare them for all of its stages and to cope with chronic illness and injuries is essential. This has to be facilitated in school, home, work and community settings' (WHO 1986). In 1995, heeding the call to apply health promotion to school settings, WHO created its Global School Health Initiative. WHO's approach to school health was consistent with the World Health Organization's (WHO's) definition of health as a 'state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO 1948). This effort was based on the concept of the Health Promoting School (HPS). A Health Promoting School is one 'that constantly strengthens its capacity as a healthy setting for living, learning and working' (WHO 2004). A Health Promoting School, as shown in Figure 1, coordinates four major components: 1) policy; 2) curriculum; 3) physical and psycho-social school environment; and 4) health services with teacher, student, parent and community involvement to achieve its goals.



**Figure 1.** *Components of a Health Promoting School*



Adapted from WHO and EDC (unpublished).

As attention to implementing this concept has increased worldwide, donors, policymakers and planners have placed greater emphasis on using research-based programmes to maximize health and learning outcomes. What evidence is there for the effectiveness of each individual component of a HPS or combinations applied together? Which component is effective for which issues and with which types of students? How do schools—both resource rich and resource poor—choose and use research-based approaches?

Answering these questions presents schools with many challenges. To assess and select interventions, education leaders and teachers must have a basic understanding of the language and concepts of social science research and evaluation, as well as basic knowledge from the fields of public health, diffusion of innovation and organizational development. These topics and skills are not taught widely in pre-service or continuing education courses for educators. Beyond the development of individual competencies, there is also the need to build the capacity of the school as a system to introduce and carry out the innovation.

To advance the research-to-practice process in schools, this paper offers the following contributions:

- Defines the term, research-based programmes for schools and initiatives around the world to identify and describe the programmes;
- Reviews theory-based and practical capacities that schools need to implement research-based programmes
- Presents technical assistance strategies that strengthen schools' capacity to implement research-based programmes

## Defining and Identifying Research-Based Health Promotion Programmes for Schools

Much of the original work that fostered research-based practice was done in the field of clinical medicine, in an effort to identify the most effective practices for improving patient outcomes. For example, in 1993, the Cochrane Collaboration was formed in England to review results of randomized clinical trials of the most effective treatments of the day. Over time, Cochrane has collected evidence on best practices for treating such conditions as breast and colorectal cancer, dementia, depression and anxiety, cystic fibrosis and many more (Cochrane Collaboration 2004). The Cochrane's aim is to prepare and maintain systematic reviews of the effects of health interventions and to make this information available to all practitioners, policy makers and consumers.

In the nineties, the trend for research-based practice has gradually moved from clinical medicine to address health education and public health interventions within specific settings, such as schools and community agencies. National and international organizations have taken steps to define research-based programs and criteria and processes for experts to review and select them. For example, the Cochrane Collaboration's Health Promotion and Public Health Field now works with the health promotion and health education communities to identify their needs and develop a relevant, useful evidence base (Doyle et al. 2003).

The terms science-based, research-based and evidence-based are used somewhat interchangeably, but the terms mean different things. Evidence-based tends to be broader in meaning than science-based or research-based and includes the tacit and practical experience of practitioners and others.

Moreover, all evidence is not equal. As defined by Davies et al. (2000), evidence is generally derived from research, in the form of results of systematic investigations that seek to increase knowledge about an issue or phenomenon. Two characteristics of evidence are 1) it can be independently observed and verified and 2) there is widespread consensus about its content. Nutbeam (2001) presents a very broad definition, offered by the UK Government Cabinet Office, that 'the raw ingredient of evidence is information. Good quality policy making depends upon information from a variety of sources—expert statistics, stakeholder consultation, evaluation of previous policies, new research, if appropriate, secondary resources.'

In the United States, the Substance Abuse and Mental Health Services Administration (SAMHSA), within the U.S. Department of Health and Human Services (HHS), has played a leadership role in defining and identifying what the agency refers to as research or science-based programmes for schools and communities. SAMHSA began this effort with substance abuse, mental health and violence prevention programmes and has now extended its work to a broad range of topics. SAMHSA defines a research-based programme as one that:

... produces consistently positive patterns of results. Research-based programs are theory-based, have been rigorously evaluated with sound methodology and can demonstrate that the effects are clearly linked to the program itself and not to extraneous factors, elements or events. Targeting specific populations, addressing specific risks, the programme can achieve the same results over and over again, with similar audiences in other similar locations (SAMHSA 2002).

To improve professionals' use of research-based programmes, SAMHSA's Center for Substance Abuse Prevention created the National Registry of Effective Prevention Programs (NREPP). The programmes in this database have been reviewed and scored by teams of social scientists according to 15 criteria, such as underlying theory, intervention, fidelity in implementing the programme as intended, sampling strategy, cultural and age appropriateness and utility, etc. In defining and selecting research-based programmes, SAMHSA argues for review of both quantitative and qualitative data, the first supplying 'the raw material for the extensive statistical analyses that lend scientific credence to program results' and the second, 'rich, descriptive information needed to explain the effects of program interventions' (SAMHSA 2002:12).

Another example of a national effort, based on legislative authority, is the U.S. Department of Education's (USED's) Safe and Drug-Free Schools Program. In 1998 USED established expert panels to identify exemplary and promising programmes that promote safe, disciplined and drug-free schools (USED 2001). In a two-stage review process, Panels reviewed programmes on substance abuse and violence prevention, for efficacy, quality, educational significance, and usefulness to others, as outlined in Figure 2, U.S. Department of Education's Criteria for Selecting Evidence-based Programs for Substance Abuse and Violence Prevention. Of 124 programmes reviewed, 9 were designated 'exemplary' and 33 were designated 'promising.' USED encourages local schools and communities to use their federal funding to implement them.

An important factor in implementation of these programmes is an interagency task force of three U.S. national government ministries: SAMSHA's Center for Mental Health Services, USED and the Office of Juvenile Justice and Delinquency Prevention (OJJDP). The task force has provided funding to 180 school districts in the Safe Schools/Healthy Students Initiative to implement six different elements of a comprehensive approach, using a research-based programme for each element. (OJJDP 2004). These agencies require schools that receive federal funding to have the same multi-sectoral task force of education, mental health and law enforcement involved in implementation at the local level. In many of the districts funded early in this effort, the local task forces have become institutionalized and remained functioning to operate programmes several years the federal funding ended (Vince Whitman 2004).

On the global level, the International Union of Health Promotion and Education (IUHPE) collaborated with the World Health Organization and others to launch the Global Programme for Health Promotion Effectiveness (GPHPE). This programme 1) reviews evidence of effectiveness for political, economic, social and health impact 2) translates evidence into publications, which are accessible to for policymakers, teachers and practitioners; and 3) stimulates debate about the evidence itself. A number of products will be developed from this work (WHO 2004).

WHO's Global School Health Initiative has published an extensive series of documents in its WHO Information Series on School Health, which synthesizes a worldwide research base on effective strategies for addressing particular health issues in schools (WHO 1996–2004).

**Figure 2.** *U.S. Department of Education's Criteria for Selecting Evidence-Based Programmes for Substance Abuse and Violence Prevention*

### **Evidence of Efficacy**

- Indicates a measurable difference in outcomes based on statistical significance testing or a credible indicator of magnitude of effect
- Uses a design and analysis that adequately control for threats to internal validity, including attrition
- Uses reliable and valid outcome measures

### **Quality of Programme**

- Goals with respect to changing behaviour and/or risk and protective factors are clear and appropriate for the intended population and setting.
- Rationale underlying programme is clearly stated; programme's content and processes are aligned with its goals.
- Programme's content takes into account characteristics of the intended population and setting (developmental stage, motivational status, language, disabilities, culture) and the needs implied by these characteristics.
- Programme implementation process effectively engages the intended population.

### **Educational Significance**

- Programme describes how it is integrated into schools' educational missions.

### **Usefulness to Others**

- Programme provides necessary information and guidance for replication in other settings.

In Europe, the IUHPE Report on Health Promotion Effectiveness for the European Commission contains a chapter dedicated to 'Effective Health Promotion in Schools' (IUHPE 2000). St. Leger reviews the properties and evidence of effective approaches, which have been used in Europe over the last decade in a framework of the HPS to achieve maximum success in health and education (St. Leger 2000).

Many approaches to school health programmes worldwide—Health Promoting Schools, Child Friendly Schools, Focusing Resources on Effective School Health (FRESH) (UNESCO and WHO 2001) and Coordinated School Health Programs (Marx et al. 1998)—advocate a combination of policy, curriculum-based instruction, health services and a healthy physical and psychosocial school environment, coordinated and targeted to produce specific health outcomes.

The approach of coordinating a few targeted strategies has its roots in groundbreaking preventive medicine studies of the early 1970s, such as the Stanford Three Community Study, which demonstrated that media, combined with intensive community education, led to 20–40-percent reductions in saturated fat intake and cholesterol in both men and women (Stern et al. 1976). Similarly, the North Karelia Project in Finland used several strategies for a community-based intervention that successfully reduced smoking and improved dietary habits (Vartiainen et al. 1991). None of these preventive medicine programmes relied on only one strategy. A thematic study conducted as part of the Education for All 2000 Assessment reviewed school health developments during the 1990s and found that combined strategies produced greater effects than individual ones, but that multiple strategies for any one audience must be targeted carefully to a specific outcome (UNESCO and WHO 2001).

Most of the evidence base for school health promotion, however, examines only the effects of single components, such as curriculum, each of which is aimed primarily at a single health behaviour. A few studies have begun to research the impact of several coordinated components of a school health programme. For example, O'Donnell et al. (1998) found that combining classroom health instruction with student involvement in community service reduced student risk behaviours more than curriculum alone did. The Child and Adolescent Trial for Cardiovascular Health found that food service changes, enhanced physical education and classroom curricula achieved fat reductions in school lunches and increased physical activity in the target schools as compared to the control schools (Luepker et al. 1996).

**Figure 3. Web Resources for Research-Based School Health Promotion Initiatives**

Agency	Contents
<p>The Cochrane Collaboration, Cochrane Health Promotion and Public Health Field  <a href="http://www.vichealth.vic.gov.au/cochrane/welcome/index.htm">http://www.vichealth.vic.gov.au/cochrane/welcome/index.htm</a></p>	<p>Provides systematic reviews and protocols on public health interventions for various topics, including infectious disease, cardiovascular disease, cancer, drugs and alcohol, mental and social health and injury. Offers links to the Cochrane library and other databases of evidence-based medicine</p>
<p>Center for Substance Abuse Prevention (CSAP), Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services  <a href="http://prevention.samhsa.gov/">http://prevention.samhsa.gov/</a>  <a href="http://preventionpathways.samhsa.gov/">http://preventionpathways.samhsa.gov/</a></p>	<p>Prevention Pathways provides information on prevention programmes, programme implementation, funding, evaluation TA, online courses and other resources</p>
<p>SAMHSA Model Programs, reviewed by the National Registry of Effective Prevention Programs (NREPP)            SAMHSA Model Programs  <a href="http://modelprograms.samhsa.gov">http://modelprograms.samhsa.gov</a>            NREPP  <a href="http://modelprograms.samhsa.gov/template.cfm?page=nrepbutton">http://modelprograms.samhsa.gov/template.cfm?page=nrepbutton</a></p>	<p>Offers alphabetical listings of SAMHSA's promising programmes, effective programmes and model programmes; a search tool to find programmes in specific content areas including academic achievement, alcohol use/abuse, antisocial/aggressive behavior, HIV/AIDS, illegal drugs, psychological trauma, social and emotional competency, tobacco and violence</p> <p>Lists NREPP's evaluation criteria and explains the review process of potential effective programmes</p>
<p>Office of Juvenile Justice and Delinquency Prevention (OJJDP)            Blueprints for Violence Prevention  <a href="http://ojjdp.ncjrs.org/">http://ojjdp.ncjrs.org/</a>            Blueprints for Violence Prevention  <a href="http://ojjdp.ncjrs.org/publications/PubAbstract.asp?pubi=11721">http://ojjdp.ncjrs.org/publications/PubAbstract.asp?pubi=11721</a>            Successful Program Implementation: Lessons from Blue Prints  <a href="http://ojjdp.ncjrs.org/publications/PubAbstract.asp?pubi=11719">http://ojjdp.ncjrs.org/publications/PubAbstract.asp?pubi=11719</a></p>	<p>A report of the Blueprints project, an evaluation of over 600 programmes that identified 11 model programmes and 21 promising programmes that prevent violence and drug use and treat youth with problem behaviours. Report also includes lessons learned about programme implementation and recommendations for those who design, fund and implement such programmes</p>

<p>International Union of Health Promotion and Education (IUHPE)  <a href="http://www.iuhpe.org">http://www.iuhpe.org</a>          Global Health Programme for Health Promotion Effectiveness (GPHPE)  <a href="http://www.who.int/hpr/ncp/hp.effectiveness.shtml">http://www.who.int/hpr/ncp/hp.effectiveness.shtml</a>          GPHPE leaflet  <a href="http://www.who.int/hpr/ncp/docs/gphpe_brochure.pdf">http://www.who.int/hpr/ncp/docs/gphpe_brochure.pdf</a></p>	<p>Describes the GPHPE, the need for evidence of health promotion effectiveness and GPHPE's key contributions to the field</p> <p>Provides descriptions of IUHPE's projects, the latest news in the field and links to journals, videos and special reports on the topic of health promotion</p>
<p>World Health Organization, School Health and Youth Health Promotion: Global School Health Initiative  <a href="http://www.who.int/school_youth_health/en/">http://www.who.int/school_youth_health/en/</a>          WHO Resources and tools for advocacy  <a href="http://www.who.int/school_youth_health/resources/en/">http://www.who.int/school_youth_health/resources/en/</a></p>	<p>Provides an introduction to and background of the Global School Health Initiative, resources and tools for assessment and monitoring effective school health programmes, resources and tools for advocacy (links to WHO School Health publications regarding the physical environment, psychosocial environment, reproductive health, oral health, skills-based health education, sun protection, nutrition, tobacco, HIV/AIDS, helminth infections and violence prevention)</p>

(All websites accessed 21 January 2005)

A recent large national study of U.S. adolescents found that students feelings of connectedness to their school community and to caring adults there (the psychosocial component of a HPS) were the most important factors in reducing risk behaviours (McNeely et al. 2002).

All these studies illustrate how important it is to find and use the best evidence on various elements (or combinations of elements) that lead to reductions in risk behaviours.

St. Leger (2000) has reviewed the properties and evidence of effective approaches for each element used in the HPS framework, in Europe and throughout the world. But, as St. Leger and Nutbeam (2000: 257) note, 'A paucity of research has examined the effectiveness of using the Health Promoting School framework to address school health issues.' Until there are more school-based studies of the effects of combined strategies, the best available strategy seems to be to draw from studies of individual components and combine the components for maximum success.



The websites of these various national, international and regional efforts define their criteria and their review and selection processes, and provide databases that include descriptions of approved research-based strategies and programmes. See Figure 3, Web Resources for Research-based School Health Promotion Initiatives.

The major challenge for educators is to assess whether programmes that have succeeded in one setting with a particular audience will fit their own particular assets, needs and contextual conditions. The next section discusses the capacities and competencies that ministries and schools need to transfer research to practice most effectively.

## Theory-Based and Practical Capacities That Schools need to Implement Research-Based Programmes

Implementing research-based programmes in schools is analogous to constructing a building. The architect uses engineering principles to create a blueprint for a structure that will meet customer specifications and take into account various aspects of the site. The builder must interpret the plan and often adapt it based on conditions he/she encounters. Similarly, education systems must have the capacity to understand the basic concepts of social science research and evaluation, and have in place processes for selecting and using the programmes, which best fit the health issues, demographic and other conditions of particular schools. Technical assistance (TA) can build the capacity that schools need by nurturing, enhancing and employing the skills and talents of people and institutions at all levels (Yates 2000).

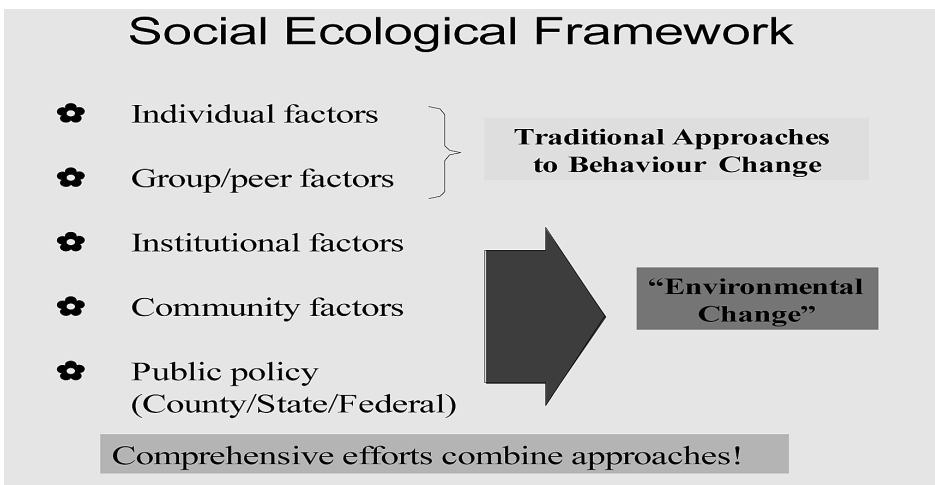
Building schools' capacity requires more than enhancing practitioners' knowledge and skills. It demands a social-ecological approach, which includes interpersonal processes; institutional factors, such as rules and regulations; community factors, such as connections among groups; policy factors; and relationships between the national, state and local levels and between researchers, programme developers and practitioners. Capacity-building activities promote the following kinds of change:

- At the individual level: adoption of healthy behaviours and safe practices
- At the policymaker and practitioner level: acquisition of the knowledge and skills needed to advocate for and implement evidence-based practices

- At the organizational level: adoption of policies, creation of structures and operating systems, and dedication of time and financial and human resources that support delivery of evidence-based practice (Stokols 1996)

These levels – individual, practitioner and school agency – involve students, teachers, other school personnel, administrators, parents and community leaders and the relationship between the classroom, district and often sub-national and national education structures. Figure 4, Social Ecological Framework, illustrates the levels, which all need to be involved to implement research-based programmes. (Langford 2003).

**Figure 4.** *Social-Ecological Framework*

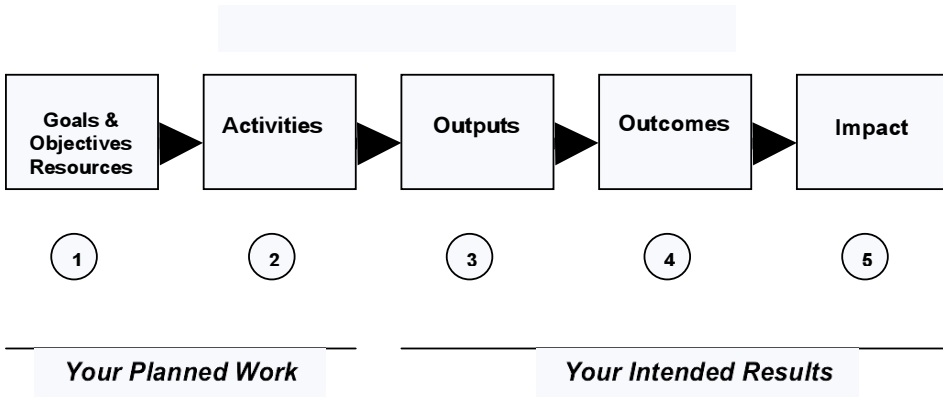


Adapted from Langford (2003).

The blueprint for selecting and implementing a research-based programme for a HPS often takes the form of a 'logic model,' illustrated in Figure 5, The Basic Logic Model, (W.K. Kellogg Foundation 2001).

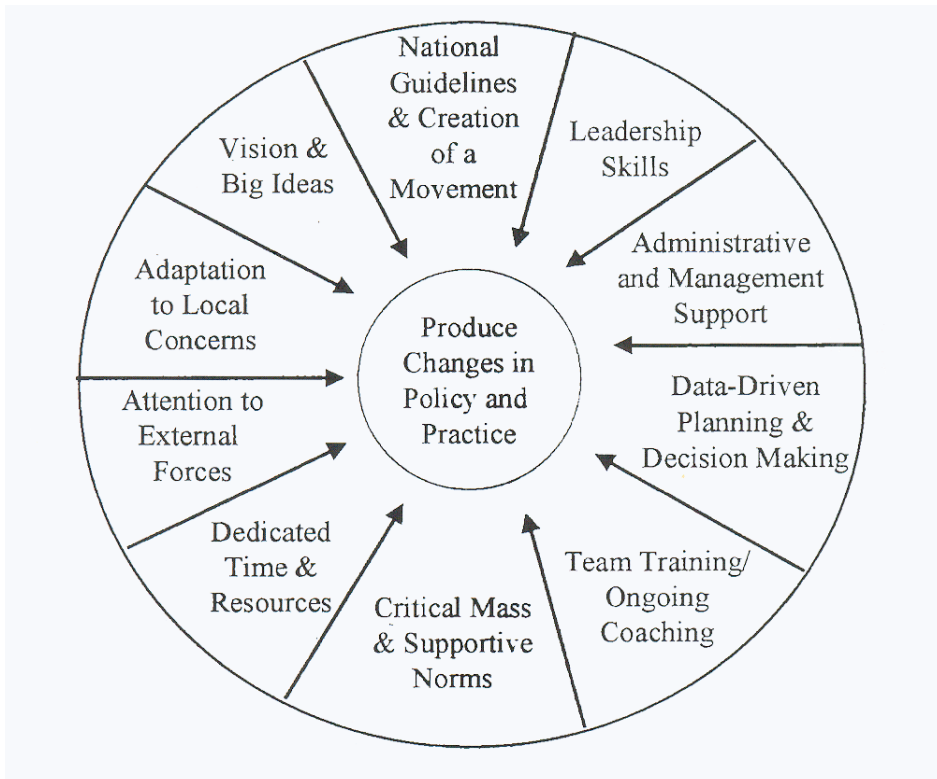
This model guides educators through the process of thinking with final outcomes in mind, so that they can specify goals and objectives, clarify and align the resources and activities to meet those objectives and determine ways to measure progress and outcomes. With such a blueprint in hand, ministries and schools then require the capacity to address Key Factors in Changing Policy and Practice, Figure 6, discussed below (Vince Whitman 1996). The more programme planners can address these factors, the greater the likelihood that they will gain the capacity to transform research findings into practice.

Figure 5. *The Basic Logic Model*



Adapted from W.K. Kellogg Foundation (2001).

Figure 6. *Key Factors in Changing Policy and Practice*



Vince Whitman (1996).

One of the first key factors in the process of changing policy and practice is to have a clear vision or big idea to guide outcomes. A vision can be instrumental in leading educators to adopt new and more effective practices. More often than not, change occurs as a result of outside influences. Ideas requiring large changes are more likely to be embraced than ideas involving small, incremental ones (Berman and McLaughlin 1975). Compared to the more narrow and traditional view of school health as classroom instruction, the broader vision of the HPS, the Child Friendly School, and FRESH (UNESCO and WHO 2001) is beginning to take hold worldwide. This vision combines policy, instruction, a healthy school environment and services. Applying research-based practices in this context requires a large change.

National and international guidelines (the research and evidence) and advocacy can stimulate and support action. Although local schools decide whether to adopt specific approaches, there is little doubt that their efforts are sparked by and rely on the promulgation of international and national initiatives, which define, promote and encourage adoption of the research base. Studies of physician behaviour in the United States, for example, have shown that dissemination of national guidelines, the evidence about proven clinical practice, has increased by 10 percent the number of physicians who adopt the recommended practice (Cohen et al. 1994). A study of USED's Principles of Effectiveness policy for school alcohol and drug prevention programmes found that many school districts reported that they were applying the principles and selecting research-based curriculum (Hallfors and Godette 2002). Dissemination of the research and advocacy for its use in schools are beginning to make a difference in the number of schools that attempt to apply it.

Data-driven planning and decision-making are critical factors in the research-based process and an area where most school staff have little capacity. Data are needed to understand health, academic and behavioural patterns that underlie risk and protective factors, to analyse demographics for how interventions fit the target population, to assess the financial, human and other resources that can be tapped for programme implementation, and organizational properties that affect the school or district's readiness to implement the innovation. Tracking progress also requires data, as well as mechanisms to supply the data to planners for course correction and to document the impact of the programme.

## **Adaptation to Local Concerns**

Those identified research-based programmes have shown results with a particular audience and under specific conditions. Many of the settings to which a programme will be transferred are not identical to the one that produced results—the cultural diversity of students, the type of school system (urban, rural and suburban), and income level of families – may vary. How much change or adaptation can a programme undergo without threatening its ability to produce the same results? What are the core elements, dosage and duration that cannot be changed? Research shows that attention to fidelity is critical for successful outcomes (Backer 2001).

Leadership skill has often been cited by schools and health agencies the primary reasons they have been able to implement innovative programmes. An evaluation of the Promoting Alternative Thinking Strategies (PATHS) programme for ages 6–12 found that good outcomes were associated with principal or headmaster support and high-quality implementation (fidelity, dose, duration). Without the Principal's support, it would not have been possible to achieve the intended outcomes (Kam et al. 2003). The leader's commitment, dedication, support and ability to articulate the vision and motivate and inspire others is key (Kotter 1988). For implementing complex ideas (such as the HPS) or complex processes (such as implementing research-based strategies), leadership talent must exist not only at senior levels, but also at every level in ministries and schools. According to Rogers (1995: 288), 'Change agent effort, whether [by] the leader or [by] her designee, is known to be a predictor in the rate of diffusion.'

Administrative and management support refers to the human and financial capacities necessary to plan and manage the change process. Such support includes making sure that roles, responsibilities and communication channels are clear and that tasks proceed on time and within budget.

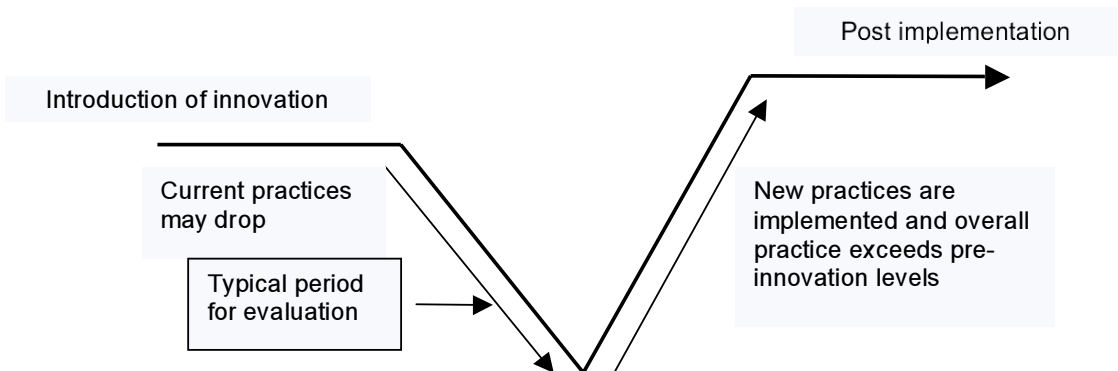
A critical mass of people who share supportive norms is necessary for creating new thinking and practices within and across systems. People in groups tend to move toward normative actions, that is, toward what they believe most people are doing. Until and unless enough staff are trained and committed to implementing research-based practices, it is unrealistic to expect a single teacher or administrator returning home from off-site training to be able to effect change. For this reason, professional development needs to provide team training, involving at least three or four people from the same

school or ministry, who can become the critical mass that influences the norms. Further, professional development needs to move beyond one-time events to a continuum that includes face-to-face team training and peer-to-peer learning, followed by coaching and mentoring over time, supporting people as they try new things.

Finally, there are the factors of time and readiness. A core team must dedicate adequate time to implementing new programmes. One of the most common reasons a project fails is because managers underestimate how much time it will take and whether their staff and system are ready to take it on. Education systems must determine realistically how much time will be needed and assess staff readiness and willingness to move in the new direction.

Once implementation has begun, it typically takes from 18 months to 3 years to actually see or capture evidence of change. In the beginning, the skills of programme implementers—teachers and others—often decline as they try the new skills or strategies, but they gradually surpass their former levels of competence once an innovation is established. Too often we evaluate programmes early on, when experimentation is underway, as shown in Figure 7, Cycle of Implementation, and may fail to capture the change that is happening.

**Figure 7.** *Cycle of Implementation*



The capacity to address these key factors can be enhanced by a TA provider who has experience with schools, the social science evidence, the approved research-based programmes and the implementation process. The next section describes TA strategies to strengthen schools' capacity to convert research into practice.

## Technical Assistance Strategies that Strengthen School Capacity for Technology Transfer

Aware that implementing research-based programmes requires more than disseminating information about them, many countries and regions have established TA centres or networks. These entities serve as the bridge between academic researchers and findings, and the everyday world of the school and its reform efforts. Research-based programmes are often created by university social scientists or by individual developers, who do not have the interest or capacity themselves to disseminate information or provide support for scaling up implementation in many sites. TA centres are experienced in and can perform this valuable function for many projects and programmes.

The European Network of Health Promoting Schools, the more recent Latin American Network of Health Promoting Schools and similar organizations provide a range of TA including informal exchanges of experiences and materials between schools, structured continuing education activities, Web-based resources, publications and implementation tools.

Technology transfer is the movement of a new technology from its creator or researcher to a user. The TA centre's function is to facilitate technology transfer by delivering products and services that lead users to adopt the new technique or product. Services may range from disseminating information about programmes to professional education, coaching and peer learning forums, which offer the opportunity to learn from other teachers and administrators from a range of school systems.

Over the past two decades, Health and Human Development Programs (HHD; <http://www.hhd.org> Accessed 21 January 2005), a division of Education Development Center, Inc. (EDC; <http://www.edc.org> Accessed 21 January 2005), an international non-governmental organization working worldwide, has designed and operated more than six large TA centres enabling a variety of agencies to transfer research to improve policy and practice. Figure 8 lists the

URLs for these centres and the many resources they offer. Enriching our methods and resources are the lessons we have learned from other countries has been the TA work we have done in our role as a WHO Collaborating Centre to Promote Health Through Schools and Communities.

**Figure 8.** *Health and Human Development Programs' TA Centres*

<b>Health and Human Development's TA Centres</b>	<b>URL</b>
Children's Safety Network National Injury and Violence Prevention Resource Center	<a href="http://www.childrenssafetynetwork.org/">http://www.childrenssafetynetwork.org/</a>
USED's Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention	<a href="http://www.edc.org/hec/">http://www.edc.org/hec/</a>
The National Center for Mental Health Promotion and Youth Violence Prevention	<a href="http://www.promoteprevent.org/">http://www.promoteprevent.org/</a>
Northeast Center for the Application of Prevention Technologies (CAPT)	<a href="http://www.northeastcapt.org/">http://www.northeastcapt.org/</a>
National Training Center for Middle School Drug Prevention and School Safety Coordinators	<a href="http://www.k12coordinator.org/">http://www.k12coordinator.org/</a>
The Suicide Prevention Resource Center	<a href="http://www.sprc.org/">http://www.sprc.org/</a>

A typical scenario our U.S. TA centres may encounter follows. A local school district hires a professional writer to prepare a competitive grant proposal seeking federal funding for implementing an approved, research-based programme. In the 30 days available for proposal writing, the school district proposes to implement a research-based a programme, having done minimal or no assessment of its suitability for local conditions or assessment of the readiness and motivation to do so. Few processes may be in place for collaboration among staff within the school or between the school and community. After receiving



the grant, the school has an uphill battle, facing obstacles such as stakeholder resistance, lack of time set aside for training, inadequate financial resources to purchase materials and cover training, etc. The grant recipient and TA provider must then solve these challenges.

Based on these experiences, and on research into technology transfer and innovation diffusion, we have developed a philosophy for delivering TA. Research shows that the quality of implementation makes a difference in student outcomes (Kam et al. 2003). To effectively improve implementation quality, HHD/EDC's approach to TA employs six major strategies:

1. Focus on building the relationship between the TA provider and the recipient.
2. Provide customized TA based on assessment and desired ultimate outcomes.
3. Offer a continuum and variety of TA and professional development modalities to accommodate different learning styles.
4. Develop the leadership capacity and skills of change agents at all levels.
5. Use electronic technologies creatively and cost-effectively.
6. Track and monitor progress, with continuous feedback on successes and challenges, to a range of stakeholders.

The following sections discuss these six strategies in detail.

*1. Focus on building the relationship between the TA provider and the recipient.*

We believe that the relationships we develop with school staff are most important in the change process. We base our approach on understanding their strengths and concerns, respecting what school staff know about what works for them and their students, families and communities. Loucks-Horsley's (1996) 'concerns-based adoption model' offers the 80/20 rule: Unless you devote 80 percent of your attention to the user's concerns, you have only a 20-percent chance of success.

Technology transfer is not about exchange between expert and non-expert, but between people who possess different spheres of knowledge, each essential for the success of the project. One sphere may relate to the science of intervention and circumstances needed for success; the other sphere may concern the school environment and conditions in which the intervention will be introduced. HHD/EDC uses numerous techniques—basic conversation, surveys and focus groups—to understand school staff's concerns about the innovation, as well as the strengths they bring to the effort.

*2. Provide customized TA based on assessment and desired ultimate outcomes.*

Each school's circumstances and stage of readiness are unique and TA must be customized to meet the school where it is in the process. HHD/EDC created a developmental TA model, by which we meet each school at its particular stage of development in the research-to-practice process. A major challenge that schools face in using evidence-based programmes is assessing the fit between characteristics of the setting where results were achieved and the features of their own students and school. Many of the early research-based programmes were developed in more affluent, homogeneous, suburban communities, not ethnically diverse, poorer, urban or rural areas. How does a school choose a programme or approach so that it can achieve the same results as the model.

Beginning with the end in mind, as illustrated in the logic model, what resources, inputs and activities will it take to achieve those outcomes? Consistent with the educational goals of the school, what health outcomes does the school want to produce? Guiding schools through this consideration of content and process can focus and align the resources.

HHD/EDC has also developed easy-to-use tools to assist schools in assessing both their readiness to undertake implementation and the feasibility of implementing a research-based programme. One U.S. state required every school and community agency that received state funds to use our tools for the process of selecting research-based programmes. By assessing readiness and feasibility with user-friendly tools, local agencies reported that the tools made it much easier for them to understand the research to science process and to select programs that were relevant (Harding and Goddard 2000).

*3. Offer a continuum and multiple modalities of professional development events.*

Research on professional development for educators reports that less than 10 percent of the content taught in one-time workshops or seminars is applied to practice and that ongoing coaching and mentoring are necessary for practice change (Langer 2000). Therefore, our TA offers a continuous series of learning events, with different formats, for different stages in the implementation cycle. As described earlier, HHD/EDC aims to reach teams, not merely individuals, from a school or ministry, to ensure that a critical mass of people returns to the organization and changes its ethos and capacities.

Offering a continuum of learning events, from assessment to face-to-face workshops, we focus not only on developing knowledge and skills, but also on building relationships. Typically, we bring teams from the same institution to

an event so they can support one another in creating change when they return home. Our learning events are never one-time only; rather, face-to-face experiences are followed by on-line courses, additional print and Web-based resources and telephone TA. As TA recipients try new things, they generally experience setbacks and obstacles; ongoing support from the TA centre can help them work through their problems and succeed.

#### *4. Develop the leadership capacity and skills of change agents at all levels.*

Often, we expect people in senior leadership positions at the school or district level to assume this responsibility. We have found that designated leaders may not always act as such and that others emerge who must be nurtured and supported. Therefore, leadership talent must be developed not only in those designated with the responsibility, but also in staff at various levels. As a nurse in one of our programmes stated, “Leadership is having the courage and imagination to do what is necessary without waiting for someone to tell you what to do.”

To build leadership for reducing heavy and harmful drinking on college campuses, HHD/EDC’s Higher Education Centre for Alcohol and Other Drug Abuse and Violence Prevention (HEC) searched for presidents of colleges and universities who were creating new prevention strategies. After recruiting six outstanding candidates who were making a difference and serving as leaders, the TA centre created a campaign, The President’s Leadership Group, funded by the Robert Wood Johnson Foundation. Using case studies from these six exemplary leaders, the campaign, called on all college presidents to take leadership roles on this issue. HEC used many strategies, including rallying all college presidents within a state to come together and sign a commitment to act. This strategy was effective because it avoided single campuses’ having to declare that they had a problem. The six original innovators also participated in many media and public events, calling for change. This initiative has proven to be an effective way to engage presidents in making commitments to action, giving them visibility for their courage and leadership and holding them publicly accountable for policies and prevention strategies on their campuses.

Another example of the way we build leadership is the National Training Centre for Safe and Drug-Free School Coordinators, which developed the competencies of approximately 1,000 newly appointed school and community coordinators who were responsible for implementing evidence-based school strategies. Guided and funded by USED, the Centre developed and implemented

a leadership institute, where coordinators could learn leadership skills for creating change and institutionalizing their work. Targeted to individuals, who identified the need for these skills, the institute focused on four broad areas: skills development, knowledge acquisition, personal reflection, and networking and support system development. Content was taken from the fields of prevention, systems change and organizational development. Individual assessments of skills and style were interwoven with time devoted to personal reflection. Opportunities to network with other participants were provided, creating a support system designed to reduce participants' sense of isolation after they returned home.

*5. Use electronic technologies creatively and cost-effectively.*

The Internet makes it possible to provide ongoing support and services to schools after face-to-face training. Based on research into what is effective, HHD/EDC has mastered the art of creating Web sites that support the implementation of research-based programmes. Our TA centre web sites typically have the following features:

- Employ a research-based conceptual framework for approaches to a particular issue, such as substance abuse and violence
- Incorporate a range of searchable databases containing publications; tools; research articles; directories of experts, peers and evaluators; etc. Schools can use this wealth of information to learn, network and find solutions for their own problems
- Deliver web-based follow-up courses after face-to-face workshops – one form of ongoing coaching and mentoring that research shows is necessary for practice change. Research demonstrates that web-based courses can achieve learning outcomes similar to those of face-to-face courses (Cukier 1997). However the initial cost of developing web-based courses can exceed the costs of developing face-to-face workshops, unless the final product can be used with large numbers of people. Extensive evaluation of our on-line follow-up courses has shown significant changes in participants' knowledge and practice, even up to six months after the course (Harding and Formica 2001). Most striking are the reported increases in the number of middle school coordinators, who reported that they initiated evidence-based programmes (from 45 to 82 percent) and who increased programme evaluation (from 35 to 78 percent) (Harding and Formica 2001).

- Encourage and facilitate peer learning and exchange of tacit knowledge about experience with the implementation process. By supporting Web-based conversations among practitioners all over a country, we enable them to learn from each other. We have also transformed the Web-based exchange about lessons learned concerning implementation into print products for broad circulation to others (EDC 2002)

#### *6. Track and monitor progress, with continuous feedback from stakeholders*

Our TA centres must strive to answer two critical questions: What impact are the products and services having on organizations' and practitioners' ability to implement research-based programmes? And what is the relative effectiveness – including cost-effectiveness – of various TA approaches?

Built into the work of each HHD/EDC TA centre is an evaluation component, conducted by a third-party organization. An evaluation begins by assessing each client and then measures which TA products and services were delivered to whom on which topics. We examine the short- and longer- outcomes (from 3 to 24 months) of specific learning events, examining changes in practitioner knowledge, skill development, actions taken, organizational changes in policy and structure, and customer satisfaction. Some evaluators also maintain databases of anecdotal success; in-depth notes on each TA conversation; and anthropological case studies of what changes took place, how they were brought about and the facilitating and inhibiting factors. The centre often transforms these cases into additional teaching and TA tools.

TA centre evaluations have contributed to the documentation and understanding of the many results we have described here. The future demands that we conduct more research on the implementation process itself, to learn in more depth about the cost-effectiveness of various techniques and ways to bring research into practice, shortening the research-to-practice time gap and improving the health of students and staff.

## Conclusion

If individual children and nations are to achieve their educational goals, more attention must be dedicated to the physical, social and emotional health of students and school staff. In the last 15 years, research has taught us so much about effective strategies for promoting healthy behaviours and environments,

but many of these lessons have not yet been applied. The challenge is still to convince education policymakers that health is vital to academic performance and then to strengthen school capacity to implement research-based health promotion policies and programmes. Quality TA can be instrumental in ensuring quality implementation, which in turn improves student and staff outcomes.

In our TA centres, we see that many education and public health agencies are familiar with the concept of research-based approaches and funders' demands to use funds for this purpose. But the saturation, depth and quality of implementation do not match the level of familiarity with the concepts.

There is a long way to go in providing professional development in TA services to school and community staff to gain these competencies. The schools receiving TA are typically the most capable ones, with strong track records in winning grants. By mandate, most TA services go to those funded groups. However, thousands of other school and community agencies need capacity building and a much broader audience could be served.

But even this first wave of change has produced numerous benefits. Education and community practitioners have gained new understanding of social science research and methods of evaluating school-based interventions and are asking important questions about programme selection and implementation. Through many training and TA events, TA recipients have become more aware of the need to use local data carefully to ensure the best fit between the intervention and the particular health issue(s), audience and setting.

Practitioners have also gained knowledge and skills related to the many organizational and human factors that contribute to success, including the need for collaboration and cost savings and the invaluable impact of a principal or headmaster's leadership.

Planners and school staff have gained confidence from acquiring these new competencies. One school health coordinator commented:

“The first thing I learned is to talk the language of the school. Once I could convey how research-based approaches would address academics, discipline and behavioural management, teachers saw the value and were drawn in to participate.”

Another benefit of TA is that through forums facilitated by TA centres, researchers and developers have come together with practitioners and national and state

policymakers. The trend itself has increased the connections and dialogue about the many issues involved in using research to improve practice and generated new research questions and evaluation efforts to make more programmes eligible to be judged as exemplary.

One of the drawbacks of this recent trend, however, is that many of the approved programmes that have met rigorous criteria for evaluation are single-element, single-topic programmes. Many have been evaluated in mainstream, resource-rich communities. Because of the cost and difficulty of conducting controlled studies of multiple elements, relatively few such studies exist. Lacking an organizing framework and evidence for broader strategies, many schools select 'packaged programmes' that tend to be narrow. Even when schools select multiple research-based components, the components are typically unrelated in terms of health topics, as well as uncoordinated in terms of implementation. The schools thus miss an opportunity to maximize impact.

As the evidence about what works grows, what remains most valuable for implementing schools and agencies is acquisition of the knowledge and skills needed to understand social science and public health methodologies. With such knowledge and skills in place, they can continually assess the ever-changing needs of their constituents and plan, implement and monitor proven approaches. With high staff turnover rates in schools, ongoing ways to develop and evaluate these competencies are essential.

For TA centres to be effective, innovative work for the future lies in improving services by evaluating 1) the relative effectiveness and cost-effectiveness of various TA strategies and dosages; 2) the effect of financial incentives requiring that funding be used primarily or only for research-based programmes; and 3) the impact of TA strategies on practitioners' knowledge and skills, the organization itself, and the education and health outcomes for students and staff.

With the growing realization of the interdependence of health, education and human and economic development, investments in this arena could produce untold savings in the costs of academic failure, delinquency and chronic disease. We owe it to the many committed practitioners who strive every day to serve society, and to the children and adolescents whose lives are affected, to make wise decisions about these investments—and then to make the investments.

## Acknowledgements

I would like to pay tribute to the leadership provided by the directors of EDC/HHD's technical assistance centres, who have designed innovative national systems to support schools in implementing evidence-based programmes: Connie Constantine, Tania García, Yvette Lamb, Deborah Haber, Ginger Mackay-Smith and Lloyd Potter. Their work has informed and provided many ideas for this article. Special tribute is also owed to Mr. Jack Jones and Mr. Charles Gollmar of the World Health Organization in Geneva, whose commitment to Health Promoting Schools over many years has made so much possible for others worldwide; to Carmen Aldinger for the technical assistance she has given to schools in many countries; to Mr. Frans Rameckers of EDC-Europe, the bridge for our work across the Atlantic, and to Ms. Kathryn Curran and Ms. Tracie Robinson for their patient assistance with this chapter.

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## 7

## Health Education and Environmental Education: The Case for Integration

*Jörgen Svedbom*

### Introduction

Health Education (HE) and Environmental education (EE) are assuming great importance all over the world in response to the fact that global environmental and health problems are growing in scale and complexity. Naturally many politicians and policy makers think that school education is a powerful way to tackle these problems and therefore support projects and programs on HE and EE (Environmental Education 2005). This has resulted in different national and international initiatives such as 'Green schools', 'Eco Schools', 'Healthy Schools', 'Health Promoting Schools' etc. At the same time, and because of financial reorientation in many countries, schools and other public institutions have been subjected to financial cutbacks. These cutbacks can result in a competition between different issues at school level, e.g. between HE and EE. But there are so many connections between the development of health problems and environmental problems and so many similarities between HE and EE that cooperation and integration between the two issues should be explored, rather than seeing them as two aspects of education in competition. The purpose of this chapter is to explore the conditions for a mutually beneficial integration of HE and EE within schools.

## Environmental and Health Problems

### **Environment**

The history of mankind is the history of environmental pollution and environmental problems (Hubendick 1985), and these have changed dramatically over the last 150 years. Up to the beginning of the 20<sup>th</sup> century most environmental problems in industrialised countries were local: smoke and waste from industries, power plants etc. caused heavy pollution in the neighbourhood of these works. However, with continued industrial expansion and development polluting agents were released higher up in the atmosphere and moved over longer distances from the source. This resulted in more diluted polluting agents but at the same time these diluted agents covered bigger areas. The environmental problems became regional!

While the introduction of cleaning equipment and more efficient processes in the industry and power plants reduced this kind of pollution, concurrently a lot of small-scale polluters such as cars, refrigerators, freezers, Hg- and NiCd-cells and electronic equipment were introduced. In addition, the consumption of energy increased considerably with a growing demand for electricity. Together these sources of pollution have contributed to huge, global environmental problems such as the global warming, degradation of the ozone layer, pollution of the sea, erosion of soils, and extinction of species. These kinds of problems can be seen as a consequence of our present economic system and predominating economic theory with its constant struggle for increasing economic growth, and this in turn makes it very difficult to stabilise these kinds of global environmental problems, let alone reverse them (Tiberg 1993).

### **Health**

The profile of global health has also changed substantially over the last 150 years. Infectious diseases such as tuberculosis, cholera, smallpox etc. were the most common causes of death in the pre-industrial and industrial world up to the middle of the 20<sup>th</sup> Century. But with better standards of housing, nutrition and hygiene as well as more efficient health care systems, infectious diseases decreased, especially with the introduction of antibiotics. With these changes, greater affluence and substantial improvements in life expectancy have come dramatic increases in so-called 'life-style' diseases, such as diabetes, obesity, cancer, and cardiovascular diseases. An increasingly elderly population has also brought with it increasing levels of degenerative diseases, such as dementia. In

addition, health problems of a social and psychological character have increased e.g. depression, anxiety, obsessive-compulsive disorders, stress-related conditions and addictions. These kinds of problems may be connected with wide-ranging changes in society, work-life balance, media/communication, and family structures and Borgenhammar (1997) argues that such changes have led to a loss of trust among people. He even labels these problems 'lack of trust-diseases'. It has also been suggested that these social diseases are the result of a large-scale loss of what Antonovsky (1987) calls salutogenic factors such as coherence, purpose and meaningfulness.

The constant struggle for economic growth leads to bigger and bigger systems that are difficult to understand and control. The ever-increasing speed in society reduces time for reflection and for development of understanding and coherence (Hylland Eriksen 2001). And the strong tendency to individualization in our societies threatens the development of trust and social capital. (Putnam 2000).

## The Role of Education in Tackling Environmental and Health Problems

In many countries politicians see the education system (including schools) as an important way to tackle environmental and health problems. In the Central European pedagogical tradition, 'didactics' is understood as the scientific reflection on the relations between the aims, the content and the methods for a given education. Such reflections are linked to the following key questions:

- Why? (why should we teach about this – what are our aims and goals?),
- What? (what shall be the content of this education if we want to reach our aims and goals?) and
- How? (how shall we teach – what methods shall we use to realize the aims/goals?).

What are the differences and similarities between HE and EE from a didactical perspective? Are the aims, means and methods of HE different from those involved in EE? And what didactical reasons can be given for an integration of HE and EE? There are three different rationales for combining or integrating HE and EE, which focus on instrumental reasons, on holistic reasons and on efficiency reasons.



### **An instrumental approach**

An instrumental approach can be taken in two directions. In the first approach, attention is paid to the fact that health can be seriously damaged by different kinds of environmental pollution. Therefore promotion of health is taken as a reason for developing and delivering EE. The idea behind this approach is that people care more about their own individual health than for the common environment, and by stressing that environmental degradation is likely to damage personal health, people will care more about the environment. In this approach, environmental impact on health is used as a 'tool', or instrument, to motivate integration between EE and HE.

The second approach starts with health, and argues that if a person experiences mental well-being, where the different levels of the personality are in a harmonic balance with each other, they will experience less of a need to struggle for continuously increasing levels of luxurious consumption which pollutes and damages the natural environment (Moberg 1985). This instrumental approach uses mental health impacts on the environment as a 'tool' to support integration of EE and HE.

### **A holistic approach**

As opposed to the instrumental approach a holistic approach means looking upon HE and EE as two different sides of the same coin. And in this case the 'coin' is life on earth. In this approach every living creature is apprehended as a part of life itself and thus connected to all other creatures living on earth, now and in the future (as well as in the past). This kind of understanding of life, nature and environment can be illustrated by the speech from the Indian chief Seathl (or Seattle) in his negotiations with the Washington district governor General Stevens about Indian land where he said (Jansson and Stride 1980):

“Man didn't weave the great web of life. He is just a thread in this web.  
And everything he does to this web, he does to himself”

In this approach to HE and EE, there is very little difference between HE and EE. HE has to do with environment and EE has to do with health. This kind of education is not very common in the western, industrialized part of the world. It is mostly connected with movements or associations concerned with philosophical ideas such as deep ecology or 'ecosophy'. Also in traditional

cultures, (that should not be denigrated as ‘primitive’), such views upon nature, life, man and health are more common.

### **An efficiency approach**

Another reason for combining or integrating HE and EE is that such integration can increase the relevance and efficiency of teaching these issues, especially when financial cut-backs risk to reduce the resources for both HE and EE. To explore the conditions for such relevance and efficiency-gains, it is important to analyse what some of the more important international documents on HE and EE, the Ottawa Charter (1986) and The Tbilisi Declaration (1977), say about the didactical perspective.

The Ottawa Charter does not speak explicitly about health education but about health promotion. An important part of health promotion in schools is HE. According to this Charter health promotion is:

‘... the process of enabling people to increase control over, and to improve, their health (...) The fundamental conditions and resources for health are peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equity (...). People cannot achieve their fullest potential unless they are able to take control of those things which determine their health.’

If the Ottawa Charter is applied to HE in school, it should be: The educational process that enables the students to take control over those things that determine their health. Thus, the aim of HE is that students shall be able (and willing) to ‘take control over’ these factors that determine their health.

The Tbilisi Declaration, defines EE as the kind of education:

‘... that prepares the human being for life through making her aware of the complex problems in the world today and through giving her the skills and qualities needed to play a productive role in the efforts to improve living conditions and to care for environment with appropriate anchoring in ethical values. Through a holistic attitude, rooted in broad, multidisciplinary soil, environmental education creates an overall perspective that takes into account the fact that the physical and man-made environments are closely depending on each other.’

In the Tbilisi Declaration, the aim of EE can be summarized with the words awareness, knowledge, attitudes, skills, and participation. The goals for the education are put on the knowledge and attitude levels while Ottawa Charter places the goal for HE on the action level (to 'take control over' meaning a competence to act). What would happen if we introduced aims on the action level in EE? Can we use the formulations from Ottawa charter in EE? What would it mean if we assumed that the aim of EE was that people should 'take control over those factors that determine' their environment? To explore that, we need to know something about which factors determine people's health and their environment.

## Factors Determining People's Health and the Environment

Firstly, the health status of a population is determined by some factors that we cannot influence e.g. sex, age, genetics etc. In addition to this there are a number of factors, which we are able to influence. These include our own life-style, the conditions under which we live and the structural factors related to the development of the society on the macro level.

From an educational, or didactical, perspective the aim of HE can be directed at one or several of these areas. In many countries, and for many years, life-style has been in focus for HE. This kind of HE seems to neglect the fact that people's life-styles are to a great extent determined by the conditions under which they live and that these conditions are heavily influenced by the structural development of the society. Consequently, a lifestyle-oriented HE runs the risk of being moralistic and inefficient, having very little influence on students' health.

In addition to factors mentioned above we have the so-called 'protective factors'. These are factors that protect people from being ill and help them to stay healthy in spite of not very healthy (or even quite unhealthy) conditions. This area is attracting more and more interest in HE and examples of such protective factors are social competence, self confidence, coping ability, efficacy, emotional intelligence, sense of coherence, health literacy etc.

When we turn to the environmental problems the same kind of factors are in play. There are factors that man can hardly have any influence on, such as volcanic eruptions, earthquakes, cosmic radiation etc.

Life-style factors are also very important for the quality of the environment.

Such factors can be transport, food and eating habits, energy use, housing, commercial consumption, recycling etc. Life-style factors are to a substantial degree determined by the living conditions which again are determined by structural factors such as economic development, public policy, legislation, industrial structure and development etc. These structural factors, that are important for the development of the environment, are nearly identical to the structural factors that are crucial for the public health of a society.

Can we also talk about 'protective factors' in relation to the environment? If there are protective factors for the environment, analogous to the health protecting factors, they are probably more physical and external than human and internal. Examples of such factors that are protective to the environment are calcium disposal to increase the buffering capacity of lakes and rivers, increasing the diversity in ecosystems so they are more resistant to changes in physical factors, introduction of plant species that better can resist polluted air etc.

## Implications for Education

As illustrated above there are many similarities between factors determining health and the environment. Many lifestyle factors are important for both health and for the environment. If the aim of EE and HE is that students modify their life-style into a more healthy and/or environmentally friendly way, the same methods can be used in both HE and EE.

Living conditions and the structural factors are more difficult than life-style to influence from an individualistic life-style perspective. Consequently, a more action-oriented pedagogy must be used to develop the competence and willingness among the students to act to change the living conditions in a healthier or more environmentally friendly way. Examples are air-quality, water-quality, housing environment, traffic and transportation systems and fiscal policy.

When talking about EE most people think of our natural environment such as forests, rivers, lakes, seas, wildlife etc. But the majority of children and young people, at least in the industrialized, 'western' part of the world, are not very often in direct contact with this kind of environment. For most young people, living in urban areas, the most common environment are the streets, the schoolyard, the parks, the housing areas, the traffic etc. Consequently, if EE is to

be engaging and important for young people in urban settings, it must focus on this 'human-shaped' part of the environment.

This kind of urban environment has more direct and obvious influences on health than has the natural environment. The quality of the streets, parks, playgrounds, traffic systems etc. are more important for the health of young people than the situation in lakes, forests, grasslands, swamps, rivers and seas. So from an instrumental point of view, it could be even more important to integrate urban EE with HE than it is to combine traditional EE and HE. Furthermore, students' actions in EE, focused on the urban environment, will probably have a more direct influence on their health than actions related to the natural environment.

## Integrating Health and Environmental Education – A Case from Sweden

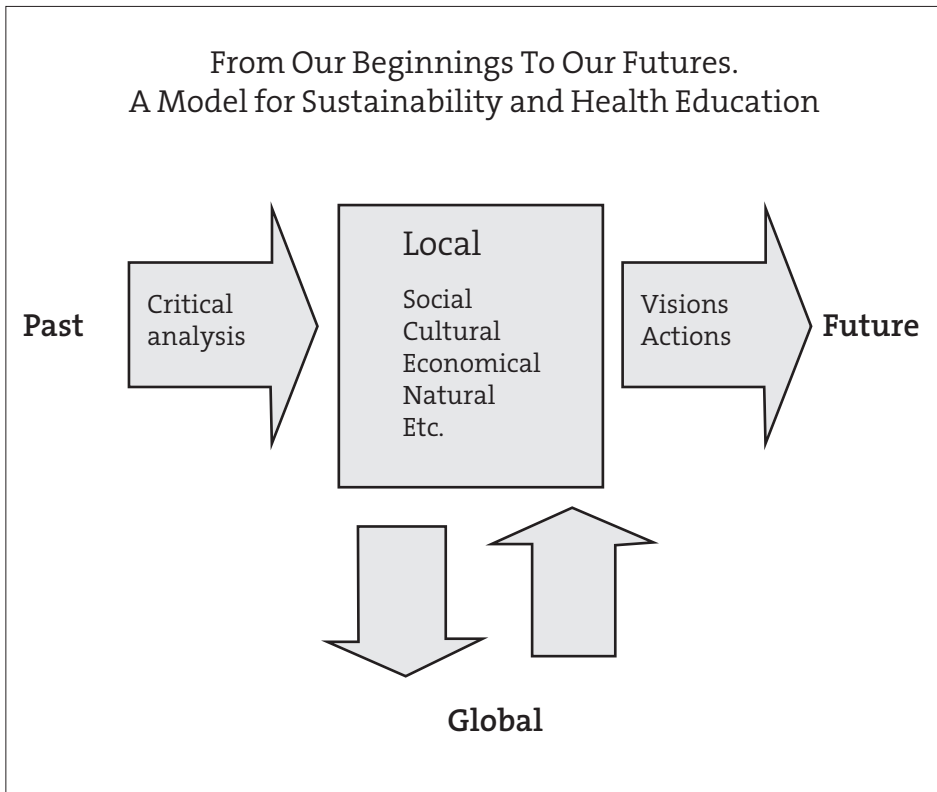
How do we develop the skills needed to meet the challenges of the future and ensure the active involvement of future generations in working for sustainable development and good health, locally and globally? 'From Our Beginnings to Our Futures' (FOBTOF), is a project developed at School of Education and Communication, Jönköping University in Sweden, which tries to tackle these questions. The FOBTOF project is deeply rooted in the Tbilisi Declaration on environmental education as well as in the Ottawa Charter on health promotion (see Figure 1)

The main questions for this project are:

- How can we, in basic education, promote pupils' commitment for sustainable development and good health, locally and globally?
- How can teachers prepare for their own, and for their future pupils' learning for sustainable development and good health?

The two most important theoretical fundamentals for this project are the concept of Action Competence as developed at the Research Centre for Environmental and Health Education at the Danish university of Education (Jensen 1997) and Antonovsky's theories on coping and coherence (Antonovsky, 1979, 1987). The practical fundament is the use of modern, computerized information and

**Figure 1.** *From Our Beginnings To Our Futures – a model for integrated and action oriented health and environmental education*



communication technology (c-ICT), and the purpose is to involve students (13-16 year old) in the municipal Agenda 21-programmes for a sustainable development and better health (Agenda 21 1992).

This c-ICT-tool works as a matrix, which pupils can use to explore a specific issue or aspect of the subject they are studying. The pupils can choose to explore almost everything they are interested in and which is connected to this subject. The tool makes it possible for the pupils to illustrate social, ethical, cultural, physical and other conditions and changes in a society from our beginnings up to now. The tool also gives opportunities to explore global perspectives on the theme studied (see References for web resources).

One purpose of using this learning tool is to stimulate students/pupils reflection on what underpins their own values by responding to questions such as:

- When was the best time to live?
- For whom was it best?
- What qualities in life have been lost?
- What have been added?
- What forces have there been behind the changes?
- How was the ecological situation for mankind during different eras?
- How was their health?
- Which lifestyles were/are possible to combine with sustainable development and good health?

A second aim to be addressed by pupils in this project is 'How would we like to live our lives in the future'? Using simulation-style programs, combined with the learning tool, pupils can explore how their different visions of the future relate to sustainable development and good public health. The use of c-ICT allows the pupils in the project to easily establish contacts with other pupils in other parts of the world to present and discuss their different visions of the future with each other. The purpose of this is that the students shall develop an understanding for other cultures but also an understanding for what impacts it could have on people's environment and health if their own visions would be realized on a global scale.

A third aim of the project process is that the pupils shall develop some kind of action plan, and then take action, to realize (parts of) their visions. At this stage in the process, the actions taken should be reflected on, well informed and built upon reliable knowledge. With the help of the c-ICT-tool, the pupils can compare the desired outcome of the actions with the real outcome. If needed and possible, the pupils can start the process with visioning, planning, action-taking etc. once again

This project has not yet been fully evaluated but preliminary results show that this way of organising teaching and learning gives the teachers and students considerable freedom to work with issues they find really interesting. They also use this freedom to develop their own profile of the project. Preliminary results also show that this way of working seems to strengthen some of the protective factors, e.g. self-confidence and empathy by the pupils. These are factors that help the students to manage unhealthy situations and stay healthy.

## Conclusions

From a historical point of view, there are many similarities in the development of health and environmental problems on a global scale. In both areas an historical development can be discerned, as problems have changed from being more local, well defined and potentially manageable, to being global, diffuse and more intractable. In developed societies many environmental and health problems are caused by the same underlying mechanism i.e. the quest for continuous economic growth. This constant struggle results, among other things, in:

- Increased energy consumption and material transformation causing global environmental problems
- A more hectic life, which produces tensions in the relations between man and man, man and family, man and society and man and the environment
- Increased 'speed' of life, reducing the possibilities for reflection, over-view, coherence, meaning and trust

Currently, therefore, many increasingly serious environmental and health problems appear to have the same underlying causes, and this supports the argument for a far-reaching combination and integration between HE and EE. However, the way EE and HE should or should not be linked depends on how we regard the overall aim of these activities. From an educational point of view health and environmental problems are often treated separately if the aim of the education is to develop knowledge about health and the environment. On the other hand, if the aim is that students develop their own attitudes to life style and living conditions that are crucial for health and environment, a more integrated approach should be used as the fundamental attitudes and values underpinning health and environmentally conscious behaviours are very similar. Furthermore, if the aim of education is to develop students' competence to act and to facilitate fundamental change, a far-reaching integration between the two subjects is certainly warranted as the root causes behind many environmental and health problems are similar.

In conclusion, a far-reaching integration between HE and EE seems necessary if we consider the overall aim of HE and EE as to develop students' attitudes and values that are friendly to environment and health and to develop their competence to act, individually and jointly. By doing this we also live up to the



international agreements and declarations, such as the Ottawa Charter and the Tbilisi Declaration.

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## 8

## Skills For Health: Skills-Based Health Education to Teach Life Skills

*Carmen Aldinger and Cheryl Vince Whitman*

### Introduction

Skills-based health education is an approach to creating or maintaining healthy lifestyles and conditions through the development of knowledge, attitudes, and especially skills, using a variety of learning experiences, with an emphasis on participatory methods.

This chapter reviews the body of theory and research that provides a rationale for the benefits and uses of skills-based health education, including child and adolescent development theories, social learning and social cognitive theory, social influence or social inoculation theory, resilience theory, theory of reasoned action and the health belief model. Research evidence and accumulated experience have established the effectiveness of skills-based health education to successfully address prevalent health issues such as the use of alcohol, tobacco and other drugs; high-risk sexual behaviour; delinquent and criminal behaviour and bullying; self-esteem and positive social adjustment. Critical success factors for skills-based health education include a commitment from stakeholders, theoretical underpinnings, relevant content and developmental levels, participatory teaching methods, adequate timing and sequencing, multiple strategies in a coordinated approach, teacher training and professional development, and participation of students, parents, and the wider community. For going to scale with skills-based health education, the trend is toward a comprehensive approach, effective placement within the curriculum, using existing materials better, linking content to behavioural objectives and changes in health-related conditions, and consistent, ongoing professional development for teachers and support teams.

This review is based on a synthesis of information from the literature, field experiences, experts, and electronic questionnaires sent to international health and education agencies around the world.

## Theoretical Base for Skills-Based Health Education

A significant body of theory and research provides a rationale for the benefits and uses of skills-based health education. Child and adolescent development theories provide an understanding of the complex biological, social, and cognitive changes, gender awareness, and moral development that occurs from childhood through adolescence. For instance, late childhood and early adolescence (ages 6-15), when the ability for abstract thinking develops (Piaget, 1972), are critical moments for building skills and positive habits such as understanding consequences and solving problems though the validity of Piaget's theoretical constructs has recently been challenged. The wider social context of early and middle adolescence provides opportunities to develop positive relationship with peers and other individuals outside the family.

The theory of multiple intelligences (Gardner, 1993) proposes the existence of eight human intelligences that take into account the wide variety of human capacities: linguistic, logical/mathematical, musical, spatial, bodily/kinaesthetic, naturalist, interpersonal, and intrapersonal intelligences. A broader vision of human intelligence points toward using a variety of instructional methods to engage different learning styles and strengths.

Social learning theory (Bandura, 1977) concludes that children learn to behave both through formal instruction and through observation. Children's behaviour is reinforced or modified by the consequences of their actions and the responses of others to their behaviours. Therefore, teaching skills needs to replicate the natural processes by which children learn such as modelling, observation, and social interaction. Reinforcement is important in learning and shaping behaviour.

Problem-behaviour theory (Jessor and Jessor, 1977) recognizes that adolescent behaviour is the product of complex interactions between people and their environment: the personality system (values, expectations, beliefs and attitudes), the perceived environment system (perceptions of friends' and parents' attitudes), and the behavioural system (acceptable and unacceptable behaviours). Behaviours are influenced by all three systems; therefore

interventions need to address personal, environmental, and behavioural elements together.

Social influence and social inoculation theory (Bandura, 1977; McGuire, 1964 and 1968) suggest that children and adolescents will come under pressure to engage in risk behaviour. Programmes based on these theories anticipate these pressures and teach young people both about the pressures and about ways to resist them before they are exposed. Usually, these programmes target peer resistance skills to very specific risks behaviours.

Resilience theory explains the process by which some people are more likely to engage in health-promoting rather than health-compromising behaviours. There are internal and external factors that interact and allow people to overcome adversity. According to Bernard (1991), the characteristics that set resilient young people apart are social competence, problem-solving skills, autonomy, and a sense of purpose.

The theory of Reasoned Action (Fishbein and Ajzen, 1975) views an individual's intention to perform behaviour as a combination of his attitude toward performing the behaviour and subjective normative beliefs about what others think he should do. The Theory of Planned Behaviour (Ajzen, 1988), an extension of the theory of Reasoned Action, includes the added concept of perceived behavioural control, which refers to the perceived ease or difficulty of performing the behaviour. The Health Belief Model (Rosenstock 1966; Rosenstock et al, 1988) recognizes that perceptions, rather than actual facts, are important to weighing benefits and barriers affecting health behaviour, along with the perceived susceptibility and perceived severity of the health threat or consequences. Thus, if a person perceives that the outcome of behaviour is positive, she will have a positive attitude toward performing that behaviour.

The Stages of Change Theory or the Transtheoretical Model (Prochaska, 1979; Prochaska and DiClemente, 1982) describes stages that identify where a person is regarding her change of behaviour: pre-contemplation, contemplation, preparation, action, maintenance, or termination/relapse. It is important to understand the stages where students are in terms of their knowledge, attitudes, motivation, and experiences. Interventions that address a stage not relevant to students are unlikely to succeed.

These theories provide a base for skills-based health education that addresses behaviours and conditions related to prevalent health and related social issues. Consequently, skills-based health education should be developmentally appropriate, address different learning styles, reinforce behaviour

through instruction and observation, address individual beliefs and the perceived environment, anticipate and prepare children for dealing with pressures, develop resilient personalities, and pay attention to a person's attitude toward a behaviour and his or her stage of change.

Skills-based health education should enable young people to apply knowledge and develop attitudes and life skills to make positive decisions and take actions to promote and protect one's health and the health of others. Experts and practitioners agree that the term 'life skills' typically includes a combination of skills: communication and interpersonal skills, decision-making and critical thinking skills, coping and self-management skills (Figure 1). These skills are interrelated and may overlap.

Skills are learned best when students have the opportunity to observe and actively practise them. Learning by doing is necessary. Studies of approaches to health education have shown that active participatory learning activities for students are the most effective method for developing knowledge, attitudes, and skills *together* so that students learn to make healthy choices (e.g., Wilson et al., 1992; Tobler et al., 2000). Participatory teaching methods for building skills and influencing attitudes include: class discussions, brainstorming, demonstration and guided practice, role plays, small groups, educational games and simulations, case studies, story telling, debates, skills practiced with others according to a particular context, audio and visual activities, decision mapping or problem trees.

## Research Evidence of Effective Programs

Research shows that skills-based health education promotes healthy lifestyles and reduces risk behaviours. A meta-analysis of 207 school-based drug prevention programmes in the United States concluded that 'the most successful of the interactive programmes are the comprehensive life skills-based education programmes that incorporate the refusal skills offered in the social influences programmes and add skills such as assertiveness, coping, communication skills, etc.' (Tobler, 1992). Meta-analyses by Kirby (1997, 1999, 2001) confirmed that active learning methods, along with other factors, were effective in reaching students and led to positive behavioural results. Studies in developing countries have also established the effectiveness of interactive and participatory teaching methods for skills-based health education (e.g., Wilson et al., 1992).

**Figure 1.** *Life skills for skills-based health education*

Communication and Interpersonal Skills	Decision-Making and Critical Thinking Skills	Coping and Self-Management Skills
<ul style="list-style-type: none"> <li>• Interpersonal Communication Skills               <ul style="list-style-type: none"> <li>- verbal/nonverbal communication</li> <li>- active listening</li> <li>- expressing feelings; giving feedback (without blaming ) and receiving feedback</li> </ul> </li> <li>• Negotiation/Refusal Skills               <ul style="list-style-type: none"> <li>- negotiation and conflict management</li> <li>- assertiveness skills</li> <li>- refusal skills</li> </ul> </li> <li>• Empathy Building               <ul style="list-style-type: none"> <li>– ability to listen, understand another’s needs and circumstances, and express that understanding</li> </ul> </li> <li>• Cooperation and Teamwork               <ul style="list-style-type: none"> <li>- expressing respect for others’ contributions and different styles</li> <li>- assessing one’s own abilities and contributing to the group</li> </ul> </li> <li>• Advocacy Skills               <ul style="list-style-type: none"> <li>- influencing skills and persuasion</li> <li>- networking and motivation skills</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Decision-making/ Problem-solving Skills               <ul style="list-style-type: none"> <li>- information-gathering skills</li> <li>- evaluating future consequences of present actions for self and others</li> <li>- determining alternative solutions to problems</li> <li>- analysis skills regarding the influence of values and of attitudes about self and others on motivation</li> </ul> </li> <li>• Critical Thinking Skills               <ul style="list-style-type: none"> <li>- analysing peer and media influences</li> <li>- analysing attitudes, values, social norms, beliefs, and factors affecting them</li> <li>- identifying relevant information and sources of information</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Skills for Increasing Personal Confidence and Abilities to Assume Control, Take Responsibility, Make a Difference, or Bring About Change               <ul style="list-style-type: none"> <li>- building self-esteem/ confidence</li> <li>- creating self-awareness skills, including awareness of rights, influences, values, attitudes, rights, strengths, and weaknesses</li> <li>- setting goals</li> <li>- self-evaluation / self-assessment/ self-monitoring skills</li> </ul> </li> <li>• Skills for Managing Feelings               <ul style="list-style-type: none"> <li>- managing anger</li> <li>- dealing with grief and anxiety</li> <li>- coping with loss, abuse, and trauma</li> </ul> </li> <li>• Skills for Managing Stress               <ul style="list-style-type: none"> <li>- time management</li> <li>- positive thinking</li> <li>- relaxation techniques</li> </ul> </li> </ul>

(from WHO, 2003: 9)



Skills-based health education has been shown by research to:

- Delay the onset age of using alcohol, tobacco, and other drugs (Griffin and Svendsen, 1992; Caplan et al., 1992; Werner 1991; Errecart et al., 1991; Hansen et al., 1988; Botvin et al., 1984, 1980)
- Reduce high-risk sexual activity that can result in pregnancy or STI or HIV infections (Kirby, 1997 and 1994; WHO/GPA, 1994; Postrado and Nicholson, 1992; Zabin et al., 1986; Schinke et al., 1981)
- Reduce the chances of young people engaging in delinquent behaviour (Elias, 1991), interpersonal violence (Tolan and Guerra, 1994), and criminal behaviour (Englander-Goldern et al, 1989)
- Prevent peer rejection (Mize and Ladd, 1990) and bullying (Olewus, 1990 & 1993)
- Teach anger control (Deffenbacher et al., 1995; Deffenbacher et al., 1996; Feindler, et al 1986)
- Promote positive social adjustment (Elias et al.,1991) and reduce emotional disorders (McConaughy et al.,1998)
- Improve health-related behaviours and self-esteem (Young et al., 1997)
- Improve academic performance (Elias et al.,1991)

For instance, Australia, Chile, Norway, and Swaziland collaborated in a pilot study on the efficacy of the social influences approach in school-based alcohol education. The data showed that peer-led education appears to be effective in reducing alcohol use across a variety of settings and cultures (Perry and Grant, 1991).

In Uganda, an HIV/AIDS prevention programme in primary schools emphasized improving access to information, peer interaction, and quality of performance of the existing school health education system. After two years of interventions, the percentage of students who stated they had been sexually active fell from 42.9% to 11.1%. Social interaction methods were found to be effective. Students in the intervention group tended to speak to peers and teachers more often about sexual matters. Reasons for abstaining from sex were associated with the rational decision-making model rather than with the punishment model (Shuey et al., 1999).

In the United States, a study of nearly 6,000 students from 56 schools implemented a Life Skills Training (LST) programme, based on a person-environment interactive model that assumes that there are multiple pathways

to tobacco, alcohol, and drug use. The results of the three-year intervention study showed that LST had a significant impact on reducing cigarette, marijuana, and alcohol use. Results of the six-year follow-up indicated that the effects of the programme lasted until the end of the 12th grade (Botvin et al., 1995).

Also in the United States, a two-year drug prevention curriculum called Project ALERT, designed for adolescents aged 11 to 14 from widely divergent backgrounds, has been highly effective. Project ALERT uses participatory activities and videos to help students establish non-drug norms, develop reasons not to use drugs, and resist pressures to use drugs. Skills-building activities utilise the modelling, practise, and feedback strategy. Guided classroom discussions and small group activities stimulate peer interaction and challenge students, while intensive role-playing encourages students to practise and master resistance skills. Parent-involved homework assignments extend the learning process. Longitudinal testing included 6,000 students from 30 junior high schools. Project ALERT was successful with high- and low-risk youth from urban, rural, and suburban communities and with youth from different socioeconomic levels and different ethnic backgrounds. The evaluation showed that Project ALERT reduced the initiation of marijuana and tobacco use by 30% and heavy smoking among experimenters by 50-60% (<http://www.projectalert.best.org>).

### **Success factors**

Skills-based health education will be most effective in influencing behaviour when applied as part of a comprehensive, multi-strategy approach that delivers consistent messages over time. Strategies need to be tailored to discrete aspects and stages of behaviour. A narrow focus on skills-based health education is unlikely to sustain changed behaviour in the long term. More powerful and sustained outcomes tend to be achieved when skills-based health education is coordinated with policies, services, family and community partnerships, mass media and other strategies.

The following critical success factors for school-based approaches have been identified by research:

- **Gaining commitment:** Intense advocacy is required from the earliest planning stages to influence key leaders and to mobilise the community to place skills-based health education on its agenda. Advocating with accurate

and timely data can convince leaders and communities that prevention from an early age is important. It can also help ensure that programmes focus on the actual health needs, experience, motivation, and strengths of the target population, rather than on problems as perceived by others (McKee et al., 2000; Webb and Elliott, 2000).

- **Theoretical underpinnings:** 'Effective programmes are based upon theoretical approaches that have been demonstrated to be effective in influencing health-related risky behaviours' (Kirby, 2001). Common elements exist across these theories, including the importance of personalising information and probability of risks, increasing motivation and readiness for change/action, understanding and influencing peers and social norms, enhancing personal skills and attitudes and ability to take action, and developing enabling environments through supportive policies and service delivery (McKee et al., 2000).
- **Relevant content:** The information, attitudes, and skills that comprise the programme content should be selected for their relevance to specific health-related risk and protective behaviours. Effective programmes focus narrowly on a small number of specific behavioural goals and give a clear health content message by continually reinforcing a positive and health-promoting stance on these behaviours (Kirby, 2001). General programmes and those that have attempted to cover a broad array of topics, values, and skills without linking them are generally not recommended where prevention of a specific risk behaviour is the goal (Kann et al., 1995).
- **Participatory methods:** Effective programmes utilise a variety of participatory teaching methods, address social pressures and modelling of skills, and provide basic, accurate information. Effective participatory teaching methods actively involve the students and target particular health issues (Kirby, 2001). Programmes with a heavy emphasis on information can improve knowledge but are generally not effective in enhancing attitudes, skills, or actual behaviour (Wilson et al., 1992). However, effective programmes do need to provide some basic, accurate information that students can use to assess risks and avoid risky behaviours (Kirby, 2001).
- **Timing and sequence:** Effective education programmes are intensive and begin prior to the onset of risk behaviours (Kirby and DiClemente, 1994). As a guide, at least eight hours of intensive training or at least 15 hours of classroom sessions per year will be required to provide adequate exposure and practice for students to acquire skills. Subsequent booster sessions are

needed to sustain outcomes (Jemmott et al., 1992; Kirby and DiClemente, 1994; Wilson et al, 1992; Botvin, 2001). A planned and sequenced curriculum across primary and secondary school is recommended. Concepts should progress from simple to complex, with later lessons reinforcing and building on earlier learning.

- **Multi-strategy for maximum outcomes:** Programmes need to be coordinated with other consistent strategies over time, such as policies, health and community services, community development, and media approaches. Because the determinants of behaviour are varied and complex, and the reach of any one programme (e.g., in schools) will be limited, a narrow focus is unlikely to yield sustained impact on behaviour in the long term. Only coordinated multi-strategy approaches can achieve the intensity of efforts that yields sustained behaviour change in the long term (UNESCO/UNFPA, 2001; South Africa Ministry of Health, 1998).
- **Teacher training and professional development:** Teachers or peer leaders of effective programmes believe in the programme and receive adequate training. Training needs to give teachers and peers information about the programme as well as practice in using the teaching strategies in the curricula (Kirby, 2001). Research shows that teacher training for the implementation of a comprehensive secondary school health education curriculum positively affects teachers' preparedness for teaching skills-based health education and has positive effects both on curriculum implementation and on student outcomes (Kann et al., 1995; Ross et al., 1991).
- **Relevance:** Programmes must be relevant to the reality and developmental levels of young people and must address risks that have the potential to cause most harm to the individual and society. Issues that attract media attention and public concern may not be the most prevalent or harmful. The programme goals, teaching methods, and materials need to be appropriate to the age, experience, and culture of children and young people and the communities they live in, and need to recognise what the learner already knows, feels, and can do (Kirby, 2001).
- **Participation:** The involvement of students, parents, and the wider community should be encouraged in the programme at all stages. The participation of learners, parents, community workers, peer educators, and others in the design and implementation of school health programmes can help ensure that the needs and concerns of all these constituencies are met in culturally

and socially appropriate ways. Participants whose concerns are addressed are more likely to demonstrate commitment to and ownership of the programme, which in turn enhances sustainability and effectiveness (UNICEF, 2001; Jemmott et al., 1998).

### **Going to scale**

'Going to scale' means implementing interventions in an entire county or province or nation. It involves considering a variety of expansion models and agencies for reaching the greatest number of schools and students. Such considerations should be made from the beginning of the planning process, once the importance and feasibility of skills-based health education are understood. Smith and Colvin (2000) distinguish four major approaches for scaling up young adult programmes. (1) Planned Expansion means a steady process of expanding the number of sites and youth served by a particular programme once it has been pilot tested. (2) Association consists of expanding programme size and coverage through a network of organizations. (3) Grafting means adding a new initiative to an existing programme. (4) Explosion involves sudden implementation of a youth programme at a large scale.

The following are recommended priority actions, based on the research presented earlier, for shifting efforts away from ineffective strategies toward approaches that have the focus and intensity which typify successful programmes.

*Away from education programmes developed and delivered in isolation from other health-related effort—toward a comprehensive approach.*

Comprehensive and effective school health programmes combine skills-based health education with supporting policies at the school and/or national level, a healthy school environment, related health services, and school-community partnerships. Focusing Resources on Effective School Health (FRESH), initiated by WHO, UNESCO, UNICEF, and the World Bank in 2000, is a framework for action that proposes four components as a starting point for developing an effective school health programme as part of broader efforts to design health-promoting, child-friendly schools. If all schools were to implement these four components, there would be a significant, immediate benefit in the health of students and staff and a basis for future expansion. The aim is to focus on interventions that are feasible to put in place. These four FRESH components

should be made available together, in all schools: (1) health-related school policies, (2) provision of safe water and sanitation as an essential step toward a healthy learning environment, (3) skills-based health education, and (4) school-based health and nutrition services. These components should be enforced by effective partnerships between teachers and health workers and between the education and health sectors; effective community partnerships; and pupil awareness and participation.

*Away from attempts to infuse health topics thinly across many subjects—toward effective placement in the curriculum.*

The preferred short-term approach addresses a limited number of high-priority health issues and teaches the necessary knowledge, attitudes, and skills together in one existing subject (sometimes called a carrier subject) in the context of other related issues and processes. Skills-based health education is placed in an existing subject designated for another purpose but relevant to the issues, such as civic/social studies or population education. The advantages of this approach include that teachers of the carrier subject are likely to link the relevance of the topic to other subjects; training of teachers is faster and less expensive; it is faster and costs less to integrate skills-based health education into materials of one principal subject than to infuse across all; and the carrier subject can be reinforced by infusion through other subjects. The drawbacks of this approach include that the selection of the carrier subject may be inappropriate, teachers may or may not be knowledgeable about or comfortable with health content, and health topics may receive less time than needed.

Alternatives to placing skills-based health education within the curriculum include teaching it as a core health education subject. This is a good long term option that requires strong commitment over time. Skills-based health education (e.g., health education or family life education) is taught as a core subject for addressing important issues. This is more likely to command the attention of students and teachers than when presented as a sidebar to another course. It tends to have high teacher support owing to specific focus on health and teacher's sense of professional responsibility to health education and life skills development. It also allows concepts to be sequenced smoothly from primary levels to secondary levels to reinforce previous learning experiences and to make links for new learning.

Another alternative is to infuse skills-based health education across subjects. The regular teacher integrates aspects of skills-based health education across many existing subjects. This approach is not recommended, as it does not yield good results on its own. Experience with infused skills-based health education in the United States has shown that when teachers teach general life-skills programmes they often do not cover, in depth, the specific health issues that adolescents face. Evaluations of programmes in the United States, which emphasised generic decision-making skills, general communication and assertiveness, found no effect on adolescent health, especially sexual behaviour (Kann et al., 1995).

A UNICEF-supported review of skills-based HIV/AIDS prevention programmes in East and South Africa (Gachuhi, 1999) found that infusion approaches tended not to have the expected impact, often because teachers were not sufficiently trained and did not implement the programme properly; and teachers overlooked sensitive issues and realistic situations that would allow them to personalize the risks that young people face. Not having a specific allocation in the timetable was also a barrier to effective implementation.

A combination of approaches is yet another option. This is a very long term approach, combining the use of a carrier subject in the short term with a separate subject in the long term.

*Away from creating new teaching and learning materials from scratch – toward using existing materials better.*

It is often possible to work with existing resources rather than starting anew to create appropriate materials for skills-based health education. This should ensure better distribution and adaptation of the many quality materials that demonstrate research and evaluation evidence of effectiveness. The following issues might be considered for selecting existing materials:

- Do the materials have goals that clearly describe health and related social issues to be influenced in a particular way?
- Do the objectives clearly describe behaviours or conditions that can be influenced to significantly impact the goals? Are these relevant to our students' needs?
- Who is the target audience?
- What time investment is suggested (number and length of sessions)?

- Are the materials suitable for the available settings?
- Is the language used most appropriate for the target group/users of the materials?
- Have the materials been evaluated, and if so, with what audience and setting?
- What is the evidence of effectiveness?
- What is the similarity between the ‘proven programme’ and the intended audience and cultural setting?
- How well is knowledge relevant to the health issue addressed? Is the information clear? Does it provide accurate, up-to-date knowledge on the health issue?
- How relevant are the attitudes to the health issue addressed?
- How relevant are skills to the behaviours that are to be influenced?
- How appropriate are the methods for achieving the educational objectives (e.g., increasing knowledge, fostering health-supporting attitudes, building skills)?
- Are the materials gender-sensitive in content, methods, and language?
- Are the materials relevant to student needs and interests?
- How easy will it be for teachers, parents, and students to adapt and implement the materials?
- Do the materials include sufficient learning experiences to achieve the objectives?

*Away from generic life skills programmes that are not attached to specific objectives and goals—toward linking content to behavioural objectives and changes in health-related conditions.*

Applying skills-based teaching and learning methods for the development of knowledge, attitudes and skills is needed to achieve objectives in terms of behaviours and conditions that will lead to health and correlated social goals.

Programmes aimed at helping young people to develop life skills without a particular context are less effective in achieving specific behavioural outcomes. It is critical that programme planners set objectives and select content on the basis of what is most relevant to influencing the behaviours and conditions that are associated with priority health issues.

The central question is ‘what’ behaviours or conditions must be sustained or changed to influence the health issues. The situation assessment should reveal



the issues most relevant to the health and development of young people who will participate in the programme. Then, what knowledge, attitudes, and skills will be the most useful to address, given the behaviours and conditions to be changed?

The answers to these 'whats' are then used to develop programme objectives. Such objectives are required for clearly delineating the programme content, including knowledge, attitudes, and skills that are important to achieve the behavioural and conditional objectives.

The question of 'when' relates to the needs and developmental abilities of young people. These vary with age. Programmes need to take these factors into account. This is commonly referred to as 'developmentally appropriate programming.' For example, concepts in school curricula should be sequenced smoothly from primary levels to secondary levels to reinforce previous learning experiences and make links for new learning; this process is sometimes referred to as a 'spiral curriculum.' For sensitive issues such as HIV/AIDS, sexual and reproductive health, education should begin as interest begins to increase but *before* the target group has become involved in the risk behaviours.

*Away from delivery by unprepared adults — toward consistent, ongoing professional development for teachers and support teams.*

Various individuals involved in skills-based health education must be trained to ensure successful implementation of such programmes. Trained educators are more likely than those who are not specifically trained in this area to implement programmes as intended, that is, to teach all of the required content and to use effective, high-quality teaching and learning methods (Kann et al., 1995). Skills-based health education teachers must possess a mix of professional and personal qualities. Some individuals bring these qualities to the job; others must receive training to acquire them. When properly trained, students themselves (peers), community agency workers, guidance officers or counsellors, social workers, and psychologists or other health care providers, as well as teachers, can facilitate skills-based health education.

The best programme facilitators are role models for healthy behaviours. They are credible and respected, skilled and competent, able to access resources and leadership and institutional support. In addition, they have the ability to play different roles; the ability to act as a guide; the ability to respect the adolescent and his or her self-determination (Tobler, 1992); warmth,

supportiveness and enthusiasm (Ladd and Mize, 1983); ability to deal with sensitive issues; appropriate personal and professional attitudes and practices; accurate knowledge of, and adequate comfort with, the range of issues being addressed.

Access to good quality training and support is essential to the development of these characteristics. Teachers and other facilitators ideally should receive quality training in both pre-service and in-service contexts. Training needs to expose teachers to, and allow them to gain experience in, participatory teaching and learning methods, with administrative support at the school level, and ongoing support from experts to foster and sustain participatory teaching and learning methods.

Training for skills-based health education should mirror the teaching and learning principles of the programmes that are to be implemented. It should incorporate active teaching and learning methodologies that take account of what is known about adult learning styles. In reality, teachers in many countries receive neither quality pre-service training nor ongoing in-service training, and there may be little support for addressing sensitive and complex topics that require specific skills.

Developers of Teenage Health Teaching Modules (THTM), a skills-based health education curriculum in the United States, effectively trained programme providers in establishing a programme environment in which open communication and positive peer interaction are valued and constructive problem solving occurs; using participatory teaching strategies; modelling skills and applying them to particular behaviours, including how to give encouragement and praise to reinforce social norms; teaching complex social skills; providing resources for health information and referral; and dealing with sensitive issues (Blaber, 1999).

A study involving 85 schools found that pre-implementation training in THTM positively affected teachers' preparedness to teach THTM and student outcomes. Trained teachers implemented the curriculum with a significantly higher degree of fidelity than untrained teachers. Teacher training also had positive effects on student outcomes. Students' knowledge and attitude scores were significantly higher for classes taught by trained teachers than by untrained teachers. At the senior high school level, trained teachers also accounted for curbing self-reported use of illegal drugs (Ross et al., 1991).

## Conclusion

Schools have an important role to play in equipping children with the knowledge, attitudes and skills they need to protect their health. Skills-based health education, when planned and implemented based on research-based strategies, can make a significant contribution to the health and learning potential of young people. The commitment to skills-based health education as an important foundation for every child is shared across the FRESH partners who agree that skills-based health education is an essential component of a cost-effective school health programme.

## Acknowledgements

This chapter is based on *Skills for Health: Skills-based Health Education including Life Skills: An Important Component of a Child-Friendly/Health-Promoting School*. WHO Information Series on School Health; Document 9. (2003) Geneva: World Health Organization, developed with the technical support of Carmen Aldinger and Cheryl Vince Whitman of Health and Human Development Programs at Education Development Center, Amaya Gillespie of the Education Section at UNICEF, and Jack T. Jones of the Department of Noncommunicable Disease Prevention and Health Promotion at WHO/HQ, and co-published by UNICEF, WHO, Education Development Center, Education International, UNESCO, UNFPA, World Bank, and Partnership for Child Development.

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## 9

## Participation and Learning about Health

*Venka Simovska*

### Introduction

The core principles underlying the health promoting schools initiative as discussed and adopted at the first two conferences of the European Network of Health Promoting Schools (ENHPS) clearly indicate a move away from the traditional, disease-focused approach to health education and health promotion towards an empowering, social model (WHO, 1997; 2002). The health promoting schools approach brings together the strategic guidelines outlined in the Ottawa Charter (WHO, 1986) and the principles stated in more recent WHO documents, for instance Health 21 – the Health for All policy for the WHO European Region, which sets out targets for the 21<sup>st</sup> century. Health 21 draws on the values of health for all, including for example health as a fundamental human right, equity in health, and participation of individuals, groups, institutions and organizations in health promotion. One of the key strategies that this policy document emphasises is a participatory health development process that involves relevant partners for health, at all levels – home, school and workplace, local community and country – and that promotes joint decision making, implementation and accountability (WHO, 1999).

Accordingly, health promotion in schools is construed as a social process of individual and collective empowerment. A health promoting school is defined as an educational setting that attempts to constantly develop its capacity for healthy learning, working and living (WHO, 1993). Health is interpreted positively and holistically, encompassing the living conditions related to health as well as dimensions of physical, social, emotional, spiritual and mental well-being. The development of an individual's skills, self-determination and agency

with regard to health matters is always considered within a given context, in connection to the surrounding living conditions. The whole school environment is viewed as an important arena for promotion of health and for learning about health.

Interpreted in this way, the health promoting schools approach inevitably brings to the fore the issue of meaningful student involvement in teaching and learning processes. Moreover, 'student participation' has become one of the trendy, captivating terms within the ENHPS, holding the central position in portraying the health promoting schools initiative. In reality, however, the ideology underpinning the health promoting schools initiative is to a large degree influenced by elements of professional power and the need for public accountability (Denman et al. 2002); the concept of health promoting schools has been interpreted differently in different cultural, geographical and educational contexts thus obtaining a wide range of, sometimes contradictory, meanings. A number of models of health promoting school have emerged over the previous years reflecting different educational priorities, ideologies, needs and systems of meaning within the national networks (Jensen and Simovska, 2002).

One of the significant challenges to traditional models which are focused on behaviour modification is characterised by the distinction between 'moralistic' and 'democratic' health education and promotion conceptualized within the Danish Network of Health Promoting Schools (Jensen, 1997). The main aim of democratic health promoting schools is construed as development of students' action competence, that is, the ability to act and bring about positive change with regard to health (Jensen, 1997; 2000; 2004).

From this viewpoint participation is interpreted as a transformative process focused on making a difference, as opposed to conforming to the status quo. One of the key tasks of a democratic health-promoting school is providing an appropriate space for the students to participate actively in relevant, rather than trivial aspects of decision-making processes at school (Simovska, 2004). Moreover, it is considered essential that a health promoting school should ensure resources and opportunities for students to develop, enhance, exercise and exert their competences to act as qualified agents in democratic environments. This presupposes fostering students' self-awareness, critical thinking, decision-making and collaboration skills, connecting students among themselves and with the school and empowering both students and school communities to deal with health determinants and other health matters that concern them (Simovska, 2000).

Thus, the democratic approach to health promoting schools stimulated the introduction of fundamental changes to school approaches to teaching and learning as well as school management, which move away from the top-down hierarchical school structures toward more participatory and empowering systems on all levels. Consequently, as will be discussed in what follows, this perspective points to controversial processes of challenging the traditional power imbalances in schools and also implies a different view on the nature of learning.

## Participation, Democracy and Learning

Over the last few decades, a number of authors (e.g. Arnstein, 1969; Brager and Sprech, 1973; Cornwall, 1996) have developed useful typologies of participation based primarily on distinguishing between different degrees of shared power and influence. These models do not address the participation of children and young people directly, which is quite specific even though originating from the same theoretical principles.

Hart uses the metaphor of a ladder to highlight the distinction between several types of children's 'non-participation' on the one hand and different levels of 'real participation' on the other (1992; 1997). The ladder metaphor has been criticised for suggesting 'lower' and 'higher' levels of participation, with the higher often valued more positively than the lower. The danger of this is that participation becomes ritualised, with higher levels imposed as an imperative, creating a case for what some critics have called 'participation as tyranny' (Cooke and Kothari, 2001: 4). Hart (1997) emphasises, however, that using this conceptualisation does not mean that it is always necessary for children to participate at the highest possible level. The most important principle in determining the level of participation, according to Hart, should be the students' choice; ideally, children and young people should be able to determine how much they would like to be involved while conditions should be provided to optimise the opportunity for every child to participate at the highest level of his or her competence, interest and motivation. Yet, research has demonstrated that a number of determinants such as the overall societal and school culture, the specific issues that are being dealt with in teaching, as well as the skills and competences of teachers influence the level and quality of student participation in practice (Johnson et al., 1998; Simovska and Jensen, 2003).

When we think about participation from a variety of perspectives in learning theory the meaning of it varies substantially. Conventional learning theories typically attempt to explain the ways individuals learn and to discuss the implications of these explanations by considering teaching strategies that would foster an isolated individual's learning. In contrast, the socio-cultural theory of learning and development inspired by the ideas of Vygotsky, among others, interprets learning as a profoundly social process, linked closely to the processes of psychological development. In Vygotsky's view (1978; 1987), the problems of teaching and learning cannot be successfully analysed without exploring the relation between learning and development first. He suggests a radically new approach based on the concept of zone of proximal development, defined as:

...the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978: 86).

In other words, as the developmental processes take place 'behind' the learning process; this difference results in the zone of proximal development. This means, according to Vygotsky (1987), that any 'good' learning *leads* the development. One of the crucial characteristics of learning is that it stimulates a number of developmental processes within an individual, which can operate only in the context of interaction of the individual with the adults or peers in her or his surrounding. Then, through the processes of internalisation these developmental processes become part of the individual's independent development. Internalisation refers to a process of internal reconstruction of an external operation. The concept of zone of proximal development points to a change of focus in learning theories, involving deeper consideration of the interaction between cognition, context and practice. The change in focus also means that the unit of analysis is not the individual but the dynamic integration of the individual and the social environment.

In her interpretation of Vygotsky's theory, Rogoff (1990; 1995) extends the concept of zone of proximal development by emphasising the interrelatedness of the roles of children and adults and pointing to the active role of children as participants in their own learning and development. Instead of internalisation the notion of 'appropriation' is suggested to describe the mechanisms through

which learning takes place. Appropriation is determined as a process in which individuals participating in an action change so they can more easily handle further actions and interactions. Internalisation means that children make external things internal. In contrast, appropriation is participatory; children 'must already be functioning in the social activity in order to be making their contributions' (Rogoff, 1993: 139) and that is how they develop insights, critical skills and competence. Building on Vygotsky, Rogoff suggests that processes of learning and development should draw attention to how personal efforts, interpersonal relationships and culturally structured activities constitute each other. In other words, it would not be sufficient to focus on individual learning or competence development without paying attention to the interpersonal relationships as socio-cultural activities in which learning and development are taking place.

It is through the process of guided participation that the link is provided between previous experience and competences and the skills and information needed to solve new problems (Rogoff, 1995; Rogoff et al., 2001). Intersubjectivity and participation-in-meaning are therefore considered to be core elements of participatory learning. These two concepts serve to emphasise that creation of meaning and understanding is relational, that is, it happens *between* people. Both the concepts of intersubjectivity and participation-in-meaning refer to a process in which participants reach an agreement and common, dialogical understanding of actions with which they are faced. Intersubjectivity is, in a way, a shared meaning that persons involved in interaction create on the basis of a joint focus of attention, shared visions and other assumptions that shape their common communication ground.

In this perspective, knowledge is interpreted as a social *process* of knowledge construction rather than an *object* for students to internalise. Meaning and knowing are negotiated and dynamically created and re-created through participation in socially organized activities. Thus, authentic student participation and social guidance that builds on students' perspectives in teaching and learning processes are considered essential dimensions of personally meaningful learning.

The socio-cultural perspective inevitably puts forward the importance of interpersonal relationships in facilitating active student participation in teaching and learning processes. Particularly important seem to be the relationships with teachers and other adults or 'more experienced participants', as they play the vital role of supporting and guiding learning in the zone of

proximal development. Experience needs to be related before it can be conceptualized. Therefore, the relationships form a kind of developmental infrastructure on which school experiences build (Pianta, 1999). Teachers need to be aware of educationally critical aspects of students' experience and build participatory situations that are slightly beyond their current competence. In other words, relationships constitute part of a specific quality of the zone of proximal development, which could be more or less conducive to encouraging students' learning and enhancing their competences. It is essential that through authentic participation and also through 'intent participation', i.e. listening-in in anticipation of participation (Rogoff et al., 2003), students attempt to create meaning for the actions in which they take part. The process of creating meaning takes place while they actively search for common ground and understanding with the other participants.

Thus, in the context of the health promoting schools one can argue that participation in dialogue, changes of perspective, reflecting on and constructing shared meanings about health problems and strategies for solutions, are equally important in the development of action competence as is undertaking specific actions.

## Different Modes of Student Participation

Inspired by Hart's categorization of participation mentioned earlier and also by the socio-cultural perspective on learning as an underlying theoretical framework, two distinctive qualities of student participation are identified by drawing on the experience from the Macedonian Network of Health Promoting Schools and its collaboration with other networks of the ENHPS: token and genuine student participation. Unlike Hart's ladder which sets up more procedural democratic criteria for involving children and distinguishing between different degrees of participation, this model focuses on the quality of participation apart from its presumed position on the ladder (the participation part). It deals with values, often implicitly embedded in socially organized participatory activities involving students at school and repeatedly neglected when researching the processes of teaching and learning – e.g. self-determination, democracy, diversity and equity (Simovska, 2000; 2004; 2005). As presented in Table 1, three main points serve to differentiate between token and genuine student participation: focus, outcomes and target of change.

**Table 1.** *Three points of differentiation between token and genuine student participation*

<b>Token Participation</b>	↔	<b>Genuine Participation</b>
<b>Focus</b>		
health information consequences effects		processes of knowing personal meanings social construction
<b>Outcomes</b>		
convergent (ready-made lifestyles, healthy behaviour)		divergent (critical consciousness, responsible freedom)
<b>Target of change</b>		
individuals		individuals-in-context

The first point of differentiation is the *focus* of the health promoting and learning activities in which students participate. Token participation would have its focus on acquisition of content that has to be learned, accepted and utilised. In the context of the health promoting schools, such content involves the traditional factual knowledge relating to health and the hazardous effects of different behaviour styles. Students do not have much influence on the knowledge with which they are supposed to work. However, they ‘participate’ in an interactive methodology that helps them acquire that knowledge.

Genuine participation, on the other hand, focuses on knowledge building through reflection on meanings and on different ways of constructing knowledge within the health domain. Factual information is addressed, too, but it is the processes that lead to legitimation of information and its integration in a system of economic, historical and ideological aspects that are considered essential. Students are involved in processes of knowing, which are social and relational in their essence. These processes take place in the context of both asymmetric relationships of students with teachers as more experienced dialogue partners and symmetric relationships with more or less equally skilled



peers. In contrast to the views of participation as merely a motivational tool the experience from the health promoting schools that rely on genuine student participation shows that it is possible – and in the long run more conducive to health – to build on the view of learning as a process primarily seeking and constructing meaning, as seeing something from different perspectives (Marton and Booth, 1997) and changing as individuals while initiating changes in the surrounding environment. The development of competence to act intentionally requires not only knowledge but also the ability to regulate one's own cognition and action in a way that identifies, makes use of, and improves the potentials and possibilities of the environment.

The second point of differentiation between token and genuine student participation is in the expected *outcomes* of the health promoting school activities in which students are engaged. The outcomes of token participation could be defined as acceptance of pre-existing healthy lifestyles that correlate with facts describing what is healthy and what is not. The learning outcomes are closed or convergent: rules and facts regarding health are fixed, prescribed by experts on the basis of scientific evidence, without much room for personal choice and determination. Student participation within these frames means active practice in making 'healthy' decisions and developing assertive and other personal and social skills in order to avoid health 'risks' and possible negative pressure by classmates, peers or the media.

In terms of genuine participation, in contrast, the aims would be to encourage students' autonomy, critical consciousness with regard to health matters and their potential to deal with the complexities of their own lives and the world in active, creative and socially responsible ways. Consequently, the expected outcomes would be open and divergent, depending on the ideas and interests of individuals or groups of students, as well as on the constellation of power relations, needs and possibilities existing in a particular school environment at a given moment. In other words, the expected outcomes of genuine participation would be the students' lived identities as active agents in health domains, based on negotiated, social and imaginative learning experiences. The motivation and competence to engage in further learning is also an important dimension of the expected outcomes.

The third point of differentiation between the two forms of participation is the *target of change* of the participatory activities. Token participation tends to target individuals with a view to changing their lifestyles, while within genuine participation the target would be individuals-in-context. In the latter, individual behaviour is closely intertwined with interpersonal involvements and

organizational structures. The point of departure is that students' competences are not only their own property. The development of skills and competencies includes processes that occur at three levels – personal, interpersonal and cultural. Students are as competent as their context (schools for instance) affords them the opportunity to be (Pianta, 1999) and, at the same time, they are able to influence these circumstances and to initiate positive change. Therefore, it could be argued that if students have opportunities to participate actively in improving their surroundings as part of their education and thus be agents of their own learning, they are enabled to assume responsibilities for their own lives, to deal with change, and also to participate competently in the social web.

Arguably, health promoting schools that are based on genuine participation hold the potential to achieve a better balance between the individualistic and structural (social) approaches to health promotion in schools (Simovska, 2000). Health and health promotion are seen holistically without neglecting either the environment and health conditions or the individual and the importance of personal meanings. In the spirit of Vygotsky (in Holzman, 1997), a student participating genuinely in school health promoting processes is looked upon not as an individual but rather as a 'person-and-environment', where the school and the environment are not abstractions but real entities consisting of real people. Consequently, indicators for successful learning about health would not be only what a student knows, but rather what she or he wants to and can do alone or in collaboration with others.

Inherent to the conceptualization of teaching and learning through genuine participation are the issues of power and ownership. Genuine student participation allows for student ownership of the learning process. Ownership presupposes that the potential for effective individual and group action is embedded in the knowledge that is acquired. In contrast to traditional school knowledge, 'owned knowledge' positions its possessor as an acting subject, able to employ his or her knowledge in a dynamic way (Paechter, 2001) by visualising different alternatives and dealing with complexities of change.

## A Case Study: 'Young Minds' Learning about Health through Participation and Action

The case draws on the international, web-based educational project titled 'Young Minds – exploring links between youth, culture and the use of alcohol'. In

'Young Minds', students from Danish, the Czech Republic, Macedonian and Swedish ENHP schools explored links between youth, culture and alcohol consumption through cross-cultural collaboration and the use of Information and Communication Technology (ICT). Box 1 below summarises the main underpinning principles or criteria for the Young Minds project.

The participants in the project were primary and lower secondary school students in the age range 12 – 16. Approximately 100 students in four classes in the four countries mentioned above as well as their respective teachers were directly involved in the project. Students presented their investigation results, ideas and opinions relating to the area of alcohol and young people on the project's website (Young Minds 2000-2001).

An important feature of the project was its presentation by student representatives from all four classes at the WHO Ministerial conference 'Young People and Alcohol' that took place in Stockholm. This presentation was construed as a special kind of student action contributing to the project's main aims. The action-focus in the project was designed according the conceptualization

**Box 1.** *Underpinning principles for 'Young Minds'*

- Schools' projects are targeted towards action and change. Students' visions and ideas play crucial roles with regard to which changes and actions have to be carried out. The IVAC (investigation-vision-action-change) approach (Jensen, 1997) is employed as the main framework for structuring the school projects.
- Students in the participating classes are actively involved in deciding about specific aspects within the area of alcohol with which they wish to work
- Teachers have the role of responsible facilitators with the tasks of inspiring, supporting and challenging the students
- The project emphasises the cross-cultural collaboration by using the benefits of involving four classes in four European countries working on the same overall issue at the same time
- The project explores possibilities of and barriers to integrating ICT within participatory and action-oriented health education

of action suggested by Jensen and Schnack (1994): delineating characteristics of an action in relation to other kinds of behaviour are its intentionality and directedness towards bringing about positive changes in regard to the problem in question. With their action at the conference 'Young Minds' students, supported by their teachers and the projects' consultants participated actively in voicing young people's opinions about alcohol consumption and problems related to it, with an aim to influencing the ideas and opinions of the conference participants as well as alcohol policies that concern young people.

The material used in this analysis forms part of a wider body of data, collected for the evaluation study researching the students' work with the issue of alcohol as well as the participating teachers' and students' perspectives on the main aspects of the educational approach (Simovska and Jensen, 2003). Data was generated through document and web content analysis as well as interviews with the teachers and students. In what follows I will discuss only the findings concerning the issue of student participation.

### **Participation in meaning**

The analysis of the contents students presented on the Young Minds website showed that students worked with open concepts within the area of alcohol, using a plethora of enquiry methods that they chose independently and/or in collaboration with the teachers. Table 2 summarises the variety of investigation methods that students used to explore and discuss the issue of alcohol consumption, examples of content-focus in their inquiries and the participation structures observable in the web contents. The findings of the students' investigations as well as their conclusions and reflections were also presented on the website.

The contents students presented on the website reflected the complex nature of the issues at hand as well as students' own interests and lived experience. For example, they addressed negative, as well as positive effects of alcohol consumption; made links between the consumption of alcohol and traditions and customs in different cultures; presented national guidelines for moderate drinking issued in a number of countries in Europe; discussed social as well as individual causes for alcohol use and misuse. Evidently, in their work students considered the links between lifestyle, living conditions, culture and context. They also developed visions about solution strategies concerning alcohol-related problems, and, in some schools, took action in their schools to address some of the problems. Examples of actions documented on the website

include: alcohol-free party at school; a debate about alcohol and young people between parents and students organized at school; change of the school policy concerning advertisements in school (a ban of using free drinks to advertise junior parties).

In addition, the students who participated in the conference in Stockholm interviewed a number of conference participants (policy makers and politicians) in an attempt to raise their awareness for the need to listen to the voices of young people and engage young people in dialogue and decision-making processes about issues that concern their lives. In the positive reactions and feedback they got from the conference participants the students could see the immediate impact they made on the conference process. This had quite an

**Table 2.** *Investigation methods, content-focus and participation structures in exploring links between youth, culture and alcohol consumption*

Investigation methods	Content focus	Participation structures
<ul style="list-style-type: none"> <li>• cross cultural surveys, interviews with students and teachers</li> <li>• interviews with parents, interviews with people from the local community</li> <li>• photo narratives</li> <li>• web and literature search</li> <li>• essays</li> <li>• creative workshops involving drawing, modelling</li> <li>• brainstorming and class debates</li> </ul>	<ul style="list-style-type: none"> <li>• reasons to start drinking, differences and similarities across countries</li> <li>• cultural traditions related to drinking in a historical perspective</li> <li>• positive and negative effects of drinking</li> <li>• trust between parents and children</li> <li>• policies concerning alcohol and young people locally</li> <li>• places where young people drink</li> <li>• drinking and school</li> <li>• recommended units</li> <li>• parties without and with alcohol</li> <li>• having fun and alcohol</li> <li>• goods and bads about drinking</li> </ul>	<ul style="list-style-type: none"> <li>• individual work</li> <li>• work in pairs</li> <li>• small groups</li> <li>• cross-country teams</li> <li>• whole class discussions</li> </ul>

empowering and motivating effect. Students' accounts in the interviews are a clear signal that they felt that their participation made a difference to the conference. Examples capturing the feelings of empowerment and ownership include:

They [conference participants] should tell if we made a difference, I would like to hear that. But I think we made them think that what we feel matters. (student A)

...I don't know if they made a law or something like that, but we asked a lot of questions, important questions. Sometimes, the politicians tried to slip away, to lie, but they could not. (student C)

The students' ideas presented on the website and their accounts in the interviews indicated that the aims and the outcomes of their participation were open and divergent, depending on the choices that students, together with their teachers made during the process. There were no predetermined contents in the alcohol area that the students had to learn, recall and employ. Rather, students were exploring the area in their own ways, supported by the teachers and using the broad possibilities of ICT and cross-cultural collaboration. The website reflected the fact that the focus of the participation was placed on critical reflection and negotiation of meanings related to the issue of alcohol consumption rather than on changing students' behaviour with this regard. Furthermore, the action students took at the conference brought learning closer to 'real life' and so contributed to enhancement of students' commitment, participation skills and authentic action experience. All these point to the genuine participation discourse in which student involvement aims primarily at their socialisation towards the democratic processes of making decisions together with others, acting to reach shared goals, creating meanings together and developing social, emotional and personal competences in the process. Table 3 summarises the characteristics of student participation in the project by using the participation model discussed above.

The data from the case study showed that an important aspect of learning in the project was peer collaboration, both within the class and across the classes in the four countries. However, not all forms of peer cooperation were necessarily beneficial. It was only when students shared the logic of the task and when they focused on solution strategies for handling a problem that their

**Table 3.** *Characteristics of student participation in Young Minds*

Characteristics of participation	Examples
Student participation was <i>focused on</i>	inquiry in the area of alcohol consumption, creation of shared frames of reference, development of common understandings and visions across classes
The expected <i>outcomes</i> concerned	students' enhanced awareness in relation to alcohol-related problems, critical thinking, creative articulation of ideas and planning for action together with others
Students' actions <i>targeted</i>	the everyday school life, alcohol policies and decision-making mechanisms on a whole school level, the awareness of parents and of policy-makers about young people's voices

participation in cooperative activities was mutually beneficial. Thus, consistent to the research within socio-cultural theory (Rogoff, 1995; 2001) the present case study demonstrated that intersubjectivity and collective thinking, supported by teachers' guidance, allow for creating levels of meaning that transcend students' individual efforts. When students are actively engaged in a creative process in which intersubjectivity is achieved, this leads to generating new insights, systems of meanings and new solutions. As Vygotsky points out (1987), intersubjectivity as a ground for communication encourages the extension of students' understanding to new information and further activities. Students internalise, or, *appropriate* the social and cultural tools of knowing as they use them in joint problem solving. Genuine participation has an embedded capacity to encourage processes of collective learning, which in turn is beneficial to the individual student as the individual's initiative, commitment and critical thinking are fostered.

The Young Minds students used a number of ICT resources to present their class work and teamwork, and got feedback from students in the other classes. Through the feedback, the young people provided one another with guidance, challenge and inspiration. Furthermore, at the conference students acted in

cross-cultural teams, planning and preparing their actions together. Additionally, throughout the project students used the online forum to discuss, confront and share their opinions and ideas related to the project topic with young people from different countries within the ENHPS. All these project activities contributed to creating a dynamic collective zone(s) of proximal development which was more inclusive, motivating and in advance of the developmental level of any individual student. Contrary to the traditional understanding that students need to be motivated in order to learn it seems that this project supported Vygotsky's (1987) claim that children need to learn in meaningful ways in order to be motivated.

Further, the online learning environment as created for the project, combined with the participatory and action-oriented teaching approach, demonstrated to have the potential to challenge traditional power relations in the classroom. The interplay among cross-cultural collaboration, action-taking and participation in an online learning environment contributed to students' increased sense of self-determination and control over their activities and so their learning. ICT provided structures that encouraged the students' freedom to learn in their own ways and pace, as well as to create and communicate meaning in more flexible, inclusive and democratic ways. The participation in the community of learners as defined in this project allowed for authentic and intentional learning where common understanding was created in a shared process of goal setting, decision-making, planning and taking action. To use the expression of Rogoff, it was a 'minds-on', purposeful learning through reflective participation in socially structured practices (Rogoff *et al*, 2001).

The students' individual choices, which they made over the course of the project, were not independent of each other; rather, they constituted each other and depended on the possibilities that existed at the level of the group or the community of learners. The community of learners was heterogeneous with regard to competence, skills and knowledge. This created a flexible, dynamic structure of learning 'zone' consisting of more as well as less experienced peers that helped and complemented each other's learning. Thus, learning in the zone of proximal development as described in this project was facilitated by mutual or peer relations, as well as by the asymmetric relations with teachers as more experienced partners in the educational dialogue.



## Concluding Reflections

I will conclude by outlining a few issues and challenges for further research emerging from reflecting on the theoretical concepts and the case study presented in the paper.

The health promoting schools approach should involve critical examination of the concept of student participation if it is to truly integrate the principles of democracy, ownership and empowerment. The health promoting schools approach that is informed with the concept of genuine student participation entails a different view on learning and challenges the traditional power imbalances in schools. However, there are no simple, straightforward answers to the question how to ensure genuine student participation in the school context. Health promoting schools, and also the concept of participation, should be seen more as processes of contextual interpretation and negotiation of meanings rather than as outcomes of the implementation of global principles. Therefore, researchers would do well to work in close collaboration with teachers and students, taking their perspectives on the possibilities and barriers related to participatory teaching and learning at school as a starting point for better understanding of these processes and for improving the realities of practice.

The view on learning inherent to the socio-cultural perspective provides a valuable theoretical framework to reflect on the processes of student participation and the development of their action competence within the democratic health promoting schools approach. The socio-cultural perspective emphasises the social and relational nature of learning and the importance of interaction between cognition, context and practice. Intersubjectivity and participation-in-meaning are core elements of learning through participation, pointing to dialogue and social interaction as the vital constituents of learning processes in the zone of proximal development. However, given the fact that most of the research has been focused on dyadic, child-adult or child-child interactions and so on learning in the 'individual' zone of proximal development, more research is needed to expand the concept of the zone of proximal development to school contexts and to explore the possibilities for and barriers to creating class-wide, collective zones of proximal development. The philosophy of the health promoting schools emphasises the significance of the whole school environment, school ethos and school culture for the processes of learning about health, and thereby provides a good basis for the development and research of new ways of creating communities of learners that allow the

social nature of learning to be expressed. Nevertheless, even if the processes of learning are seen within the context of the whole school setting, the socio-cultural perspective suggests that it is not sufficient to focus on the ways individual students learn. The unit of analysis should be 'person-and-environment'. This has consequences for both research focus and research methods in the area of the health promoting schools.

It is through genuine student participation that the collective zone of proximal development is created. Genuine participation implies open outcomes and involves individuals-in-context rather than isolated individuals. Genuine participation is conducive to enhancing students' empowerment and ownership, which are necessary preconditions for the development of the ability to take action and initiate changes with regard to health. Both peers and teachers play important roles in creating a community of learners. However, the role of the teachers as more experienced partners in the educational dialogue is vital, as it is their responsibility to design learning situations and interactions that are slightly beyond the actual developmental level of students and to support students in the learning process. Support in this case means – to guide, encourage, confront and challenge students as well as to help them overcome barriers. Given the fact that students are not a homogeneous group but differ in their identities, previous experience, motivation, skills and learning styles, the complexity of the role of the teachers is evident. Further research is needed to explore new ways of professional development and teacher support to improve teachers' competences to work with participatory strategies that encourage student ownership and relational learning and that contribute to the development of action competence.

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### **Websites**

Young Minds (2000-2001) <http://www.young-minds.net/ym/top/index.php>

### **See also**

Young Minds (2002) <http://2002.young-minds.net/>

Young Minds (2004) <http://2000.young-minds.net/>

## 10

## Inequality, Health and Action For Health – Do Children and Young People have an Opinion?

*Bjarne Bruun Jensen and Bente Jensen*

### Introduction

According to the declaration from the first conference for European Health Promoting Schools the overall aim of a health promoting school is to ‘... improve young people’s abilities to take action and generate change’ (WHO, 1997). Initiating such processes of transformation requires that the young people acquire ownership of the conditions and challenges involved. Exploring and identifying young people’s own concepts of health is therefore a key prerequisite for successful health education and promotion activities. Many of these health activities have only moderate success in reaching the objectives and targets established. One possible reason for this lack of success is that the initiated activities do not involve and impact the target group of children and young people. Consequently, the conference declaration from the first conference of ENHPS states (WHO, 1997):

The curriculum must be relevant to the needs of young people, both now and in the future, as well as stimulating their creativity, encouraging them to learn and providing them with necessary learning skills.

On the basis of these fundamental assumptions this article explores young people’s concepts of health. As a specific issue young people’s understanding of ‘Inequality in health’ is explored and discussed. An international conference ‘Reducing Social Inequalities in Health Among Children and Young People’ resulted in a number of recommendations for working with young people of which one was (Danish Ministry for Interior and Health, 2004: 93):

Social inequality in health should be included in national curricula and linked to the United Nations Convention on the Rights of the Child. As a basis for developing young people's ideas and visions for a society with less inequality, the national curricula should provide knowledge on the structural and cultural factors in society generating inequality in health.

Social inequality in health is an important theme recognized internationally, and numerous projects and interventions have been initiated that aim to reduce social inequality in health. This chapter focuses on the issue of young people's understanding of this societal challenge by addressing the following questions:

- Do young people believe that health and illness are inequitably distributed?
- Do young people have an attitude towards these issues?
- Which potential determinants do young people consider important?
- What action and change do young people propose to enable health to be distributed more equitably and do they believe they themselves can contribute to reducing the existing inequality in health, not merely in school but in society as a whole?

After a brief review of the international literature, the survey, the methods and the main findings, will be presented. The focus will be on young people's concepts and understanding of 1) health, 2) inequality in health and 3) action for health. Furthermore, the influence of gender and social class will be briefly explored. Finally the implications and challenges for future health promotion and education will be outlined.

## Review of the Literature

In this section we present a very brief overview of the international research on children's and young people's health concepts. For each of the tendencies dealt with a few illustrative examples will be given. For a more elaborative review see Jensen and Jensen (2005).

The main part of the international literature within this area has focused on children's and young people's concepts of illnesses within a Piagetian framework (see for example Rushforth (1999) for a critical review). In one of the

most influential studies (Bibace and Walsh, 1980) Piaget's theory of cognitive development (Piaget, 1929) provided the case for a 'six-category' model (phenomenistic, contagion, contamination, internalisation, physiological, psycho-physiological) indicating that children's cognitive development related to illness progresses from global undifferentiated ideas to more abstract and complex ones. Many researchers have tried to confirm, sophisticate and further develop these stage-models (e.g. Eiser et al., 1984; Hansdottir and Malcarne, 1998; Kister and Patterson, 1980).

Recently, a growing number of researchers have criticised and challenged the idea that children's cognitive development goes through a set number of pre-defined stages (see for instance Jensen, 1989, 1991; Kalnins and Love, 1982; Normandeau et al., 1998; Rushforth, 1999). The main criticism stresses the importance of viewing children's cognitive development as influenced by their socialization and not as an automatic development through fixed stages. Another type of criticism challenges the dominant focus on children's misconceptions in relation to specific illnesses. Consequently, a number of surveys have been carried out to explore how children and young people view and understand more open concepts related to the WHO definition of health. The conclusions from these are presented below.

With few exceptions the literature concludes that children and young people understand health as more than the absence of disease, emphasising feelings, emotions, life quality and social relations. As an example Altman and Revenson (1985) asked children (between 8 and 14 years old) the question "What does it mean to be healthy?" 51% of the answers were categorized under 'feeling/being in good physical and mental health' while only 25% of the answers were categorized within 'absence of illness'. In a questionnaire involving 1,629 students from grade 7 (13 years old) they were among other things asked the question "What does the word health mean to you?" Twice as many expressed positive dimensions of health compared to more disease-oriented aspects (Jensen 1989, 1991). In a survey from Brazil 96 students between 6 and 14 years responded to the question "What is health?" and the most frequent category was 'positive feelings' while 'preventive practices' was the second category mentioned by half as many (Boruchovitsch and Mednick, 1997).

With respect to important factors influencing our health the main body of literature suggests that young people primarily think of nutrition and exercise. For example, Bird and Podmore (1990) asked children at 5 and 9 years old about



things to do to be healthy and 'eating/food' was the most frequent category mentioned at both age groups. Natapoff (1978) interviewed 264 children between 1st and 7th grade and asked the question "what does the word 'health' mean?" and 'nutrition' was mentioned by 42% while 'exercise' came up as the second priority mentioned by 29%. Williams et al. (1987) used the so-called 'draw-and-write' technique to explore health concepts among 9,584 children between 4 and 8 years in England and nutrition and exercise was mentioned as the most frequent factors by 50% of the children.

Other surveys, where questions have been more explicitly related to concrete situations and problems, suggest that children and young people are more concerned about living conditions, e.g. the environment, traffic etc. Examples of these are Brumby et al. (1985) where children were asked about factors that influence our life span and Jensen (1989, 1991) who asked the question "what factors do influence our health?" Also Kalnins et al. (1994) found that 9-10-year old children were able to identify many problems in their surroundings and specifically label them as healthy or unhealthy. The review of the international literature therefore suggests that the context in which the survey is carried out and the design of the interview or questionnaire to a high degree shape the responses and answers given from the children. Furthermore, a number of recent surveys indicate that children go beyond a behaviour-oriented health concept and include living conditions if the context and design of the study 'allow them' to do so.

A few surveys, which focus on concepts and understandings of inequality in health, have been carried out with adults (Blaxter, 1997; Calnan, 1987; Popay et al., 2003). They indicate that lay people possess a multi-factorial concept, which explains inequality in health as a combination of individual factors and factors at the structural and societal level. Furthermore they also show that people living in disadvantaged areas hesitate to view themselves as 'passive victims'. There is a lack of surveys addressing children's concepts of inequality in health.

In relation to 'actions for health' a number of surveys suggest that children emphasize 'healthy behaviour' as the most important action. Nevertheless, many surveys are designed on the basis of an individualistic and behaviour-dominated health concept. When Altman and Revenson (1985) for instance ask the question "What can you do to stay healthy?" or when Williams et al. (1987) ask children to imagine what they do when they try to stay healthy, then the framework is already narrowed down to a behaviour-oriented health definition. Also when Normandeau et al. (1998) ask the questions "Is it necessary to do

particular things to be healthy? If yes, which things are necessary?” the focus is on the individual’s behaviour.

Other surveys have explicitly emphasized broader potentials for health promoting actions and for instance Jensen (1989, 1991) asked the question “What can we do to promote health for ourselves and for others?” and concluded that the most frequent suggestions were: pollution (mentioned by 45%) and nutrition (mentioned 27%). Kalnins et al. (2002) found that 9-10-year olds are interested in changing community conditions that affect their health, but that their perception that adults don’t take them serious may be significant barriers to their action-taking.

Some research findings in the literature have documented a few tendencies with respect to gender differences in children’s conception of health. Firstly, girls seem to be more concerned with health in general (Jensen, 1989, 1991; Sobal, 1987). Furthermore, girls more often report food and nutrition than is the case for boys while it is the opposite with respect to physical exercise (Cohen et al., 1990; Jutras et al., 1997; Jutras and Bison, 1994). With respect to differences in children’s health concepts by socioeconomic background studies are extremely rare and there is no clear evidence of variations.

## Methods

The findings presented in this article are based on a survey with several different components. The main survey targeted the seventh-graders (average age 13 years) and ninth-graders (average age 15 years) at 100 randomly chosen, representative schools throughout Denmark of which 83 schools responded positively. The data were collected in 2001 and the total number of valid responses was 3,500.

Inequality in health is a complex societal problem, and obtaining valid responses on young people’s concepts and attitudes towards key factors related to this may be difficult. Issues relating to health, inequality in health, action and other topics were therefore discussed with the young people in a series of focus group interviews to improve the quality of the data. The insight gained into the young people’s own concepts in relation to the overall challenge formed the basis for designing the questionnaire. In addition, the questionnaire had several open-ended questions that provided the opportunity for expressing opinions about health and inequality.

The questionnaire was tested in a pilot survey of 120 students in grades 7 and 9, and the responses were discussed with selected respondents immediately afterwards. The final version of the questionnaire was simplified so that the respondents could understand it and could complete it within one school lesson of 45 minutes.

The results and the conclusions of the questionnaire were finally introduced to four 'panels' of young people at the age of 15 years with the aim of getting their reflections and further explorations of the conclusions from the questionnaire survey.

In the following selected quantitative and qualitative findings from the various methods are presented to explore the issue of young people's concepts of inequality, health and action for health.

## Findings

### **The concept of health**

This section focuses on young people's attitudes towards health based on two perspectives. The first is based on the definition of health. One question here is whether adolescents think that health and life quality are related, overlap or are distinct concepts. The second is the factors adolescents consider important for people's health.

The survey documents that young people possess a health concept that goes beyond a traditional medical-oriented concept of health as 56% consider health and the good life to be overlapping while 34% indicate that they are identical. Only 10% said that health and the good life are not identical at all. Most of the respondents consider health and a good life to be closely intertwined, as many responses to the open questions clearly indicate:

Health mostly means that you aren't sick. Good, juicy apples, all kinds of fruit, not too much fast food, not too much candy. For me health also means feeling good, which means being healthy deep inside. Bullying and that type of thing is bad for your health.

Health means that you have a good life. This means good relations with family, friends. But also that you eat healthy food. Having a good place to live, not being unhappy. Hygiene and cleanliness must be okay and you have to have a good education.

Health is something that is very important in everyone's lives. It is actually important for the whole world and the universe – and this means ENJOYING LIFE!

The respondents considered the mental and social aspects of people's lives to be similarly important to the physical aspects. Thus, the physical, mental and social aspects of health and their mutual relationships are deeply rooted concepts for most young people:

When many people hear the word health, they think of good food and being in good physical shape. But that is not everything. You can easily eat really healthy food and exercise for 5 hours each day. But what about inside you? Inner well-being may require that you be well externally, but it requires, for example, having a good workplace with good co-workers; that is, good relations with the people around you. You should not be apathetic about yourself.

Health has many aspects, but the most important are and will remain the environment, exercise, food and friends and family. And that you can get health care that cures you if you are ill.

Good that you ask for our opinions. But does health mean eating apples and running in school? I don't think so. Healthy means that I live in a functioning family. Unhealthy is a classroom with more than 20 children in only about 18 square metres. This is sweltering. And then: peace on Earth.

These remarks illustrate very precisely that young people consider health to be more than the absence of disease and that they define health as a multidimensional concept that includes behaviour, living conditions and illness on equal terms with the perceived quality of life. These results confirm the findings from the international literature.

The survey also explored whether children and young people consider health to be exclusively related to behaviour or whether they believe that living conditions should be considered determinants. The questionnaire asked about 24 potential determinants of health. These 24 items were selected based on the terms young people used in the focus group interviews. In addition, a key aim

was to mix the determinants of health related to living conditions and individual behaviour.

The respondents were asked to decide whether each of these 24 factors is 'very important', 'important', 'slightly important' or 'not important' as a determinant of health. The questionnaire stated explicitly that each factor could positively or negatively influence health. In addition, health was not limited to health among children and was defined as 'people's health'.

Table 1 lists, in rank order, the factors rated as being very important. The respondents considered almost all 24 factors as being important in determining people's health. This was the first significant finding in this part of the survey: adolescents consider many different factors to be important in determining health.

The respondents considered factors related to behaviour and factors related to living conditions to be equally important in determining health. Food and physical exercise as well as the environment and pollution were among the most highly rated factors. Many of these adolescents included social aspects such as family and friends to be important determinants of health. Global perspectives such as war also rated highly. In relation to the discussion of health versus the quality of life, 72% of the respondents said that happiness is an important determinant of health. Thus, being happy is not isolated from or independent of being healthy.

Food received the highest score with 78% rating this as being very important for health. This is not surprising, given the intensity of many recent initiatives on food, especially from the public sector. Further, the responses to the open questions indicate comprehensive attitudes towards health, in which lifestyles (in this case dietary habits) are associated with the prevailing living conditions. For example:

Do you have the opportunity to get enough to eat when you, for example, are poor? Does everyone have the opportunity to get healthy food? Is the food safe to eat in an area with widespread pollution?

Based on the interviews, these adolescents considered the issues raised here to be just as important to discuss as the nutritional content and function of food. The respondents further linked food to ideas related to the quality of life:

Health means eating healthy food with good friends

Healthy food and good social interaction combine to comprise health...!

**Table 1.** *Percentage of 13–15 year olds in Denmark rating various factors as being ‘very important’ for people’s health (rank ordered) N = 3,500*

	Percentage rating a factor ‘very important’
Food	78
Hygiene and cleanliness	74
Family	72
Friends	72
Happiness	72
Physical exercise	71
The environment and pollution	70
Tobacco smoking	64
Work environment	58
War	56
Education	53
Bullying	53
Loneliness	49
Alcohol consumption	48
Housing	43
School life	42
Leisure activities	42
Transport and traffic	37
Stress	37
Being poor	37
Racism	35
Unemployment	31
Health campaigns	28
Being rich	10

A strikingly low 10% of the respondents rated being rich as being very important for health. However, 37%, rated being poor as being a very important factor for health. We can only speculate about the thoughts behind these responses, but they could indicate that adolescents think that, on the one hand, health cannot be simply purchased but that, on the other hand, a certain standard of living is needed to maintain health. In addition, it is striking that unemployment is ranked so low. The low rating for this factor probably comprises the greatest discrepancy compared with the scientific documentation, which clearly indicates that unemployment is one of the greatest determinants of negative health effects.

Finally, only 28% of the respondents rated health campaigns as being very important for health. The focus group interviews already indicated that these adolescents had opinions on campaigns. The interviews also showed that the adolescents are often sceptical about health campaigns and their design:

When I see advertisements on health, such as anti-smoking campaigns, I think for just a moment that what can happen is terrible, but then I do not think any more about it, because 5 seconds later the next commercial is on.

Campaigns give me sort of such a neighbourly feeling.... they always apply to the person next to me.

Several questions were therefore formulated to obtain more knowledge about adolescents' attitudes towards campaigns as a form of dissemination of health messages. In the interview, the adolescents were asked to characterize campaigns, and based on these responses several characteristics were formulated to evoke responses in the questionnaire.

The respondents indicated whether they thought each characteristic would be 'very important', 'important', 'slightly important' or 'not important' in influencing them. Table 2 shows the percentage of the respondents who rated each characteristic of a health campaign as being very important.

**Table 2.** *Percentage of 13–15 year olds in Denmark rating 'various characteristics of health campaigns as being very important' if they are to influence the respondent (rank order) N = 3,500*

	Percentage rating the characteristic 'very important'
Being genuine and credible	60
Providing information and knowledge	55
Being funny	32
Scaring me	23
Giving rewards or prizes	19
Making me feel guilty	18

These responses can be compared with those to another question assessing the extent to which adolescents believe that health campaigns influence them. Six per cent responded that health campaigns influence them considerably, 30% somewhat, 34% slightly and 20% not at all. Thus, many adolescents who do not otherwise think that health campaigns influence them still have ideas as to how a campaign should be optimally designed to influence them.

The respondents expressed the opinion that campaigns based on gimmicks (such as humour or scare tactics) are not needed; disseminating genuine and credible information is most likely to be effective. One can question the validity of these adolescents' assessment of whether and how health campaigns influence them, but it is still striking that they have attitudes as to how an effective campaign would be designed. The following statements illustrate these attitudes:

I think it is ridiculous that campaigns or ads appeal to our conscience instead of appealing to our intelligence. They have to try somehow to figure out what makes us change the most. I think it is so irritating that they target our guilty conscience; it seems stupid if I am, like, chewing on a cookie and then an ad comes on saying how unhealthy this is ...

Health is important to have a good life. Health is definitely having a good education and lots of friends that can give you support. But campaigns are not very effective means of combating, for example, obesity. They try to frighten us – but instead let us see how fat people are doing.

With respect to the international literature the findings confirm the experience that young people acknowledge living conditions as well as lifestyle issues as important determinants for health. Furthermore, they express a multidimensional and complex health concept indicating that lifestyle, living conditions, disease and life quality are closely linked. Finally they show a sceptical attitude to health campaigns and their design.

### **Inequality in health – extent and causes**

This section describes the adolescents' understanding of and attitudes about the challenge of social inequality in health. The focus group interviews sparked discussion of inequality in health in several ways. For example, the interviewed adolescents were asked to describe conditions that comprise inequality in



health. The discussions illustrated that adolescents are genuinely interested in the challenges of inequality. The discussion often focused on such words as 'variation', 'differences' or 'having the same or different opportunities'. Further, people using the word inequality may already be signalling that they have taken a position that inequality is unacceptable. Since one purpose of the survey is to determine whether adolescents in Denmark believe that inequality is acceptable or not, it was decided to use the words 'differences' and 'differs', which sounded more neutral.

The first item on inequality in the questionnaire attempted to determine whether young people have a viewpoint on whether inequality in health exists in Denmark. The question emphasises a broad societal perspective. The respondents were asked whether they 'agree strongly' 'agree somewhat', 'disagree somewhat' or 'disagree strongly' that, 'In our society there are differences between people's risk of becoming ill'. The statement was agreed with ('strongly' or 'somewhat') by 96% of the respondents.

A subsequent open question 'Which types of difference are you thinking of?' allows detailed responses. 72% of the young people responded, and the answers are categorised in Table 3.

Social and structural causes, which was the category mentioned by most of the young people, covers global as well as national issues:

homeless/rich

Worksite environment and social class

It has something to do with rich or poor, popular or unpopular!

Food poisoning, pollution

If you live in a big city the risks of getting ill are greater

Poor = public hospital. Rich = Private hospital

The category on behaviour and lifestyle includes smoking as the main component and nutrition as the second but it is not clear if the respondents conceptualize these phenomena as influenced by the conditions under which people live. Biological and physical causes include immune defence and people's resources ('strength', 'some people can cope and others cannot' and 'how sensible you are'). Being lucky – or destiny – was mentioned by less than one per cent of the adolescents.

**Table 3. Causes behind inequality (rank order)**

1. Social and structural causes (40%)
1.1. Poverty and economic capacity
1.2. Occupation and worksite environment
1.3. Environment and pollution
1.4. Housing
1.5. Global perspectives
1.6. Health systems
1.7. Family and social relations
2. Behaviour and lifestyle causes (30%)
2.1. Smoking
2.2. Food and nutrition
2.3. Physical exercise
2.4. Sexual behaviour
3. Individual biological and physical differences (20%)
3.1. Immune defence
3.2. Inherited characters
3.3. Age
4. Destiny – luck (1%)

The conclusion is that young people in Denmark have a concept of health that includes inequality as a dimension and that they use numerous factors to explain this. Most of the respondents presented factors related to living conditions when they explained their attitudes.

Young people were also asked the question ‘Do you think it is important for everyone to have the same opportunities to live a healthy life and to avoid illness?’ Nearly all respondents (97%) rated this as being very important (80%) or somewhat important (17%).

A subsequent open question (to which 76% responded) showed clearly that the adolescents desire equity:

It should be equitable for everyone – we should have equal opportunities.

We should live in a society in which no one is excluded.

Because it is not fair that some people live in squalor and others live in luxury.

Because we are all people and are equal in value.

The young people's responses pose a thought-provoking dilemma. A large majority of this representative sample of young people is aware that health is not equitably distributed, and at the same time nearly all the respondents believe that everyone should have the same opportunities for a healthy life. The challenge to the educational process in dealing with these topics in schools cannot be posed more clearly. Education in school must aim at starting with the knowledge and attitudes of adolescents and must support them in developing their visions and alternatives related to equity in health.

### **Opportunities for action and change**

The previous sections found that young people in Denmark have a concept of health that relates health to many diverse determinants: lifestyles, living conditions, the perceived quality of life, societal factors, inequality, global conditions and others. The key question therefore is whether these adolescents have the ideas and energy to attempt to change some of the health problems they mention or whether they feel powerless and paralysed.

In the focus group interviews, the adolescents expressed comprehensive concepts of health and similar complexity concerning the difficulty of intervening as individuals to change and promote health. For example, when adolescents comprehend health as being closely linked to lifestyles and living conditions, an adequate concept of action must tackle both these types of determinants.

Since schools have a potentially active or facilitating role in promoting health and in reducing social inequality in health, developing adolescents' own competence to take action in health is a key starting-point for the work of schools and other agents in reducing social inequality in health.

Young people's ability and motivation to promote change and action on health is called 'action competence' (see the chapter by Jensen and Simovska in this book for a presentation of the concept). This competence includes adolescents' action to change their own behaviour and lifestyles and to change

the prevailing living conditions. Young people's visions are an important prerequisite to and component of this competence. This component expresses whether they actually have ideas or proposals on how health can be promoted. Another component is commitment: whether they desire to struggle to implement their ideas and visions. A third component expresses their attitudes towards the ease of achieving the influence to which any visions and commitment could lead.

On the 'vision-component', adolescents were asked whether they had good ideas on how to improve health ('yes' or 'no'): their own, their family's, their school's and the world's. The percentage responding yes to these four settings were 73% for making the world healthier, 68% for improving their own health, 56% to improve the health in the family and 55% for making their school healthier. Consequently, this survey does not provide evidence that young people lack visions and ideas on promoting health. Furthermore, they obviously do not exclusively focus on their own lives but are also interested in global challenges, confirming the previous findings on global responsibility and concern. In other words, this survey does not confirm the portrayal of adolescents as being individualistic and self-centred.

With respect to young people's commitment to act in order to reach their visions they were asked if they are willing to 'struggle to improve health' in the four settings. Eighty-one per cent said yes in relation to improving their own health, 68% to their family's health, 63% would struggle to make the world healthier while 46% would struggle for improving the health at school.

These results indicate that most young people strongly desire to carry out ideas to promote health. In addition, the adolescents seemed to consider improving their own health to be more feasible than taking action to influence more complex health problems that are created by society and are more political. In relation to the previous question on ideas, the global perspective and schools especially lost ground. Within these two settings, many adolescents said that they have ideas on how to improve health but not as many were willing to struggle for them.

Nevertheless, nearly half the pupils in grades 7 and 9 in Denmark want to struggle to carry out their ideas on promoting health. Many people could claim that this commitment is not very prominent in everyday school activities. Table 4 may help to explain this. The respondents were asked how easy they find achieving influence ('very easy', 'easy', 'difficult' or 'very difficult') in their daily settings: leisure activities, family, school and society. This question intended to

associate the self-rated potential for influence with the self-rated visions and willingness to struggle.

**Table 4.** *Percentage of 13–15 year olds in Denmark rating various factors as being ‘very important’ for people’s health (rank ordered) N = 3,500*

	Percentage responding ‘very easy’
Leisure activities	36
Family	44
School	14
Society	6

Not surprisingly, adolescents rated society as being the most difficult setting to influence. In contrast, it is striking that only 14% of the respondents believed that achieving influence in school is very easy. This could indicate that pupils have substantial action competence but are given relatively few opportunities to apply it.

To explore this tension between individuals and society, the respondents were asked their opinions on the extent to which six potential categories of actors can contribute to improving health (‘considerably’, ‘somewhat’, ‘very little’ or ‘not at all’). These six categories emerged from the focus group interviews (table 5).

**Table 5.** *Percentage of 13–15 year olds in Denmark responding that they think that specific categories of actors can contribute to improving health ‘considerably’ or ‘somewhat’. N = 3,500*

	Percentage responding ‘considerably’ or ‘somewhat’
Health care personnel, physicians, nurses	87
You – together with others	84
The family	82
The school	72
Politicians	68
You alone	61

These adolescents rated health care personnel highly here. Many adolescents express great confidence in health care personnel despite considerable current criticism in the mass media of selected parts of the health care system in Denmark.

Strikingly, these adolescents consider themselves to be important actors in health despite the recognition that led to the previous citations, and this competence is especially expressed in relation to cooperation with other people. The perspectives of these adolescents thus focus on cooperation. This should be viewed in relation to the fact that their concept of health includes determinants related to lifestyles, living conditions and global forces.

Thus, the challenge for schools is not merely to develop pupils' action competence but also to find opportunities to allow pupils scope for action in collaboration with others. About half the pupils in grades 7 and 9 had good ideas on how their school could become healthier and expressed commitment to struggle to carry them out. This comprises a great potential for health promotion. Thus, the schools can and should take responsibility for developing strategies for how to realize this action potential to improve health. Based on this survey, the main barrier to promoting health is not pupils but probably the social and educational practices of schools.

### **Differences between subgroups?**

This section explores differences according to gender and social class. The space available does not allow for a deeper exploration and only brief results will therefore be presented. The differences that are statistically significant ( $p < 0.05$ ) will explicitly be mentioned.

With respect to gender girls are more concerned about health than boys – for instance in 20 out of the 24 items in table 2 more girls than boys ticked in “very important”. Out of these the following were statistically significant: hygiene and cleanliness (81% among girls versus 67% among boys), bullying (62% versus 44%), family (77% versus 67%), friends (76% versus 65%), loneliness (58% versus 41%) and happiness (77% versus 67%). Thus, the survey implies that girls emphasize social, emotional and mental determinants of health more than boys do. These findings confirm the main conclusions from the international literature.

With regard to action competence more girls than boys in each of the four settings said that they had good ideas on how to improve health: improving their own health (75% among girls versus 61% among boys), their family's

health (62% versus 49%), making their school a healthier place (62% versus 46%) and making the world healthier (77% versus 68%). All differences, except for the world option, are statistically significant. These findings are unique with respect to the international literature.

The same trend emerged in being willing to struggle to improve health: improving their own health (89% among girls versus 73% among boys), their family's health (73% versus 62%), making their school a healthier place (53% versus 39%) and making the world healthier (69% versus 57%). All of these are statistically significant and they are also new to the international literature.

The overall trend is that girls were more oriented towards change and innovation in health and emphasized social and mental factors more strongly.

With respect to social class, the most thought-provoking result is that, despite differences between parents occupational status the attitudes of these various groups on health and especially on inequality in health seemed to be very similar. For example, young people in all the groups mentioned were aware that inequality in health exists, said that this should be changed and expressed great willingness to struggle to promote health and reduce inequality.

Nevertheless a few differences appeared. The greatest difference was the proportion rating education as being very important for people's health: 70% of the respondents in social class 6 versus 43% for social classes 1+2. In the realm of health visions and ideas, more adolescents in social classes 1+2 said that they had ideas on how to improve health than did those in social class 6. For improving their own health, 72% had ideas in social classes 1+2 versus 61% in social class 6 and, for making the world healthier, 78% versus 65%. Both are statistically significant.

Strikingly, the opposite trend prevailed for the respondents' willingness to struggle to improve health, since social class 6 had the highest percentage of any social class for their own health, their family's health and making the school a healthier place. For example, 80% of the adolescents in social class 6 were willing to struggle to improve health in their family versus 64% in social classes 1 and 2, and for their own health the figures are 88% versus 81%. Both are statistically significant.

Overall, young people in lower social classes attached increased importance to education as a determinant of health, which is probably related to their awareness of the necessity of fighting their way into the educational system. Finally, it is interesting that, although fewer young people in lower social classes had ideas on how to improve health, more expressed willingness to struggle to improve health.

## Future Challenges for Health Promotion and Health Education

The overall results indicate that adolescents comprise an important potential for efforts to reduce inequality in health. Most of the young people in Denmark know about the extent of the problem, believe that inequality should be reduced or even eliminated, are generally oriented towards being willing to participate in and struggle for health promotion and have ideas and visions for initiatives that can promote health. Thus, this potential poses a challenge for health education in schools and for efforts to promote health. This challenge includes 1) translating these expressed attitudes into enhanced action competence and 2) generating scope for promoting action so that adolescents can participate as actors and thereby exercise the action competence the survey shows that they already have in many areas.

Three perspectives should be integrated into the future efforts to promote health and prevent disease among adolescents: one on participation, one on empowerment and action competence and one on interaction and partnership.

### **Participation**

This perspective includes the challenge of involving the adolescents as active participants and of using the comprehensive knowledge on health they already have. It builds on their attitudes towards health and towards inequality in health and on the commitment they express. In addition, many adolescents indicated great satisfaction in the focus group interviews and in the questionnaire about being asked and consulted on these themes.

### **Empowerment and action competence**

This perspective extends participation into the realm of action. Adolescents are thus not merely part of a dialogue and discussion on health but also participate in developing and initiating action intended to create change and innovation in health. This perspective is relevant to all settings in which adolescents spend time, including the family, school, leisure activities and clubs.

### **Interaction and partnership**

The respondents to the survey said that cooperation is important in promoting health. This perspective is therefore also related to the participation perspective but in a way that qualifies this. Participation and empowerment do not mean that the adolescents as individuals can or should tackle the challenges related to



health. Adolescents need to enter into dialogue with other adolescents and with adults to test their ideas, to be challenged and sparked into thinking in new ways about ingrained routines and to brainstorm about identifying problems, solving them and developing strategies. It is especially here that both the family and the professions related to health promotion and disease prevention should seize opportunities as they arise.

This perspective requires conscious efforts from society to enhance adolescents' potential to participate in collective production processes both in institutions such as schools and in leisure activities as well as efforts to involve adolescents themselves in national and local political initiatives. This survey indicates that the young people are ready to take up the challenge.

The following response to an open question in the questionnaire is a fitting conclusion:

Health is the freedom to choose what you want to do. If you do not have any influence on the things you are asked to do and no one wants to hear what you have to say, then I do not think that you have a healthy society. You can also see it from another angle and say that you are being healthy when you eat healthy and varied food, get exercise, give and get love, get lots of sleep and have good economic opportunities.

That was my opinion. I hope you find it useful!

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## **Section II**

# **Case Studies**



## 11

## What Can We Learn for the Future Development of the Health Promoting School Idea from the Experience of a Project in Two Regions in Russia?

Katherine Weare

### Introduction

The European Network of Health Promoting Schools (ENHPS) has now spread across 38 European countries, and includes over 500 schools with 400,000 students. Russia has officially been part of this network from the outset, but the idea has never taken off in Russia as readily it has in other parts of Europe, and, partly due to the sheer size of the country, it has not in practice had a great deal of impact.

In 1999 David Rivett, from the World Health Organization European Office Copenhagen, whose particular responsibility it was to facilitate the development of the Health Promoting School (HPS) in Eastern and Central Europe, saw an opportunity to develop the HPS in two Oblasts (regions) in Russia offered by a new World Bank funded project. This project provided support to help schools in Rostov (in the South, near the Caspian sea) and in Novosibirsk (in Siberia) develop more modern approaches to education. Another Oblast, Tver, in the centre of Russia, was also part of the project, but funded separately. David Rivett approached the Health Education Unit at the University of Southampton, where staff had experience of developing the HPS in Central and Eastern Europe to organize a development project over three years. The aim of this project was to introduce a HPS approach into the three Oblasts, and to discover how some basic concepts and ideas found within HPS networks in other parts of Europe could best be developed there, using the key principle that the HPS is a process not a preset outcome (Jensen and Simovska, 2002:2) and has to be developed in each context in a way that is appropriate, and which builds on the needs, perceptions and understandings of participants.

This chapter explores what can be learned from the experience of these two Oblasts for the development of the HPS approach. It is based on evidence from Rostov and Novosibirsk Oblasts (Tver is not included as it was not part of the World Bank funded project and not evaluated in the same ways).

### **Project events**

An introductory seminar was held in Moscow in 1999, led by David Rivett of WHO and Katherine Weare of the University of Southampton, and attended by health and education officials from the three Oblasts. Participants then went back to their Oblasts and discussed the implications of being in the project with their key stakeholders. Ten schools were selected in each Oblast – they included village schools as well as schools from the cities, and some boarding schools for orphans.

Those from the Oblasts who were to be involved in managing and running the programme came to a central three day seminar in Rostov in September 2000 to clarify starting points. Three further five day seminars were held at about six month intervals in 2000 – 2001 in each of the three Oblasts, covering a range of issues selected by the Oblasts as important. Consultants visited most of the schools in the project to see what they were making of the project. In June 2001 there was a central four-day seminar to share progress and define future strategies. In 2003 a five-day ‘Training of trainers’ seminars were held in Rostov and Novosibirsk, which explored what is needed to disseminate a HPS Programme. At the end of the project, a questionnaire evaluation was carried out. Guidelines were produced which summarised the learning from the project, and were used by schools in their efforts at dissemination.

### **Rationale for the issues covered by the project**

This section explores the view that was arrived at during this project of what it means to take a HPS approach. This view was based partly on the consultants’ assumptions about what is fundamental to a HPS approach (which may or may not concur with the assumptions of others, hence the need to make the rationale explicit), and partly from the needs and interests of participants.

*Focus of concern / settings* Participants were encouraged to see the WHO ‘settings’ approach (WHO, 1991) and the ‘eco-holistic model’ of the school (Parsons et al., 2002) as fundamental to the project. These approaches focus on the way in which health is created in social settings such as schools, and suggests that all aspects of school life are inter-related and highly influential over health. Aspects include not only the taught curriculum, but also the school

ethos, its norms and values, relationships, management structures, physical environment, links with parents and the wider community.

*Principles* Participants were encouraged to base their activities on a set of self-chosen principles, and to evaluate the success of their activities against them. They were invited to consider ten principles established at the ENHPS Thessaloniki conference as fundamental to the HPS approach (WHO, 1997), and from this to create their own agendas from which to develop their activities and assess their own progress.

*Evaluation* The project encouraged participants to evaluate their activities in ways that were both rigorous, in line with ENHPS experience (WHO, 1998, Weare, 2002; Piette et al., 2000; Parsons et al, 1997) and with the overall WHO principles of health promotion and evaluation (Rootman et al., 2001) – in other words empowering and involving for all and using a range of data, with the emphasis on process rather than outcomes.

*View of health and health promotion* The project presented participants with the original WHO definition of health (WHO, 1946) as mental and social as well as physical, and as about wellbeing rather than illness. It also employed the Ottawa charter vision of health promotion (WHO, 1986) as the development of social contexts to support health, personal competence, autonomy and decision-making.

*Teamwork* In line with the model set up at the inception of the ENHPS (WHO, CEC, and CE, 1993b) and reinforced in more recent conferences and publications (Young, 2003), Oblasts ran their projects as partnerships between their health and education authorities. The project emphasised the idea that health is 'everybody's business' and involves teamwork and a multi-agency approach – schools were therefore encouraged to send a range of school personnel to the seminars, not just teachers but also supportive agencies such as psychologists and medical staff, as well as staff from the University in Rostov who were working with the project. They were particularly encouraged to help pupils participate actively in the process (Jensen et al., 2005).

*Health of school staff* The HPS movement has emphasised the importance of promoting the health of school staff as well as pupils (WHO, CEC, and CE, 1993b), and the centrality of teacher education in the development of the HPS idea (Gray, 1995; WHO, 1993a). Staff were therefore encouraged to explore their own health and how they might promote it, and consider how they might help other staff do likewise through developing in-school training. All schools held follow up seminars after the project seminars, and the longer term goal was that



project schools would disseminate the HPS approach to other schools – so teacher education was a major emphasis.

*Involving parents* Involving parents was a theme which both Oblasts requested as a topic for their self chosen seminars, and which the consultants were happy to support, as it was very much in line with the ENHPS emphasis on health for all and community involvement.

*Curriculum* There is a long tradition of curriculum development within the HPS movement, and several large-scale curriculum based projects and initiatives have been implemented, across Europe as a whole (WHO, 1993a) and within specific countries (McWhirter et al., 1996), which emphasise the active, integrated curriculum. Health promoting schools have generally moved on from treating traditional health education topics, such as diet, drugs, exercise, or sexuality in isolation and teaching the generic competences that underlie health issues (WHO, 1997) usually through an integrated curriculum, and again with the emphasis on choice, decision making and empowerment. Curriculum was an issue explored in some depth during this project, as those from the Oblasts were keen to work to develop this area.

*Methods of teaching and learning* In line with common practice in the ENHPS (WHO, 1997) the methodology used by this project was an entirely active one, with a few short lectures and readings as triggers, followed by workshop activities (e.g. group work, discussion, games, simulations and role play). Participants were encouraged to use these methods subsequently in their attempts to develop the project in schools, both in training other staff and in teaching children.

*Mental health* Mental, emotional and social health and well being has from the outset been seen as central to the HPS idea (WHO 1993a, 1993b). Several key conferences, books, publications and projects have developed the concept and implications of developing mental health within the ENHPS (Weare, 2000; Weare and Gray, 1994). Mental health was also a significant issue for participants and it became a significant theme of the project.

*Physical activity* The Oblasts clearly saw physical activity as an essential part of their HPS project. They included it in all discussions of what they meant by a health promoting school and were keen to show consultants their sports facilities and demonstrations of gymnastics and dance when they visited the schools. In line with the Thessaloniki principle of equity, the project explored the idea that physical activity in schools should be fun, enjoyable and beneficial for all, including the untalented, not solely concerned with producing competitive sportspeople drawn from a talented elite.

*The school environment* Participants identified the development of their school environments as one of their goals. In line with the settings approach the project emphasised the idea that this is not just about raising money to buy more equipment such as books for classrooms, sports equipment for gymnasiums or medical equipment for sanatoriums, but is about improving the quality, appearance and 'feel' of the whole school environment including food and nutrition, classrooms, corridors, playgrounds, and toilets.

## Methodology

### **Creation of the agenda for the evaluation**

The agenda for the evaluation was based on the issues discussed above as basic to the project, from the experience of working with participants in seminars and schools, and from two written sources. Eight of the 10 Rostov schools, and one University in Rostov, wrote about their experiences of developing the project three-quarters of the way through the project. Participants from Novosibirsk did not submit reports, but they did make complex written plans for their own evaluation of their project.

A questionnaire was devised using this agenda, and piloted before being finalised. It asked participants:

- What school they were responding for, what their involvement in the project was, whether their school was part of any previous project.
- How much impact the project had had on their school, the main ways it had an impact, what aspects of the project were the most useful to them, and what could have been more useful.
- The involvement of staff, parents and pupils – in terms of how many were involved, how enthusiastic they were, whether their enthusiasm had changed over time, and what benefits they felt it had brought.
- The questionnaire presented a table of issues connected with HPS, using the agenda outlined in the rationale above, and asked respondents to rate how important they had been in practice. The rest of the questionnaire then took each of these agenda items in turn and asked more detailed questions about them, such as what participants understood by the term, whether it was a new idea for them, what they were doing about it, and what their future plans were in relation to this issue.

Clearly there is an element of bias in the methods used, and the responses to the questionnaire, the self written school reports, discussion in seminars and the choice of what consultants were shown during their visits may have been influenced by the wish to impress. However the point of this chapter is to reflect on what the participants thought a HPS approach might mean, and what they made of the various issues covered by the project and the evaluation, rather than to report an evaluation per se – so this data is a useful basis on from which to explore their perceptions and the implications of these for the HPS idea.

## Findings

Of the 20 schools involved all 10 schools replied for Novosibirsk, and 5 from Rostov (the lack of completion by Rostov schools appeared to be due to logistical and communication problems rather than a lack of enthusiasm for the project). Most of the questionnaires were filled in by the head teacher, all of whom acted as the project leader and/or coordinator. Almost all respondents had been involved from the beginning of the project and had attended all or most of the seminars.

Participants were asked in the questionnaire to indicate how important the various issues covered by the project were to them. Issues that were seen as particularly important were: promoting positive health, promoting mental health and self-esteem, teacher education and teachers' own health. All the other issues covered by the project were been seen as having at least some importance by some schools, although teamwork did not rank quite as high as the others.

### **Taking a whole school approach/ settings**

The reports on activities made by the Rostov schools suggested that many of them saw health as multifaceted and holistic, with six of the eight reports listing a wide range of aspects of health, including physical, social, mental, emotional, spiritual, and ecological health:

It is important to understand that the health promoting school is not only medical, but includes psychological and emotional health. We previously thought it was about doctors and dentists. We now think it is more about self esteem etc.

Participants, Rostov Training of Trainers Seminar

It appeared that all schools were making efforts to promote health across the school, including the curriculum, the physical environment, school clubs and activities, and relationships with the outside world. Five schools commented on their efforts to develop aspects of school life, which go right across the school, such as 'favourable climates', 'friendly atmosphere' and 'good relationships'.

This picture was reinforced by the findings of the questionnaire. Six schools were working on several aspects of the school setting – for example, "All components of educational process are involved in the HPS programme implementation". A further six saw the HPS as involving everyone – for example, "Involvement of all students, teaching staff and parents in the programme". Schools said they had set up comprehensive, whole school programmes (6) and/or made changes to the curriculum and methods of teaching and learning to reach more people and to use more active methods (6), and involved a wider range of people (4). Three schools however did not seem to have such a holistic vision, and saw it only as a matter for individuals promoting their own personal health (for example, "To be serious and active about strengthening ones own health.") or a greater involvement of medical personnel (4).

### **Basing the project on principles**

In the final evaluation, 11 of the 15 schools said they found the idea of basing activity on principle at least 'fairly useful', with 6 finding it 'very useful' or 'extremely useful'. Thirteen of the 15 said they had based their project on some key principles. 'Principles' that were identified by more than one person could be classified into involving everyone (6), democracy (4), clarity/ transparency (4), freedom of action/ independent thinking (2), and the value of health (2). Other 'principles' identified by individuals were: healthy lifestyle, mental and emotional health for all, improvement of school environment, curriculum, personal development, complex approach, systematic approach, justice, humanism, sympathy, integrity, continuity, openness, authenticity, sustainability.

However, although they could name what they saw as principles, it appeared that in practice participants found it harder to connect their activities with their self-chosen principles. In their reports, only two of the eight Rostov schools were able to give some precise definitions and real life examples of what they meant by realising their principles in practice. In the final questionnaire evaluation, when asked about how they realised their principles

in practice, over half either did not reply to the question or said they were not sure.

### **Evaluation**

It appeared from seminar discussion and the reports that there was not a strong tradition of systematic evaluation in these schools. As one of the Rostov reports said:

There is no one school in Russia that monitors and diagnoses what children we receive at the beginning of academic year and what they become as a result of being introduced to innovations; i.e. there are no strict quantitative gauging of moral, physical, creative, mental development of children during the academic year.

Despite encouragement, participants did not collect baseline data, due partly it appeared to an initial clash of perspectives on the roles of both parties. The consultants wanted the Oblasts to decide for themselves what they wanted to evaluate with support and training from the consultants while participants wanted the consultants to carry out the evaluation on their behalf.

The clash was resolved later in the case of Novosibirsk who, following work in several seminars, eventually carried out their own evaluation, based on self chosen indicators and principles. Rostov did not carry out an Oblast wide evaluation, but there was evidence for evaluation activity at school level. In their reports, four schools said they were trying to evaluate, and suggested some specific indicators they were using, including improvements in children's attitudes, learning and attendance.

In the final evaluation, three schools said they had carried out 'a great deal' of evaluation, six said 'some' and six 'a little'. When asked 'how?' six had used questionnaires, two had used teams of people to carry out the evaluation (psychologists, teachers, doctors etc) and three had used medical type indicators. Barriers to evaluation were problems with teachers' preparedness and over-work (2), lack of funding (2) technical problems (1), and the way the project kept changing (1)

### **View of health**

#### *Emphasis on diagnosis and treatment*

It was clear from the visits that schools in Russia have a strong role as agents of

primary health care. The schools visited usually housed diagnostic and treatment services, including medicine, dentistry, child psychiatry, psychology, and remedial physiotherapy for children with disabilities. As one school put it in the final questionnaire: "Our Lyceum includes medical, psychological, sanitary, hygienic, social scientific services". Many schools saw the HPS as an opportunity to increase the resources they had available for this diagnostic and treatment role, bringing in more equipment and personnel, for example: "We want to improve our diagnostic centres, laboratories and expand our specialist personnel."

### *Importance of prevention*

Linked with this role as agents of primary health care, prevention was clearly particularly important with the HPS projects in the Oblasts. In their reports, six of the eight Rostov schools talked about the efforts they had long been making to screen, diagnose and treat individual children for physical and mental problems, and some had introduced so called 'passports of health' to document their pupils' health status:

We have created 'passports of health' for each pupil, containing information about their genetic predisposition to diseases and their level of mental and physical development.

Eight schools said that the prevention of illness had become more important since the start of the project five said it was as important as before and two were not sure. When asked what they were now doing about prevention there were eight mentions of the prevention of illness by the provision of medical type health care for pupils on the school premises, and monitoring illness. Two thought prevention was about helping people to avoid 'bad habits'.

### *Positive health and wellbeing*

The model of prevention used was by no means a wholly bio-medical one, and participants were happy with the idea that health promotion is about more than the prevention of disease and is also about promoting positive well being. Indeed, when asked what prevention meant to them, there were fourteen mentions of the promotion of positive health, through promoting a healthy lifestyle, a healthy school environment, promoting sport, and education and counselling.

Five schools said they saw the promotion of positive well being it as being about creating a favourable environment for health, with three emphasising mental, emotional and social well being, seven saw it as about promoting personal health, and two as helping people avoid 'bad habits'. What was different since the start of the project was the involvement of the curriculum (4) and of people (4), and organising events and days (2). What was difficult about promoting positive well being was persuading others (10) – namely teachers (5), parents (4) and pupils (3).

### *Empowerment and autonomy*

There was something of a tension within the project on the issue of where power and initiative lay. Some participants started from a position that they wanted to get advice, and shown examples from other HPS projects of 'the right way to do it', whereas consultants emphasised the importance of participants' own values, experience and contexts and encouraged participants to make their own decisions and plans. This was resolved in practice for the participants themselves as the project unfolded over time, and they did indeed evolve their own approaches. However, there were no comments on autonomy and self-determination in the final questionnaire as something they valued and had learned, and so participants did not seem to emphasize the centrality of these principles for the project.

There were two references to 'freedom and independent thinking', when asked what principles they used, and a general enthusiasm for the idea of involving everyone. However a more dominant view of health promotion in schools, which came through all the sources of evidence, was that it was about teaching people to avoid 'bad habits' and practice 'healthy lifestyles'. The same language and mind set were largely apparent in the answers in the final questionnaire, for example:

The promotion of positive health means no bad habits.

We aim to teach teachers to lead a healthy lifestyle and how to avoid stress. We are conducting 'Healthy lifestyle promotion competitions' in the school to find 'The most healthy teacher, pupil'.

## Teamwork

All of the school reports from Rostov listed a wide range of people who were involved with their projects, including teachers, pupils, parents, health professionals and those from the school psychological service, local sportsmen and women, sociologists, and scientific professionals. In the final questionnaire, team members most often mentioned were psychologists (7) teachers (6), school managers (such as heads, deputies) (4), and medical personnel (2). Schools used teamwork to increase coordination and planning (5), to implement programmes (5), and to deliver training. They used teamwork more than at the outset of the project, and felt that what was new was the involvement of teams in training (5) and of teams helping involve others such as parents and pupils (3). The difficulties were involving teachers (3), who were too overworked, and either too young and inexperienced or too old and set in their ways to welcome new ideas, involving medical personnel (3) and, once again, involving parents (3).

In seven schools, pupils were said to be 'very' enthusiastic, in six 'quite' enthusiastic, and 'not very' enthusiastic in two. In the questionnaires, all schools said they had involved at least some staff, while most had involved the majority of staff. Eleven said their staff were 'quite' enthusiastic, in four schools it was 'very' enthusiastic. In five schools, staff enthusiasm was the same as at the start, but in ten it had grown:

You need to form a team within a school, who share common thinking.

Participants, Rostov Training of Trainers Seminar

Before the project the problem of health had been mostly addressed by medical personnel and psychologists, whereas now a wider range of participants are involved.

Novosibirsk participant, final evaluation questionnaire

The idea of teamwork as involving more than teachers and pupils was also a comfortable one. All schools sent other personnel than just teachers to the seminars, in particular school psychologists. Consultants were impressed on their visits to schools by the involvement of a range of professionals in the projects, including medical doctors who were involved to a much greater extent than is common in Western Europe, due to the, already mentioned, role of the school as an agency for primary health care.



### **Teachers' own health**

In the Rostov school reports three schools mentioned the importance of teachers setting a good example, and four schools mentioned their concern for the health of teachers, including, in three cases teachers', mental health:

Our programme of teaching and learning, which we call 'Pedagogics of Healthy Development' includes the constant study of the teacher of himself, his body, his state of health, and the health of the members of his family, as well as the transferring these skills to teaching in school.

In the final evaluation, most schools reported that a focus on teachers' own health was not new for them but that they were now doing this more intensively and in some new ways, through an increase in the number of seminars and training (4), membership of fitness clubs, sanatoriums, saunas and spas (7), and giving financial incentives for being healthy (3). Barriers included convincing older teachers to look after their own health (7), and finance, including the problem of low wages for teachers (2).

### **Teacher education**

It was useful to have a model of different activities, given by the consultants. The methodological approach, e.g. role-plays, was important. Although we knew some activities before, often it was in theory not practice.

Participants, Rostov Training of Trainers Seminar

Four of the Rostov school reports mentioned the importance of teacher education, and described seminars they had run for teachers back in school, to build on the content and methods of the project seminars.

When asked in the final evaluation what they found most helpful about the project, seven respondents nominated the project training seminars.. They said they liked the opportunity to interact with others (4), the active methods (4), the small group work (3) and some of the topics such as evaluation (2). For most teacher education had not been a new idea, but the five said that project had encouraged them to increase and deepen this work. All schools had held various events, including seminars, training sessions, workshops, meetings, councils, and conferences, held in school, at Oblast level, and regionally. One had made a video film. Again the barriers were seen as being teacher involvement (7) with

overwork, older teachers being set in their ways, and low pay the main problems.

### **Involving parents**

Our parents are not keen enough. The majority consider, that health of children is the business of the professionals, teachers, medical structures, trainers.

Novosibirsk head teacher, final evaluation questionnaire

The involvement of parents was often mentioned in seminars and school visits as both an important goal and as a major difficulty. In their reports, four of the Rostov schools made it clear they were trying to find ways to consult parents about what they liked and disliked about the school, using questionnaires and meetings, and had found they received very helpful feedback and ideas for improvement.

The final evaluation showed that parents were considered harder than teachers and pupils to involve and enthuse. Some schools were working hard to involve them, mainly through lectures (2), and meetings and events (2). Three schools were involving parents as part of the HPS teams, and had asked them to organize clubs and societies in the school. Individual schools had set up centres for parents, run courses for them, and offered them professional counselling. However, despite this, in no school were parents more than 'quite' enthusiastic (8) while in some cases they were 'not very' (6) or 'not at all' (1).

### **The curriculum/ teaching and learning**

Developing the curriculum and using active methodologies was, alongside mental health, the area which the schools appeared to find the most engaging and relevant to them. In school visits, consultants were impressed by the amount of time devoted to health education, both through designated lessons, using mostly self generated materials, and through the routine of integrating 'pauses for health' into lessons – short regular breaks for exercise, breathing, music, massage, and relaxation techniques.

In the reports from Rostov schools, all saw the curriculum as a vital part of their efforts, and were teaching lessons about health. Six mentioned the use of active methods, which they said encouraged participation and gave variety, freshness and vitality to the teaching process. Six suggested that they were

teaching about health in a wide range of imaginative ways that go beyond the classroom lesson, including visits, lectures, seminars, videos, discussion, using the media such as newspapers and magazines, wall displays and so on. Three had organized whole days devoted to the study of health. Four mentioned the need to encourage and foster a classroom atmosphere based on good relationships, openness and kindness. Three mentioned how important it is to understand child development and match the activity to the age of the child. Three schools made links between the health curriculum and other areas of learning, including creativity, ecology, spirituality, ethics and morals, citizenship and sports.

In the final questionnaire survey the value of using active methods, which involve people, particularly students, was mentioned many times throughout the questionnaires in answer to many different questions. All schools said that using the curriculum to promote health was a familiar idea already, but that the project had caused schools to work much more enthusiastically and systematically on this. Eight schools talked about developing new curriculum based programmes on health, three, said they were now focusing more on students. Most of the schools were teaching about health either through a structured curriculum (7) or through specific projects or courses (5). Two were mainly teaching health through other subjects. Three schools highlighted their use of active methods and materials. Eight were planning to develop their curricula, through widening their activity (2), through integrating it into subjects across the school (2) involving others (2), and using information technology (2).

### **Promoting mental health and self esteem**

The teachers consider that during realization of the program the psychological climate of our school has changed: the colleagues of steel are more benevolent, they support each other not only at work, but also outside of school.

Headteacher of a Rostov school, final evaluation questionnaire

Mental health was a theme that was both very important and also well developed in schools before the start of the project. The consultants were struck both in their reading of the reports and in their visits to schools by the efforts schools were making to create positive emotional climates and prioritise warm relationships between staff and between staff and pupils.

The impression that mental health was a major priority, and an issue on which participants already had a good deal of detailed knowledge, was reinforced by their responses in the questionnaires. Four schools nominated the development of good relationships as the most useful feature of the whole project, while their replies to specific questions on the mental health issue were notably longer, fuller and more specific than in any other area.

Ten understood mental health promotion to mean what one called “improvement of psychological climate in school”. They broke this down into a focus on teachers as well as pupils mental well being, avoiding and preventing conflicts, striving for success, self esteem, respect/ unconditional respect, building good relationships, good communication/ interaction, and creating a sense of safety for pupils. Five mentioned the learning of skills, such as adapting to change. All schools said that they had already been working on mental health, through improving the emotional climate (10), developing the taught curriculum programmes and training (6), organising events and activities (3) and involving the psychological service in programme development (3). Although there was already a good deal of work in place, they felt the project had brought a new emphasis on using active methods of working together cooperatively (5), greater involvement of the psychology services in support (3) and in visible improvements to student attitudes (2). The main obstacle was resistance from teachers (5), and to some extent pupils and parents (3), especially to the idea of creating positive climate and celebrating success. Two schools mentioned the problems of lack of finance and lack of experts on this issue.

### **Physical activity**

Six of the Rostov schools reports said sport was central to their projects, and four saw sport as an opportunity to involve parents and sportsmen and women to act as role models. For example:

We hold small sports Olympiads and other various sports competitions with the parents' participation.

There was a strong sense coming through all the sources of evidence that the real enthusiasm was for ‘sport for the talented elite’. In the questionnaire replies, fourteen schools mentioned competition, and six said that they were attempting to promote physical education by concentrating on rewarding

achievement. All but two schools said that 'physical activity for all' was not a new idea for them and that they already encouraged it by events and competitions (5), clubs (6) and the curriculum (3). When asked what had changed since the start of the project, most schools did not reply, or said nothing – two nominated greater sporting success, two a greater use of the facilities, and two more activities. Only one school in Rostov appeared to be working with an idea of 'sport for all' and claimed to have encouraged the development mass sports activities through slogans such as 'Get on start with the whole school!' and 'Marathon for everyone'.

### **Concern with the physical environment and food**

Improving the physical environment was a theme that Rostov requested as a topic for their self-chosen seminars. In their reports, several schools (4) said they had prioritized improving the physical environment, working to improve sanitation, hygiene, safety, furniture, lighting, ventilation, the food given to pupils and the appearance of classrooms. For example:

Special attention was paid in school to airing of rooms, lighting, arrangement of educational furniture, flowers in classrooms. The sanitary and hygienic conditions of classrooms were evaluated by a physiologist.

Very few schools (5 out of 15) responded to the questionnaire questions on this issue, suggesting that it was not generally seen as an important issue by schools. Those who did reply were all from the Rostov Oblast. Schools had made improvements to food and nutrition (3), classrooms (3) more comfortable furniture, flowers and colour on the walls, replacing strident bells with more musical ones, developing school gardens. The, by now familiar, barriers to developing this work were motivating people (3), and finance (2).

## **Discussion**

This discussion will comment on the extent to which the core ideas of the project, outlined in the rationale, were seen as useful and relevant to participants, and the implications of this for the development of the HPS idea.

**Ideas that proved relevant and acceptable**

The eco-holistic/ settings approach – which sees health as created by the totality of school life – was easily accepted, as was the related idea of the whole of physical environment of the school as a subject for development. Schools worked to improve a wide range of emotional, social, organizational and physical features in their environments. They were enthusiastic about the related idea of the integrated curriculum, and developed teaching and learning about health across a wide range of subject teaching and other learning opportunities, inside and outside the classroom, using active and participatory methods.

The ideas of health for all, the centrality of staff mental health and of staff setting a good example also met receptive ears. Participants agreed that teacher education is a vital tool to develop the HPS approach, and threw themselves enthusiastically into developing professional education to continue the change process within their schools, again using the active methodologies they experienced in the seminars.

Teamwork proved to be acceptable in theory, and the projects ran in both Oblasts as a clear partnership between education and health. Participants had no problem with the idea that health is ‘everybody’s business’, and not just a matter for the medical profession and named a great many agencies who were involved in their school projects. Teamwork was more problematic to achieve in practice and participants reported difficulties in involving some key partners, most notably the apparently rather reluctant parents, and some of the more traditionally minded staff.

**Ideas that needed some adapting**

The idea of health as more than physical, and involving social and emotional aspects proved to be on the whole familiar. Participants were particularly keen on the concept of mental health at the heart of the HPS and, starting from an already high base, worked enthusiastically to develop aspects of school and classroom ethos and atmosphere and build warm relations between staff, pupils and parents. They were also happy with the idea that health is not just about the absence of illness, but is also about positive wellbeing. However there was considerably more emphasis on physical health and the prevention of physical illness and disability than is usual in HPS projects, and an unusual emphasis on the role of the school in diagnosing and treating children’s physical health problems and diseases. This appeared to be due to the particular

role schools play in Russia as the location of primary health services, such as medicine, dentistry, and remedial physiotherapy. Although not usually seen as part of the HPS approach, this role would appear to make sense in the Russian context, given the absence of other primary health care agencies, and the very real physical health problems of that country, which has much lower indicators of child health than the rest of Europe and has experienced an astonishing decrease in life expectancy since the fall of the Soviet Union. It may be that the HPS concept needs to expand to include such a role in places where it is appropriate.

In terms of the role of physical education, all but one school appeared to be ending the project with the view they had taken at the outset – that physical activity is fundamentally concerned with the promotion of sporting excellence through fostering the talents of an elite. This attitude may be understandable in a country with a long tradition of competitive sporting excellence. It suggests that future work on HPS may need to allow for the promotion of excellence as well as equity.

Basing activities on principles was another concept that proved to be difficult to implement in these Russian Oblasts. Although participants were happy to identify principles by name, they found it hard to connect them with their activities in practice, despite strenuous efforts of the consultants to help them make such links. It may be that the emphasis on principles that has been apparent within the HPS since Thessaloniki is rather too abstract to be a useful starting point in some new contexts, whereas approaches which specify concrete goals in advance, might be seen as more helpful.

The idea of health promotion as being about autonomy, choice and decision-making was also problematic for participants. Participants did not appear to be conscious of the autonomy as a driving principle for the project and rarely commented on it as something they were learning about (in contrast, for example, to the number of times they mentioned their appreciation of the active methods of teaching and learning). In the school context, there was some evidence that a few saw freedom and choice as important principles and there was a general enthusiasm for involving everyone in their projects, including in some cases in decision making. However this coexisted with a much more dominant and frequently mentioned model of health promotion as about compliance, 'healthy lifestyles' and the 'avoidance of bad habits'. It may be that work on the HPS has to take more cognisance of the enormous interest across the globe in the promotion of personal health and peoples' thirst for

information on what behaviours benefit health, and include more consideration and discussion of this empirical evidence base in its support for schools, alongside its current emphasis on the social change and empowerment approaches.

Similarly, those involved in developing HPS approaches might consider providing more explicit direction and guidance on 'what works' in schools. At the end of the project participants remained keen to hear more about the experience of other countries, and the project might have been more helpful to them if it had come up with more case studies translated into Russian and more summaries of learning from other places. It may be that the project, and by implication the HPS movement, needed to be less relativistic, and provide more definitive guidance and evidence for those new to it, and rather than putting so much emphasis on helping people to make their own decisions, and the 'let many flowers bloom' approach.

Evaluation was another problematic issue – it proved to be acceptable in theory but harder to get going in practice. The basic problem appeared again to be the tension between two principles – the need to use an empowerment approach and the need for an objective and good quality evidence base. The consultants were keen that participants made their own decisions and do their own evaluation based on their own indicators and principles, while those from the Oblasts thought the consultants should carry out the evaluation for them. The net result was that both Oblasts did not collect any baseline data and Rostov did not carry out an Oblast wide evaluation – two missed opportunities to carry out some interesting and useful research that could have added to the evidence base for the HPS approach. It might have been better if the project had been more pragmatic in its approach.

## Acknowledgements

Thanks to: the participants from the Oblasts who took part in the project and its evaluation; the other consultants on the project who provided much of the material on which this chapter is based – Gay Gray, Jenny McWhirter, Nick Boddington, David Stears, Janice Slough, Pauline Forrest, and Ann Payne; David Rivett of WHO for setting up the project, supporting the seminars and acting as go between; and Nickolay Kalashnichov for steering the project and its funding in Russia.



This chapter reflects the personal opinions and judgements of the author, who as leader of the team takes full responsibility for all the criticisms she herself has made of the project. These opinions are not necessarily those of the WHO, the participants in the project or the other consultants.

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## 12

## Professional Competition and Cooperation Frames for Health Promotion in Schools

*Rolf Lander*

### Introduction

Health promotion in schools is an endeavour framed by the institutional and professional forces at work within the social organization of schools, and it will not be successful in the long run if it does not build on an understanding of such forces. The chapter explores this assertion by presenting two case studies of attempts at professional cooperation between school welfare staff and teachers in order to monitor the health of children in Swedish schools, and considers their successes and failures in light of institutional and organizational factors.

Schools in Sweden have available the services of a specialist pupil welfare or care team. This is typically made up of a school nurse and school physician, social and careers counsellors, a psychologist and remedial teachers. Increasingly such groups are called the health team of the school, which indicates a change of discourse about health and the conditions of health. The specialists meet in pupil care conferences, once every second week or so, to make decisions about actions to be taken with individual pupils. The physician seldom attends, but is consulted in special cases. Psychologists sometimes work at the school level, but more often as someone who is consulted when needed. Due to budget cuts during the last decade these specialists are often reduced in numbers in schools themselves, or may be centralised in municipal teams. Welfare teams tend to be separated from the educational functions of the school and are not seen as having a role in teaching and learning in classroom settings. Similarly teachers do not regard the health problems of young people as their concern, due to a traditional view of health in which problems are best taken care of by specialists.

In spite of more than ten years of work within Sweden to establish Health Promoting Schools, a governmental investigation identified a significant need for more professional cooperation around students with special needs (SOU 2000:19). The investigator pointed to a lack of clear goals, leadership and documentation regarding existing provision. Consequently, there is currently a lack of understanding of the whole system for social relations and learning in schools. Even within schools calling themselves 'health promoting schools' I have seen remarkably few examples where teachers and pupil care staff are well integrated in joint systems for planning and monitoring the learning and well-being of students.

Case studies of professional cooperation in monitoring of health issues will be given for two reasons:

- Monitoring health and health needs is a basic prerequisite of health promotion. It includes screening of sickness and severe threats against health and well-being but more importantly it serves to identify problems with lifestyle habits, which pose threats to future health (e.g. smoking, drug use, lack of exercise etc).
- Monitoring of health as a basis for health promotion is dependent on professional cooperation. It is fortunate that schools have specialists on health-related issues, as health needs assessment is a complicated task for which teachers need the assistance of specialists. Equally, health specialists need effective assistance from ordinary teachers and school leaders. Monitoring ought to be an ideal arena for the interchange of professional views and cooperative learning about health needs among young people.

The case studies of monitoring systems in schools will be presented under the same headings, and then analysed and compared using the concept of causal or generative mechanisms proposed by Pawson and Tilley (1997). Their approach serves to highlight what responsible actors think about what worked in their models. In the first case, I worked as an evaluator, and in the second as a participating researcher, and this will clearly have a bearing on the insights that emerged from the analysis. In the last part of the article I will discuss the organizational and professional implications, which follow from the case studies.

## Case 1: Group-Talks about Life at School

### Organization and method

The school was a comprehensive school at junior secondary level, grade 7-9. It took part, as one of eleven schools, in the first trial of the concept of Health Promoting Schools arranged by the National Institute of Public Health in 1994 – 1996. The school established a joint system for monitoring students' well being including school leaders, pupil care staff and teachers (Lander, 1998). The model was one of class-conferences with the students themselves as primary actors under adult supervision. Among school leaders the headmaster was the most active, and among the pupil care staff the social counsellor and the nurse were actively involved. Every class had two class superintendents, responsible for their well being at school, and both participated. At that time the school did not have teacher teams.

The model began with a focus on attempting to solve certain problems of unrest and bad relations among newcomers to the school in grade 7, but within three years, as a result of student demand, its remit covered all classes at all grades.

The conferences were held in pairs (2 x 40 min), with a week or two in between, with one such pair in every class. Students in a class were divided into four groups each with the same adult facilitator, and discussion took place on any issues that students felt were important for their well-being. Adults had a few questions to get the group talking:

- How do others see your class?
- What do you expect from adults, like those you meet in school?
- What do you expect from other young people?
- Who are the good leaders in class?
- What do they do that is good?

They also had two rules to guide proceedings:

- Encourage individuals to share the time for talk equally as much as possible
- Take notes openly for everyone to see

During the second conference, the discussion was focussed more on remedies or ideas for addressing the issues raised in the first. Adults then met after the

second conference and worked to prepare an agenda for possible action that could be discussed and decided on by the class and their class-superintendents during their next regular lesson. In leading the class discussion on what should be done a third rule was established: Every action decided should be distinctly motivated for all to understand, and responsibilities for certain steps clearly marked.

### **Intended and achieved effects**

The intention of this process was to improve the ethos in classes and so create improved conditions for the development of individual students. A better ethos can result in such positive benefits as less harassment and less isolation. It is ultimately a result of better norm building and problem solving among students.

The evaluation gathered indirect evidence supporting the view that the skill and sensitivity of adults was crucial to the success of the process introduced. There was massive support among students for the model, and in a questionnaire common to all eleven schools at the end of the field trial this school's students gave most credit to the teachers' way of giving feedback on student conduct and work, and second best credit to teachers' stimulation of independent thinking among students.

### **Why it worked**

The pair of conferences was an attempt to solve an immediate problem for the adults in the school, but it quickly became clear that conferences also met a need among students. It obviously helped class-superintendents to solve some of their basic tasks. Helping a class to function socially is a prime responsibility for a class-superintendent, and they are traditionally left to cope with this task alone. There was thus a strong motivational basis for the programme from the superintendent's viewpoint.

An important aspect of the model was the use of two meetings. The second meeting allowed feedback on what students in the other groups had said, and a focus on finding solutions to commonly identified concerns. During the second meeting the groups tended to open up more and engage in a deeper discussion of issues. As students' trust in the adults taking part in the conferences grew, they tended to be quite frank about how things looked from their angle. An important consequence was the transparency of the work-situation in many classrooms and the issues that became evident for the adults. Students and staff

members felt that this process gained greater credibility from the active presence of school-leaders, especially the headmaster himself. I was told that the moral support from the leadership, and the transparency, created an informal social pressure on teachers to be more proactive in changing problematic routines and to seek greater collegial assistance in improving their ways of working.

### **Sustainability of the model**

After four years this model seemed institutionalised, but it didn't survive the headmaster's promotion to a higher administrative post. A new head teacher came with a new agenda, and this coincided with budget cuts making the time schedule for the pupil care staff considerably narrower. The last factor could have been compensated by somewhat bigger groups (three instead of four) or by abandoning conferences in grade 9, but unfortunately many teachers felt relief by the new head teacher's change of approach to student care, which became less health promoting, and more remedial.

## **Case 2: Individual Health-Talks**

In most Swedish comprehensive schools the school nurse arranges health talks with individual students approximately once every three years. This gives the nurse a basis for action in individual cases. But this process is most often neglected as a source of information and analysis about the school and the municipal system as a whole. It is also neglected as an arena for professional cooperation between nurses and teachers. In order to change this situation I initiated a cooperative project with school nurses in 13 comprehensive schools. The basic model was tried three times during 2001 – 2002 (Berggren and Lander, 2001).

### **Organization and method**

Early in the autumn semester the nurse paid a visit to all classrooms in grade 8 to inform students about the health talk, which is voluntary (but almost everyone takes part). A questionnaire was also administered with the nurse present. A procedure for data processing was worked out so that only the nurse could identify who had completed each of the questionnaires.

The questionnaire used had the content indicated in table 1. The measures in the table are placed in an assumed causal order, which was basically confirmed



by the analysis. The idea was to measure both indicators of health and well being, and indicators of processes of school-work, and to connect these by measures of three kinds of self-concepts. Teacher-student interaction concerns micro-processes in instruction deemed to be important for learning and well being, and therefore expected to be present regardless of specific instruction methods used. Items are about teacher encouragement of social cohesion in class, student participation in planning and evaluation of instruction, teacher explanations and feedback, encouragement for independent thinking, praise for good work, support if learning problems, and about teacher concern for an orderly climate in class. The group work measure deals both with productivity and relations in groups (for results of structural equation modelling and a discussion of the choice of health concepts, see Lander, 2002).

**Table 1.** *Content of the student questionnaire used as an indicator instrument and basis for health talks in grade 8.*

Everyday processes	Mediated by self concepts	Resulting in
<ul style="list-style-type: none"> <li>• Breakfast and lunch habits</li> <li>• Clean and nice toilets in school?</li> <li>• Physical training</li> <li>• Alcohol and tobacco habits and attitudes</li> </ul>	Health efficacy	Away from school because of: truancy, illness
<ul style="list-style-type: none"> <li>• Love – worried about your boy/girl friend or not having one?</li> <li>• Harassment</li> <li>• Satisfaction with own body</li> </ul>	Sense of coherence	Psychosomatic problems
<ul style="list-style-type: none"> <li>• Teacher-student interaction</li> <li>• Group work processes</li> <li>• Home support if problems</li> </ul>	Academic self-concept	Meaningful school (interest / utility) Negative workload

The detailed instrument ran to four pages of questions and took students 20-30 minutes to complete. A few students with reading problems needed help.

Students were called to individual talks with the nurse, which lasted between 30 and 40 minutes depending on the student's situation. During the talk the nurse had the student's own questionnaire on the desk and she (there was only one male nurse) and the student talked about issues raised by the answers, if the young person wished to. Discussing the questionnaire was only part of the session with the nurse. The questionnaire was structured into sections marked by headings, and each part ended with a certain question as a marker for the nurse, e.g. 'Are you worried about how you are treated by others?' If a young person agreed, then responses to more specific questions would indicate the young person's specific concerns, and the nurse could explore these further.

When talks had been held with all students in classes belonging to a certain teacher team's responsibility, the nurse organized a meeting where she reported on student answers and reflected upon them together with the team. Group data, and not individual data, were reported, and compared with data from the year before, from other classes within the school and from the whole city. Unfortunately, some nurses did not have a dialogue with teacher teams, but restricted their feedback to a full staff meeting with few opportunities for a dialogue.

### **Intended and achieved effects**

The first aim of this initiative was to improve the information on pupil concerns and health to accompanying the school nurse health talks. This was achieved by means of the questionnaire, and some diffusion of the instrument has taken place following the pilot project.

A second aim was to under-pin the status of school-nurses in a professional dialogue with teachers, head-teachers, and central administrators. This was deemed necessary in order for nurses to be able to vindicate their professional perspective in discussing the effects of schoolwork on children's health and well-being. Talks with teacher teams were seen as helping to improve discursive practices about health and youth adjustment in schools and society. This process began, but was interrupted by the sequence of events during the third year.

A third aim was to improve the analysis and understanding of indicator data at the school and municipal level. The municipal quality report may be one of the bases for information exchange between the school board, the schools and

the newly formed national school inspection within the National Agency of Education. Nurses ought to have been given the responsibility for the presentation and interpretation of information on the health status of children, for these purposes. Unfortunately however only a few nurses undertook this task and the use of questionnaire data on both levels was unsystematic.

### **Why did it work, and why not?**

During the first year only half of the nurses established a true exchange with the teacher teams. Some were reluctant about bothering teachers, some felt they did not get support from the head teachers for approaching teachers, a few teams declared that they didn't have the time for these things. The second year saw much better exchange, but still some nurses did not meet teams. Most nurses, however, reported good interaction with teams. Several admitted having some problems in choosing what to focus on within the data gathered and to orchestrate the discussions around productive topics. This shows clearly a need for training in the interpretation of statistical data, and in managing group talks. Neither of these tasks is frequent in nurses' professional training. However nurses were encouraged from their meetings with teacher teams to demand that the municipality institutionalise the model from year three, when the support from the National Institute of Public Health ended.

At the school and municipal level the utilisation was enabled most by the detailed knowledge of the validity of indicator data possessed by the nurses. A member of the school staff interviewed every participating student and this was seen as a unique and basic guarantee for the quality of the model. It is fair to say that neither the school leaders, nor the municipal administration has fully grasped these possibilities.

### **Sustainability of the model**

The first two years were pilot years, and for the third year responsibility was taken over by the municipality administration. It tried to rationalise the coding of questionnaires into data files by scanning, but the contracted firm made fatal technical mistakes and ruined half of the data for this year. It was a severe blow to the work as nurses were unable to fulfil their undertaking to give feedback to teacher teams. At the same time the administration was contacted by a governmental agency seeking pilot municipalities for an indicator project about mental health in the same grades and schools as the on-going project. The administration chose the new project.

## A Comparison of Generative Mechanisms

Programs work by generative mechanisms that enable certain desired chains of actions and / or break certain chains that are deemed harmful. Mechanisms are capacities and choices, resources and reasoning among individuals and groups (Pawson and Tilley, 1997, p 67).

Clearly the two programs worked under quite different conditions. The group talks started with a strong motivational basis, as it tried to solve an immediate problem of social unrest, and also met a more general need of support among class superintendents. The motivational basis of the health talks was initially one-sided. It was the nurses' needs (and their allied researcher's aims) that initiated the project, and other participants had to be drawn in and persuaded to see benefits for themselves in it.

The active participation of the head-teacher gave the group talks a high legitimacy, while a low legitimacy was signalled by the fragmented support from head teachers in the health-talk project. The capacities of agents were clearly easier to mobilize in the group-talk case. Even if leading group discussions on delicate matters among youngsters is not a favourite task for many teachers, the support from other adults increased self-efficacy of uncertain teachers. But above all the everyday language of the discourse itself and the concrete problems identified meant that the staff operated on well-known ground. In contrast to this nurses, and teacher teams in the health talk-case were confronted with data that demanded interpretations of a more abstract kind. Individual, known cases could not be invoked, but group figures had to be interpreted in such a way that a meaningful picture of student needs could be constructed and compared with everyday experiences. This is harder when a team may consist of ten teachers or more, as compared to the four adults managing group-talks, and when only one person – the nurse – possesses first hand knowledge about what students behind the figures do, think and feel. The statistical documentation and analysis of longitudinal data had no counterpart in the group talk case. The latter was highly time and situation specific, and produced no documentation.

From an analysis of generative mechanisms of this micro character several ideas emerged on how programmes could be improved. Mechanisms work in contexts, and these have also to be considered. Both cases had theoretical potentialities to affect their surrounding social systems, the working organization of the participating schools and their institutional values and

mind-sets. The case of group-talks did have such immediate effects, and one may wonder how the advent of a new head teacher so easily could overthrow these. One hypothesis, intended to illuminate both cases, is that teachers may not want to be well informed about others' perspectives, i.e. the students' and the pupil care staff's. I do not say that teachers are unique in this, but the eventual benefits from participating can easily be counter-balanced by losses. The pupil care staff can in both cases regard more work as a negative factor, but on the positive side they hope to influence teacher work, and to be more accepted as professional partners by teachers.

What are, in these cases, the potential negative effects for teachers? In answering the question I turn from solid empirical data about the cases, and use them as illustrative examples of what could have happened.

### **Institutional habits in school organizations**

By implementing group-talks the school ethos benefited from the greater transparency of school activities. This was seen as a positive generative mechanism in that problems could not so easily be hidden from colleagues and leadership, and action to improve situations was not left to individuals but to collective deliberations. But convincing research suggests that teachers seldom see this as beneficial, but rather as a threat to their traditional professional independence within classrooms. The threat of the group talk in our case was directed against 'the logic of confidence' (Meyer and Rowan, 1983). By this 'logic' different actors claim confidence in each other's work, and by that no ones work has to be evaluated by anyone. The organizational structure of school systems is upheld by this logic, and it means that different parts of the system, or different professionals, need not interfere with each other more than necessary. In pupil care that means, that 'if I as a teacher have a problematic pupil, I send him to you, but it is not your task to investigate why I have this problem, you should look for it within the pupil or his home.' This is bluntly stated, but it is evident that the logic of confidence has real benefits for the teacher who does not want to have his or her methods or results evaluated.

In receiving feed-back from the questionnaire used in health talks teacher teams were presented with data indicating problems in their classes, and some of the data came from students' judgement of the quality of instruction and teacher care. Obviously some health problems of students have such origins, and/or are affected by how teacher work is conducted. An underlying issue is therefore accountability. It may happen that teachers take 'bad figures' as

disguised accusations, and feel that they are hard to counteract as no concrete facts, only indicator data, are presented.

We may compare the two models in this respect. In the group talk case concrete evidence from students may 'explode in your face' or embarrassing knowledge about colleagues may be impossible to avoid. So transparency is real, and that may be threatening. On the other hand – the small group of four adults may function as an anxiety-reducing body. The joint interpretation and decision about how to manage challenging information may provide security, if it works. The teacher team discussing health talk data implies more control over the picture of yourself and the other team members that is built up. Data are abstract and you have a choice in what own experiences you prefer to validate them with openly. On the other hand – if openness is avoided or questioned, suspicions about facts behind the figures may not be taken up, and a feeling of mistrust may grow. Who is to be blamed, what do others think of my part in this? Paradoxically then, more abstract information may be easier to escape from, but also harder to control speculations about.

### **Findings in the context of previous research**

This discussion may be illuminated by empirical data collected from team-meetings among teachers and other professionals in Sweden. The traditional reluctance against cooperation makes teachers' professional self-esteem rather fragile. Granström (1996) saw this as conditioning the clearly higher frequency of psychological defence-mechanisms he found in teacher teams as compared to teams of other professionals. The most frequent mechanism was dependence, i.e. to seek security from others, or blame others, rather than accepting challenges as a personal responsibility. Granström claims that dependence is not due to different qualities and capacities among individuals entering into different professions, but a result of socializing processes within institutionalized habits in the workplace.

The potential help from another professional perspective – the nurse's – offered in team discussions of health talk data, is complicated for several reasons, but one is that the nurse thereby may be seen as abandoning her traditionally more neutral role in dealing with student – teacher relations. This role is built upon her individualistic, and somatic, approach to students. Social counsellors and psychologists are trained to interpret the social situation of students, which more often give them a critical view of student – teacher relations. Social counsellors and psychologists also have to divide their working

time between several schools, and therefore get at superficial understanding of each school's code of understanding and conduct, mainly governed by the teaching staff. The school nurse works more often at the same school, or at least at fewer schools, and by that become more adjusted to local cultures, and therefore more accepted by teachers (Arfwedson and Lundman, 1984).

The nurses in these cases could anyway be looked at as choosing sides in a professional conflict with historical roots. Such conflicts have been documented earlier. The 1980 national curriculum for the Swedish comprehensive school recommended teacher teams. A main motive was that teachers should take a more effective part in pupil care in cooperation with the pupil care staff. A longitudinal study of 35 school management areas showed that half of them really tried to improve professional relationships, but that after five years they were equally divided between those who were successful and those who failed and even made the professional climate worse. Closer relations in the latter cases had increased a mutual suspicion against each other's perspectives (Ekholm, Lander and Fransson, 1987). Returning to the same schools 16 years later Blossing (2004) found that the number of schools with a competitive relation between the teacher staff and the pupil care staff had really been reduced (from 23 to 3% between 1985 and 2001). In spite of a big increase in cooperative relations (from 13 to 26% between 1985 and 2001), the dominant pattern still was a clear division of responsibilities with few contacts in the daily work (71% in 2001 as compared to 83% in 1980).

A case-study suggested that subject teachers, contrary to class teachers, were negative to the holistic perspectives on pupils held by pupil care staff because they themselves only met the same pupils in certain subject lessons and therefore had a fragmented view of their situation. At the same time they felt that the pupil care staff protected students instead of being loyal to teacher demands (Lundén and Näsman, 1980). The researchers found this ironic as the pupil care staff, in spite of their protective attitude, was still basically guided by a teacher perspective in interpreting the pupils' situation.

During the last decade educational programs for remedial teachers prepared for a shift in professional responsibilities by training remedial teachers for taking the role as consultants to ordinary teachers, and to see this task as important as the traditional task of helping individual students. This is an agenda of promotion, as it assumes that greater problems can be avoided if teachers in their own classrooms learn more about how to support and arrange for students with certain disabilities and needs. But it is also a break with the

logic of confidence. So reports have documented failures in the implementation of this reform (Malmgren Hansen, 2002; Lassbo, 2003). During the first years of the new century about 900 Swedish schools took part in a national trial in order to see what consequences an abandoning of the national regulation on time frames for subjects in school-work would have. An important part of the project is the restructuring of schools' monitoring systems for evaluating learning and development. But case study evidence now indicates that remedial teachers are seldom taking part in the design and management of these monitoring systems. They are still marginalised (Hansen, 2004).

In 1998 a representative sample of Swedish teachers in comprehensive schools assessed their joint 'planning and monitoring culture', and 56 per cent found it 'good' or 'rather good' (20% and 36% respectively). We didn't measure the specific part of the pupil care staff in this culture (Granström and Lander, 2000), but as you have seen from the arguments above there are obvious reasons to be somewhat pessimistic about this. Still, there are also reasons to be optimistic as there is a broad change in teacher professional self-definition going on, including a more positive view of cooperation. The cases discussed could have been examples of this if they had survived. They did not. Nevertheless, I believe they show the importance of taking institutional and organizational factors into consideration when planning for health promotion in schools.

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## Acknowledgement

My work with these cases was partly paid by the National Institute of Public Health (NIPH).

## 13

## The Roles of Participation and Dialogue in Health Promoting Schools: Cases from Sweden

*Lena Nilsson*

### Introduction

The health promoting school has been shaped by the health sector. It is explicitly designed to facilitate health gains. (...) However, there is a long way to go before the eclectic nature of the health promoting school is used as a planned strategy by individual schools (St Leger 1999: 66).

The main purpose of this article is to discuss and develop ideas concerning the development of democracy and achievement in learning in the school sector in relation to health promoting schools. As St Leger (1999) remarks, there is a long way to go from conceptions of the health promoting school to the realisation of such ideas in practice. The primary aim of health education programs is to develop behaviours that are health enhancing. Nevertheless there is, however, an understanding, often implicit, that health interventions also will enhance school achievement (Devaney et al., 1993). The underlying notion is often expressed as: 'Poor health inhibits learning' (IUHPE, p 111). This assumption is challenged by Nutbeam et al. (1993) who argue that, rather than poor health, poor learning could be seen as the root of the problem and, instead of more school health education aimed at enhancing health behaviour, schools should adapt to provide a more positive experience for students that can enhance both learning and health. Unhealthy behaviour correlates positively with underachievement and school-alienation and according to Nutbeam et al. (1993) this underlines the importance for schools to find ways to adjust to more participatory forms of practice. Indeed, a focus on health promoting schools includes the provision of opportunities for pupils to contribute to school development and for staff to

reorient traditional/autocratic teaching methods towards more participatory and collaborative approaches. This means that new kinds of relationships have to be developed in which teachers and students together discuss and make plans for the content and provision of education.

These recommendations could be seen as a starting point for the development of the health promoting school and as a proposal from the health sector to the education sector (WHO 1993, 1995, 1997). This proposal has, on the whole, been ignored by the education sector. In a recent review, only a few items combining youth health and educational research about learning and school achievement were to be found in educational literature (Nilsson, 2001). Educational researchers are used to focusing on the extent to which education is influenced by social factors. But when the question of health is raised, clear correlations between social inequality and levels of educational attainment and public health emerge. As Whitty et al. (1998, p 642) remark, 'to do well in education' seems to be a really good insurance against poor health. However, the relationships are complex and compounded by a spectrum of social factors.

With regard to the well documented relationships between underachievement and health behaviour, the aim of this chapter is to explore ways of meeting the challenge to develop pupils' participation and re-orient teaching methods in a manner that can contribute to both 'doing well' in school, as well as to health gains.

## Participation

Ever since the conference on health promotion held in Ottawa 1986, empowerment and participation have become honoured concepts. That does not mean, however, that these concepts are easy either to understand or to put into practice (Rissel, 1994). Use of an empowerment model can reveal that the participator's view of the problem can compete with the expert's anticipated possession of the 'right' answer (Kalnins, 1992). The notion of empowerment can be used as a framework to analyse underachievement. Cummins (1997, p 94) discusses power as a fixed quantity according to a zero sum logic. The more power one person or group has, the less is left over for others. Such coercive relations of power could be replaced by collaborative relations in which power could be created in conjunction with others and generated and shared among all of the participants in a process where knowledge is expanded (Cummins 1997). That means power is enlarged, empowerment comes into existence and

students can develop their ability and confidence and can thus prosper in school. Educators have choices in the ways in which they structure interactions in the classroom and can also determine many of the social and educational goals they want their students to achieve. Cummins (1986) claims that students need to feel that the experience they bring to the classroom matters. It is of particular importance that students feel that their voices are being heard and that students are regarded primarily as critical investigators and generators of knowledge instead of merely passive recipients. Such an approach to educational goals can stimulate both students' participation in society as well as their knowledge construction. How the democratic micro-interactions between educators, students and communities are shaped can also contribute to empowering, as opposed to disabling students (Cummins 1997).

Since powerlessness can be seen as one of the greatest threats to health and well-being (Jensen 1993) it is even more necessary to develop schools in the direction of promoting empowerment, participation, democracy and dialogue. By making reference to educational and political philosophy, participatory democracy can be distinguished from deliberative democracy (Englund, 2000). Whilst both emphasize participation, participatory democracy accentuates the pupil's interest in societal questions and understanding of social issues, whereas deliberative democracy accentuates the nature of the process. Education can be seen as a form of communication that creates both meaning and knowledge (Englund, 2000) and, consequently, this makes it important to support and develop the students' capacity to conduct dialogue about life and the world. Currently one area in educational research that is receiving a lot of attention is the development of democracy models and educational processes as a progression towards the creation of meaning, and these twin developments create opportunities to broaden the collaboration between the health and the educational sectors. Characteristic of a deliberative democracy model is the nature of the dialogue where arguments are presented, discussed and listened to.

## Dialogue

For progress to be made in health promoting schools, dialogue, in different shapes and forms, is crucial. Group discussions can be used for both problem solving and for the improvement of classroom climates. Dialogues in small

groups can be used as tools for the solution of conflicts even though the right words are not that easy to find (St Leger 1999). Furthermore, in educational discourses 'dialogue' is a commonly used concept and is indeed the word most frequently used when talking about Swedish school development (Carlgren and Hörnqvist, 1999). Dialogue could be used for elaboration of visions as well as for the transformation of national goals to local conditions, or for talk about whether or not pupils should take their caps off during lessons. Thus dialogue is a tool that could be used to discuss the national goals, as well as ethical positions or even small trivial classroom problems. Perhaps, though, trivial problems are not at all that trivial. Through talking about what has only previously been implicit, traditions and standpoints can be elaborated and you can learn to live with pluralism. Talking, reading and writing mean communication and the opportunity to articulate views and attitudes.

Dialogue in the classroom involves reciprocal communication. Burbules (1993) claims that dialogue is possible, and that it is important to investigate how dialogue could be used for the development of teaching and learning. Full democracy can only exist when individuals and groups who occupy rival positions can learn from one another. Engaging in dialogue can encourage deeper learning and understanding. Separate words and whole sentences are often ambiguous and in a dialogue possibilities for the creation of new, different and, or common, meanings are provided. These sorts of new learning models could lead to the development of new forms of democracy and could increase student influence (Burbules, 1993).

Furthermore, a post-modern critique challenges the intellectual traditions of Western culture (Burbules, 1993). Values of rationality, objectivity and knowledge can be criticised as a superstructure that has excluded and disadvantaged subordinated groups. A basic rule and a criterion for deliberative democracy must be to guarantee that the voices of 'the others', i.e. the disadvantaged groups, will be listened to. Converted to the school-system, these 'others' could be seen as the under-achieving group, a group that traditionally has been silenced and powerless. A key area that schools need to focus on, in order to become health promoting for all students, including those who are school-alienated, is to provide these students with opportunities to contribute and to re-orient autocratic teaching towards more participative approaches (Nutbeam et al., 1993).

In an ideal dialogue, different voices must be invited to participate and different ways of communicating must be permitted. This sort of dialogue is

marked by a climate of open participation and guided by a spirit of discovery and its tone is exploratory and interrogative. It has no ready-made answers or unassailable truths: 'It manifests an attitude of reciprocity among the participants: an interest, respect and concern that they share for one another, even in the face of disagreements' (Burbules, 1993: 8). Dialogue can be defined as a pedagogical, communicative relation. It can also be defined as a game, played by interested participants and with fulfilment as the reward. The game has its rules, but these are not stringent but are better seen as guiding principles for the game as a form of play. We need to adopt '... a general attitude of playfulness, a tolerance for disagreement, a willingness to compromise, an ability to cooperate...' (Burbules, 1993: 59). Different voices and perspectives are necessary for a dialogue to occur. A successful dialogue must not give a single correct answer to a question, but can show how difficult the solution to a problem can be. Yet dialogue can fail and fall into patterns that are anti-dialogical.

Burbules (1993) does not consider dialogue to be a 'method'. Rather, he views it as a direction of pedagogical exploration, and a flexible approach to teaching and learning. People engage in dialogical patterns if they are committed to the spirit of equality, mutuality and co-operation. Dialogical attitudes have three rules: participation, commitment and reciprocity (p 146). The fabric of dialogue is the dialogical relation. If the relation is broken, the dialogue comes to be doubted. A temptation for educators is to assume the dialogue partners are ignorant need everything spelled out for them. This sort of discussion can proceed only as a monologue with a 'banking approach' where the expert-teacher 'deposits' knowledge into a passive and ignorant student (Freire, 1970/1996). Inequality between students and teachers, as well as 'divide and rule' approaches and prejudices, are examples of broad non-communicative dimensions that can destroy the conditions for dialogue. Such shortcomings cannot be blamed on individuals, but on the dialogical climate as a whole.

## Cases from Sweden

Are schools dialogical? To investigate and illustrate this question, together with the question of how schools can meet the challenge to develop participation and re-orient their teaching methods, I will provide a few examples from the development of 'health promoting schools' that constitute the empirical data for this article. The data are obtained from secondary schools in Sweden

(Nilsson, 2003). The schools in the study have chosen to join in a process of networking as 'health promoting schools'. When the data were gathered, the schools had participated in health promoting school projects for between three and ten years. The schools had adopted different ways of developing their organization and produced their own content for the project. This article concentrates on the way in which these schools developed pupils' participation and opportunities to engage in dialogue.

### **The 'dialogue school'**

The first example is from a school, which, among other health promotion activities, took part in a 'dialogue-project'. This school had a significant number of different health promoting activities going on. They had an anti-tobacco-project, a group for alcohol issues, a fitness group, a group for school meals, groups for girls and anti-bullying groups. Furthermore, they were part of a national project for environmental issues. All these issues made the teachers confused:

“There are a lot of groups and the same people attending them. What do we want to obtain with health promoting schools? The social climate in the school – does it belong to the environment group or the health group?”

These questions did not lead to any overall answers, but the issues raised were seen by the staff as of vital importance. The school leader, as well as many of the teachers with different responsibilities, all participated in these projects. At the same time they talked about their own sense of fatigue:

“The organization is changed every year. How can we introduce newcomers among teachers? The positive feelings can get lost.”

As a further strategy in these health-promoting activities, a team from the teacher group had participated in workshops to develop and arrive at a deeper understanding of dialogue as a tool for developing the health promoting school. In preparation for the dialogue-project, the pupils and their parents participated in an overnight session where the pupils could choose subjects to talk about. The chosen subjects were as diverse as love, sex, parties, life, ethics, suicide, drugs, racism, bullying, schoolwork, grades and dropping out from school. The teachers who were in charge of the project had designed models for the

dialogues that contained value clarifications, like 'four corners' and 'the hot chair' where the pupils were invited to select one opinion that corresponded best with their own. Such exercises could be looked upon as largely pre-constructed drills, but they could also be understood as careful practice in voicing attitudes. The teachers also introduced more open models designed to get the participants to listen to one another, to develop visions and ambitions, and to develop a certain degree of common sense among the pupils.

At the outset of these dialogues with the pupils, the first subject dealt with was schoolwork. Some of the pupils' initial questions were:

"Why do we go to school? What should the school be like and how should it function?"

The discussions that unfolded were about homework, why attending school is compulsory, what grades represent, and who decides what and how to learn in school. The issues explored were both those areas that pupils could have an impact on and those that are regulated in educational legislation and are thus democratically decided at another level. The debate progressed from trivial, but nonetheless important things like behaviour in the dining hall to the nature of the teaching profession and the pupils' visions for the school, their education, and their own futures. The more experienced teachers in the project prepared these dialogue-lessons that took place twice a week, whilst all of the other teachers had access to the same materials.

### **The 'problem-based learning school'**

The second school had chosen problem-based learning as a tool for the development of health. Problem-based learning was initially developed as a learning device for students at university (Hård af Segerstad et al., 1997) but has also been modified for use in health promotion work with young people in Sweden (Jerdmyr and Svedbom, 1997). The objective, when using problem-based learning for health promotion is that, from a point of departure formulated to arouse the interest of pupils, to both enhance their learning and also to impact upon their health behaviour.

The eighth graders in this particular school had used the model for some weeks in their work on the investigation of drugs. One of the groups had investigated narcotic drugs on the Internet. They had discovered that narcotic drugs were easily accessible on the Internet; you could order them and have



them delivered to your front door within an hour. The pupils were a bit upset that it was so easy to get hold of drugs. They thought that their parents ought to know what children could find on the Internet and how easy it really was to get narcotics. Another group had investigated the types of narcotic substances that could be derived from vegetables and animals, such as mushrooms, vegetable poisons, herbs and the mucus secreted from the skin of certain frogs.

When reporting their results to younger pupils, the auditorium was hushed and silent. No further questions were posed other than those posed by the teachers. These lessons can be seen as a sort of 'banking education' (Freire 1970/1996), in the form of depositing ready-made knowledge from the Internet and encyclopaedias. The older pupils' reporting to their younger peers was intended to promote a dialogue, but as they had not been given advice in how to conduct a dialogue and were given no help from their teachers present, no oral exchanges actually took place. This contrasts with the intention of problem-based learning, which is supposed to start with the learners' questions, from which information gaps or problems to be solved are developed (Jerdmyr and Svedbom, 1997). According to the older pupils, the learners in this activity were the younger pupils, the receivers of information and pre-packed knowledge. The older pupils' views were that:

"Teachers think we learn a lot, and maybe we learn to co-operate and this might be good preparation for upper secondary school. We have learned that we can teach the seventh-graders. The teachers think we learn, but we don't."

This group of pupils were not especially satisfied, and one of the objections against the problem-based learning model was that the teachers had already chosen the points of departure which were selected from pre-fabricated instruction material or magazines. That meant that the pupils were not empowered to 'pose the problems' (Freire 1970/1996). An objection that is raised by the teachers is that this method does not suit all pupils. Some of them need more structure and supervision. Some of the pupils, they argued, needed more traditional teaching methods in order to feel safe:

"Some pupils are dubious about participation and about taking more responsibility. It is much easier and more secure when the teacher lectures and takes all the responsibility and makes all of the decisions."

These two health promoting school projects have started development work where the capacity is underused. The two schools have chosen different approaches for their health-promoting projects. Both schools had the ambition to start from the students' own interests and questions, and both of them tried to combine this ambition with another ambition: to create a positive impact upon health behaviour. The first school let the students identify their own subjects of interest. These subjects revealed a broad variety of relevant topics of debate that were prominent in the students' own minds. The teachers let them talk about these subjects and the discussions started with the concept of 'school'. The next subject was 'love'. Problem-based learning, on the other hand, offers opportunities for developing knowledge and formulating one's own questions. However, the second school had already chosen the subject of 'drugs', a subject that had in fact been chosen independently by the students in the first school. The two examples give two different perspectives and solutions to the challenge of attaining greater degree of participatory dialogue with pupils. They are premised on health promotion models like value clarification and problem-based learning, which are a product of educational research. The conclusions are ambiguous. The pupils experience new ways of conducting dialogue and come to gain insights about the conditions for their education. They are given opportunities to express visions and opinions about school and about life. But there is a danger that those under-achieving pupils are at risk of remaining alienated from school since, according to Nutbeam et al. (1993), they cannot use the opportunities that are on offer to participate in the dialogue. This places heavy demands on teachers to develop a framework that allows and facilitates the participation for all pupils (Cummins 1986).

### **The 'healthy school'**

A third example comes from another of the health promoting schools in Sweden. More than ten years ago, before the start of the current project, this school had created a 'health and fitness' subject as an alternative to the ordinary 'pupils' choice' which, at that time, was an offer to all pupils in secondary schools in Sweden. At that time the ordinary first choice was a second foreign language. The 'health and fitness' subject became a 'haven' for school-alienated pupils and others not interested in studying languages. Later on, when this school became part of a health promoting school network, the 'health and fitness' subject transformed into a broader health subject. Over the years, this health project has developed and has assumed a different set of characteristics.

Nowadays, all pupils take part and have one lesson a week for their three secondary school years. The subject has three themes, which could be described respectively as 'being brave, growing up and living'. The teacher, who is the project leader and takes a majority of the health lessons, emphasises the dialogical character of the subject. The pupils are encouraged to think, feel and express their thoughts. They are also guided to listen to and not disparage utterances from other pupils:

"In the health lessons we talk about us. You are sitting in a circle, can relax and listen to music and poetry. In the dialogue about what children like, illustrations that are raised include the summer cottage, the football team, sleeping, dancing with your mother, and siblings. The fundamental rule is that you must not make a fool of anyone else. The atmosphere must be one of trust and must encourage reciprocity."

From the dialogues the teacher and the pupils together can come to an understanding about what is important for a good dialogue. They discuss ethics and essentials. Teaching needs a curriculum and the curriculum for the health subjects contains subjects as drugs, nutrition and fitness, information on sexual matters, as well as first aid and resuscitation techniques, the law, handling stress and conflicts, and outdoor life. This illustrates simultaneously both the dilemma and the opportunity: these subjects are inherently attractive as subjects for dialogue. Society has readymade and 'correct' answers, but the teachers in this health promoting school project emphasise the dialogical skills and the dialogical attitude. When these students come to upper secondary school they are recognised as being 'dialogical'.

This latest observation points to the importance of evaluation for health promoting school- projects. The effectiveness of health promotion in schools needs to be considered carefully (IUHPE 1999) although, on this point, the literature is somewhat ambiguous (St Leger 1999). Evaluation, in this field, could have different focus; normally we anticipate the need to account for outcomes in terms of health behaviour. But, if the focus in the health project is knowledge about health topics or, as in this latest example, where the focus is ambiguous, then we need to ask ourselves what, exactly, is the proper object of evaluation? Of course knowledge can be evaluated in traditional ways with oral or written tests. But first, there is no proof that knowledge about either diet or drugs actually results in healthier behavioural choices. Secondly, if, as in this

case, the dialogue concept and dialogical skills are viewed as the primary aim and of a greater importance than acquired knowledge, then it is no longer legitimate to base evaluation on the measurement of outcomes in health knowledge or behaviour. Therefore development of new forms of evaluation that are honest and respectful to the participators, are required (Stewart-Brown 2001).

### **The 'sober driving campaign'**

These three examples emanate from participation in health promoting school activities. In a fourth example from an upper secondary school, a vocational class had developed a programme about alcohol for their peers. The focus in the project was to prevent young people from driving under the influence of alcohol and to encourage young people to prevent others from drinking and driving. The programme was comprised of information and questions with multiple choice responses, but also more emotionally-oriented elements, such as a heart-rending film, a tragic short performance and an opportunity for pupils to try out equipment designed to simulate the experience of the physical forces of a collision even at a low speed. The class had designed the day from a concept first created by the National Road Safety Office who, together with community public health officers, was the instigator of the original concept. To the teachers of these students there was another, complementary, advantage of the project; it formed a sort of 'reality', and the project could be presented for the whole school and even to the wider community. The project was thus conducted in conjunction with community partners, local business and industry. The subject, alcohol education and sober driving, was regarded as an issue of pressing importance, but these teachers were, of course, not health educators. Their purpose was to teach project management and leadership on vocational programmes. Previously, and for altogether different reasons, the class had tried other forms of dialogue, such as, for example, the use of role-plays. In this project, the students were given training in making advanced planning for a project in which a number of different actors would be involved.

The students carried out the programme by themselves. They received training and encouragement from their teachers, but were expected to manage the whole project and to take a professional responsibility for practical arrangements. They were not, however, trained in ways of conducting a dialogue. They invited their peers to discuss the project, but were not able to conduct or develop any sustained dialogue. In an evaluation with the class a few weeks after the completion of the project, the students expressed the view

that the programme had been successful. They were satisfied with their performance but felt a sense of insecurity about their own ability to conduct and participate in dialogue. Their views are perhaps best summed up in the following way, that 'if the dialogue became tough, you could need an expert there to tell the truth and to give the right answers'.

Notwithstanding the difficulties inherent in the concepts of participation and dialogue, these examples have an everyday importance. A lot of similar work is taking place in many schools. The starting point could be, as in the secondary schools described here, the promotion of health or, as in the upper secondary school, the promotion of vocational skills. From both of these points of departure, the activities come close to the development of both participatory and deliberative democracy, and in all the examples, dialogical skills and the dialogical climate become crucial. In Swedish school development discourses, as well as in international educational research and discourses, the development of different forms of democracy is strongly emphasised. In the Swedish model for school development, participation and achievement for all children could, on the one hand, be seen as taken for granted (Lpo, 1994) and a report from the Swedish National Agency for Education (Skolverket, 2001) demonstrates that 80 % of Swedish teenagers between 14 and 15 years old, believe that the climate for dialogue is good in their classrooms. They perceive they can express their views, that they feel respected and that their views are listened to. From both a historical and a geographical perspective, when compared to traditional or even dictatorial societies, this is an extremely good result for the democratic development of society. On the other hand, from an equality perspective, it is of great concern that 20 % of the children, especially those in the under-achieving category, perceive that they are seldom, or indeed never, treated with respect or encouragement and seldom or never listened to.

## Discussion

If the notions of 'school-alienation' (Nutbeam et al., 1993) or 'under-achievement' are to be taken seriously, something must be done to involve alienated and underachieving groups in order to extend participation, empowerment, dialogue and democracy. The examples in this article, all of which have their points of departure in classroom teaching, illustrate the ambiguity and uncertainty in the health promotion endeavour. In the examples, health

education is combined in different ways with the development of dialogue. From these examples it can be argued that the schools are trying to be dialogical, but have not yet fully grasped the strategies needed to make all pupils participate and feel secure in dialogue and to be aware of the learning opportunities that such dialogue provides.

Traditional, autocratic teaching can be perceived as the transmission of knowledge. Under-achievement could be regarded as a problem related to this view of knowledge. If we want to accept the challenge that Nutbeam et al (1993) provide for us, which is further underlined and extended by Whitty et al. (1998), I imagine we have to confront the view of knowledge that emphasises transmission. Educational discourses based upon Dewey or Freire (1970/1996), as well as on a number of current scientific or philosophical perspectives, could be used as a starting point. Here, just a few of a range of possible perspectives will be chosen to discuss the concepts of participation, dialogue and empowerment that address the challenge of drawing out otherwise silent voices. Health promotion work often is performed with reference to Freire (1970/1996, p 69) as an advocate of empowerment, naming the world and speaking the word: 'Human beings are not built in silence, but in word, in work, in action-reflection.' Belenky et al. (1997) explore 'ways of knowing', with a primary focus on women's ways of knowing. They claim that in schools some students 'learn' that they really know nothing and do not possess the ability to learn. Belenky et al. (1997) term such a position 'silence' and discuss how it could be changed by encouraging anxious and silenced voices to speak out, and which are normally silenced by imbalances in power between teacher and students, but also amongst the students and between the students and other parts of society. Arguably, the development of 'voice' is best achieved through conducting dialogue and nurturing of these silenced voices. The gender perspective could as well be understood as a power relation where knowledge can be seen as the teacher's property. Teachers do possess 'readymade' knowledge with 'readymade' and 'correct' answers. That means learning could be seen as a construct in which students' voices echo those of their teachers' and which entails that the construction of knowledge is in fact concealed from the student. But, if the teacher and students think together in an open dialogue, where both students and teachers can ask questions and uncover ignorance, as opposed to a form of learning whereby the teacher conceals her own thinking and simply imparts her knowledge to the students, the construction of common knowledge can take place in which different voices and perspectives are

demystified. Thus, students are encouraged to participate in the construction of knowledge and meaning.

Dysthe (1996) is a linguistic researcher who offers a substantive model for putting another learning paradigm into practice. She distinguishes between transmitting knowledge from the teacher or the textbook, and the transformation of knowledge to understanding where the 'facts' from textbooks are considered in the light of pupils' experience and pre-understanding. Dysthe claims that dialogues in the classroom are often 'monological' dialogues, where the teacher asks questions and pupils responds in brief sentences. Moreover, Dysthe points out that the teacher seldom uses the answers for elaborating the pupils' views. As thinking and learning are inherent dependent upon language, in a model, which combines writing and talking, pupils are encouraged to 'tell' using their own words. With a design for the lessons where pupils write, read and talk, the written words can become a means of support for silenced pupils to talk, and for their own questions and views of the world to become visible, acknowledged and part of a common world-view. One of teacher's responsibilities is thus to create a dialogical and trusting climate in the classroom. A central objective with this approach is to enhance commitment and concretise knowledge: 'How could I think without tools for thinking?' (Dysthe 1996, p 28). Dysthe also suggests a method of 'role-writing' – a more personally reflected way of composing texts. This way of writing can result in learning outcomes that can be compared to affective learning approaches. Dysthe draws on Bakhtin and in particular his assertion that dialogue is central to living where asking questions, answering and listening are vital necessities. It is not enough that there are various voices; the voices also must interact and differences must be brought to the fore. An equally caring and academic attitude can allow the silenced voices grow in confidence. Pupils who lack commitment and those who are alienated and reject school could, referring to Dysthe, discover an interest in thinking about community, history and their own lives.

## Conclusions

The progress of health promoting schools opens almost unlimited opportunities for encounters with school development based on a common interest in the development of democracy (Nilsson, 2003). In this article a number of different views of empowerment, participation and dialogue have been used to discuss

examples from health promotion projects. The health promotion programmes scrutinised here could be interpreted in terms of expanded learning and voicing different perspectives. The models schools apply form a good basis for dialogue, but the teachers need to gain a greater awareness of the potential of dialogue as a tool, as well as more actual practice in being able to nurture all of their pupils' voices. Furthermore, it is clearly not self-evident that the best thing to do to fulfil the health sector's ambitions about the health promoting school is to develop different kinds of health programmes. There are ambitions inside schools, as well in the broader society, about developing different kinds of democracy, which could strengthen the health sector's ambitions. Nevertheless, increased cooperation and dialogue between the health sector and the school sector could be useful.

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## 14

## Collaboration as a Learning and Research Method in Promotional and Participatory Action Research in the Finnish ENHP Schools

*Kerttu Tossavainen, Hannele Turunen and Harri Vertio*

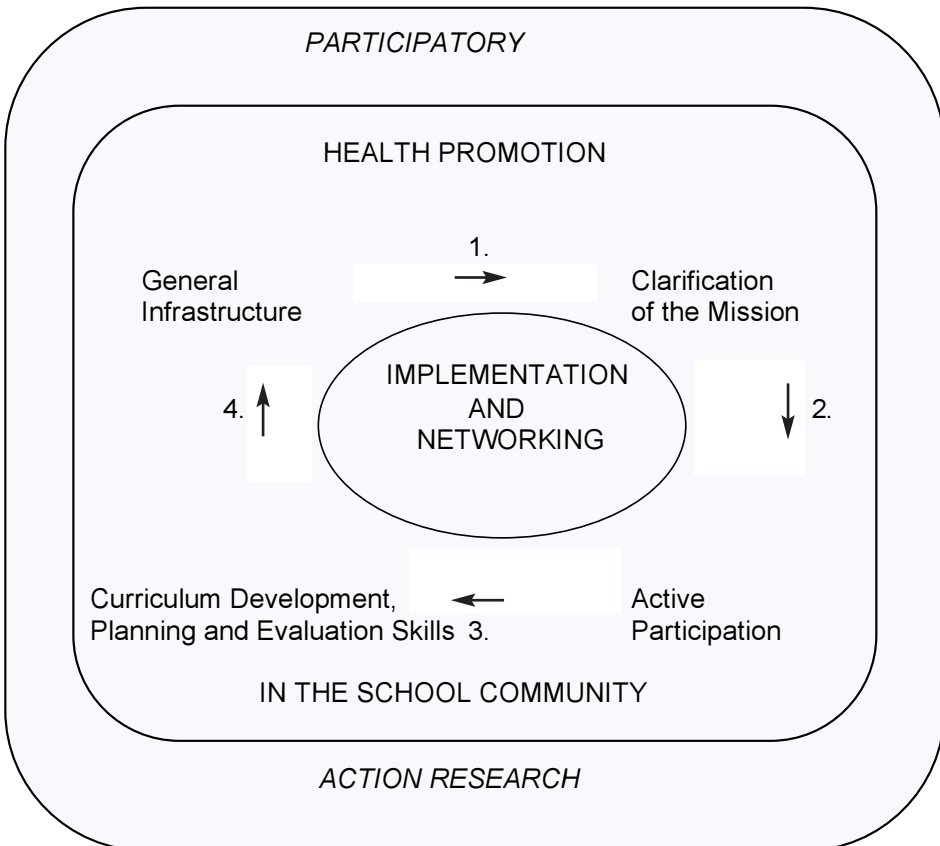
### Introduction

The Health Promoting Schools network offers unique possibilities, but requires commitment to the provision of a safe and health-promoting social and physical environment. It is important to begin from the idea of health promotion as the fundamental collaborative task of comprehensive school and the foundation of holistic learning. The ideological shift from disease prevention to health promotion has a number of impacts on the practice and research of health promotion in the school community (e.g. Baum 1998, Davies and Macdonald 1998, Lister-Sharp et al. 1999, Rowling and Jeffreys 2000). Firstly, the traditional intervention programmes developed outside the school community are gradually changing into participatory action research, where teachers, pupils, school nurses, other members of the school community and parents are expected to hold the key roles in actively analysing, planning, implementing and evaluating health-promotional activities in collaboration with researchers. Active participation and creativity in the process of health promotion are assumed to increase members' commitment to positive changes and long-term effects of health behaviour.

The second frequently mentioned impact of the ideological shift is the expansion of evaluation from outcomes towards processes that occur in the school community and either promote or hinder the implementation of health promotion. This also highlights the need for different research approaches involving both quantitative and qualitative methods. Whenever the purpose of the study is to gain deep understanding of the processes that belong to the complex and dynamic system of health-promoting schools, qualitative

methods may be more appropriate. Finland joined the European Network of Health Promoting Schools (ENHPS) in 1993, and since that, both quantitative and qualitative methods (e.g. structured and open-ended questionnaires, focus group interviews, diaries, critical incidents) have been used in the evaluation of the progress of health promotion in the participating Finnish schools. Surveys have been conducted to explore the progress made by the schools in their collaboration and participatory action to develop the health-promotional ethos. During the three-year period of 1997-1999, when the results to be presented here were obtained, a model of health promotion was developed and produced by members of the school communities with the help of the researchers during an action research process (Figure 1). The model contains four dimensions for the realisation of the aims of health promotion: 1) general infrastructure, 2)

**Figure 1.** *The Model of Health Promotion in the Finnish ENHPS Schools.*



clarification of the mission, 3) active participation and 4) curriculum development, planning and evaluation skills. Although these dimensions are presented separately in the model, they intertwine in practice (Turunen et al. 2000).

The first dimension is general infrastructure, which consists of a healthy and safe teaching and learning environment. This includes physical and mental safety during lessons and breaks. For example, healthy nutrition, opportunities for physical education and adequate health services should be available. The next important dimension is the clarification of the mission of health promotion. This means joint discussions about the values, attitudes, commitment and resources related to health promotion. The third dimension consists of the participants' active and collaborative participation. This requires staff training in collaborative methods and learning strategies. The fourth dimension consists of the development of curriculum planning and evaluation skills. It is important to recognise that if health is considered an important issue in the school community, it should also be visible at the curricular level. This requires systematic planning and collaboration between several fields.

In this chapter, we first describe a theoretical framework that enables researchers and practitioners to understand health promotion at schools from the perspective of collaboration and participation. Second, particular attention is given to discussion of the potential value of designing and implementing the Finnish ENHPS programme of adapting participatory action research (PAR), which integrates collaboration, learning and research. Thus, the research project is an intervention into the real world, and it simultaneously also influences the everyday life of the school community, as well as collaborative research of the mutual reality of these two systems. In the results section, the teachers' experiences and the internal changes in the schools are examined according to the above approaches of health promotion and the dimensions presented in the figure 1. Finally, interpretations are made based on the results as to how the ENHPS programme and the participatory action research approach applied here have initiated and promoted processes which arise from the everyday life of the school.

## Theoretical Discussion about Collaboration in Health Promotion

Collaboration is regarded as an experiential learning methodology, and it will therefore be considered within the context of experiential learning. Closely associated with the concept of collaboration are the ideas and theories linked to

the notion of a co-operative learning group and the group dynamics of the learning situation. Thus, collaboration is an integral part of the health promotion process in school communities (Table 1). West (1990) points out the use of educational collaboration as one important key to professional sharing of successful practices in the restructuring of schools. Based on the work of some authors (e.g. Bruffee 1987, McGregor 1990), it is possible to categorise their interpretations of the approach as revealing two major themes. The first views collaborative learning as a means of developing and deepening subjective knowledge, in this case health promotion at school of a group of learners. The second theme focuses on the potential of the approach to develop the group's ability to work constructively with others, i.e. with other teachers, other school staff, school nurse, pupils, etc.

In the context of the first theme, collaborative learning may be described as a process in which the participants work together, and frequently alongside

**Table 1.** *Collaboration in the Health Promoting School approach*

Collaboration	Health-Promoting School Context
<ul style="list-style-type: none"> <li>• Mental and emotional activities inside and between the learners</li> <li>• Learning process begins when ideas are presented to question the established beliefs, perceptions or values</li> <li>• Learners feel the need to resolve internal conflicts</li> <li>• Interpersonal processes among learners are important, and collaborative processes help to elicit support to resolve problems</li> <li>• Discussion has a facilitating role in mutual inquiry</li> <li>• It provides practical opportunities and feedback</li> <li>• Decision-making tasks are preliminary and instrumental before the discussion becomes inquiry-oriented</li> </ul>	<ul style="list-style-type: none"> <li>• The goals of each particular learning situation are central</li> <li>• High on equality and mutuality</li> <li>• The participants work collaboratively to perform challenging learning tasks</li> <li>• Learning in a given context</li> <li>• Conceptual insights and fundamental developmental shifts</li> <li>• Discovery and problem-based learning</li> <li>• Creative risk-taking and social support</li> <li>• Learning is interaction: guided participation and deep insight</li> </ul>

their tutors (e.g. researchers, academic educators), to grasp the subject matter of health promotion or to deepen their understanding of it. Collaborative learning can be described as a process in which learners co-operate in identifying and exploring the perceived adequacy of each other's perceptions. An important point in this description is that it views the process of learning inherent in collaboration as consensual, but the end results of the learning process as individual developments of meaning. This view is congruent with an integrative view of critical thinking and self-directed learning: the development of meaning is ultimately the responsibility of each individual, but this knowledge is created in collaboration with others.

The second theme of collaborative learning links with the idea of shared control during the process and focuses on the ability of individuals to work constructively with others. From it, we can formulate two main aims that collaborative learning must hope to achieve in real contexts. The first is to increase the participants' ability to exercise judgement within the learners' field of expertise. The second is to raise the participants' level of social maturity as exercised in their intellectual lives. Collaborative and functional work may play a role in nurturing teachers' ability to participate effectively in an innovative and reflective process, e.g. planning together a health promotion curriculum or other school activities.

The process of reflection is vital to any collaborative process and needs to be nurtured just as the development of the collaborative learning group ethos is nurtured. Reflection is conceptualized through the variable orientations and hierarchies of researchers. Some of the more common orientations include technological, practical or problematic, personal and critical or emancipatory interests (e.g. van Manen 1977, Weis and Louden 1989, Knowles 1993, Valli 1993). Technical reflection, for example, considers choices centred on the effectiveness of working in the classroom. Practical or problematic reflection is concerned with the 'resolution of problems in action.' Personal reflection involves interpretations of personal meanings and judgements when making decisions. Critical reflection is carried out in political, ethical and social contexts (Mezirow 1990).

Based on these definitions, reflection is an intrapersonal process through which personal and multi-professional knowing may take place, such as planning the work of a health promotion curriculum. Reflection must be seen as a process and a method of elaborating practice with reason (Schön 1988, Brookfield 1990), and it must underline the need to provide an emotionally and



intellectually supportive learning and working environment. In the Finnish ENHPS programme, reflection by the network schools' participating staff is facilitated regularly during the school year in national, regional and local meetings. One main aim has been to make co-operative work towards health promotion a natural practice in schools. At the school level, the schools plan their health promotion actions based on their own needs but this planning is guided by the whole programme (both international and national). Training in co-operative methods is assumed to be of importance for schools and their co-operators as a motivation to action. Also, the participants recalled their experiences when filling in the research questionnaire or attending interviews by describing their school activities through the reciprocal process of story telling. These factors may, in themselves, be sufficient to promote the productivity and health of the whole school community.

The Finnish ENHPS programme offers a forum for the participants' collective and personal understanding of health promotion to become more open to critical analysis. Working collaboratively may help the participants to expose and analyse aspects of their personal knowledge and beliefs systems. By providing to the teachers and other school staff opportunities to be exposed to alternative viewpoints through collaboration, other possible interpretations of strongly or weakly held health educational beliefs and views may become possible. The aim and vision is that, by making such comparisons, the participants may be able to reformulate their own visions of school health promotion, if they feel this to be necessary, in a more balanced and informed way and may progress to the stage of being able to put this into practice in their school.

### Participatory Action Research (PAR) in Health Promotion as a Methodological Approach

Collaboration and action research are also based on the same assumptions as community health promotion: community members have intimate knowledge of their needs, problems and possible solutions, and they further play a central role in the interaction process when developing knowledge and achieving social change (George et al. 1996, Ellis and Kiely 2000). The participatory action research process means joint collaboration throughout the whole research process between those acting in the school community and the research professionals (Whyte 1991, Boutilier et al. 1997).

During the research process, an emphasis is placed on collaboration, discussion, reflection, co-operative ways of working and empowerment. Consequently, in view of the literature, we refer to such concepts as collaborative inquiry, dialectical research, emancipatory research, participatory action learning research or empowered evaluation; all of these imply that it is essential to strengthen the involvement of individuals by enabling them to participate in self-assessment, reflection, learning and action from the initial design to the final presentation of the results and the discussion of their practical implications.

The concepts that refer to collaboration in participatory groups are 'social activity' and 'group activity' (McTaggart 1991, Cerveron and Wilson 1994). Emphasis on group dynamics is an essential issue in participatory action research, and it is at its best when the members of the target community start to 'examine' themselves and their environment (e.g. empowerment evaluation, self-evaluation). Because the research is carried out through the activity of the group members, the researchers can direct the research process in an optimally effective way by acting as facilitators. Participatory action design thus contrasts sharply with the conventional model of pure research, in which members of organizations and communities are treated as passive subjects and mere recipients of the results. Participatory action research is applied research where researchers serve as professional experts, designing the project, gathering the data, interpreting the findings and recommending actions within the client organization (Quoss et al. 2000). It is often difficult for schools to change or develop their process of capacity building, as Crisp et al. (2000) define the development of high-level co-operation, reciprocity and trust when the members of the community work together for mutual social benefit without external assistance. However, Duffy (1994) warns of creating a caste system, in which the researchers are gurus and the teachers are followers. In such systems, the teachers inevitably feel disempowered, and the progress is doomed to failure.

In this research of the Finnish ENHPS programme, the main aim was to develop the prevailing practices by the available resources and to highlight the connections between problems and knowledge, in other words, to develop a practical theory of health promotion for use by the school staff. Thus, by means of the results produced by the subjects of the school community in their school environment during the participatory action research process, the personnel and the researchers together try to develop new understanding of health

promotion, and thereby to renew the health instruction and health learning by the pupils and the school staff. This means that, as in this research, the school's curriculum and established practices are subjected to conscious reflection and examination, in order to discuss what kind of purposes of health promotion they are supporting both in the learning by the pupils and the learning of health and well-being by the school staff. Thus, the aim is to find a reflective way of examining the customary practices in a new light.

## Data and Methods

The researchers involved in the ENHPS study developed further the health promotion model produced earlier (see Figure 1) in a qualitative study by asking the members of the school communities to describe how the four dimensions (general infrastructure, clarification of the mission, active participation and curriculum development, planning and evaluation skills) had been clarified and fulfilled in their schools while they had been constructing their health promotion model. The main goal was to become aware of the possibilities or problems and to develop or change the situation in such a way that the research would represent a learning process for all participants. This goal is in line with the worldwide definitions and guidelines (WHO 1986, 1997) that emphasise health promotion as a process that increases community members' participation in decision-making and thereby develops health promotion activity in communities. This point of view is related to the humanistic self-empowerment model (Hagquist and Starrin 1997), which includes the orientation of individuals towards health and community activation.

This was a descriptive study, in which data were collected from representatives (N=30), mostly teachers and some school nurses, of the Finnish ENHPS schools; 27 representatives from 23 schools participated in this study. The data were collected by open-ended questions related to the practical concerns with these four health promotion dimensions in the school community. It was made clear in the introduction that all data would be considered anonymous and confidential.

The informants were given the following introduction to guide their responses, and each statement was followed by one page of free space for writing the response:

Statement I: Spend a while to recall how the creation of the infrastructure of health promotion took place and evolved in your school during the

ENHPS programme. Also indicate how the ENHPS programme has helped to you establish these structures.

Statement II: Examine your previous written description and think about how the mission and the goal of health promotion have been clarified in your school during the ENHPS programme.

Statement III: During the current ENHPS programme (1997-1999), the development of the curriculum in your school has been a topical question. Discuss how health promotion is visible in your school both in the written and in the implemented curriculum. Consider this topic from the point of view of yourself, teachers, pupils, school community and parents.

Statement IV: Finally, recall your experiences of active participation and activities in the health promotion of your school community. Tell a story about your experiences and give examples of situations where you have experienced or observed real sharing in your school and also more widely in the ENHPS programme.

The data were analysed using inductive content analysis after having first read through carefully the written answers in order to understand their contents. After that, the data were conceptualized and classified into sub-categories and main categories (Huberman and Miles 1994).

## Results

### **General infrastructure**

The systematic process of making a curriculum, the establishment of collaborative networks and the changes in action structures have been the fundamental functions in constructing and clarifying the infrastructure of the health promotion effort. The planned process of making a health-promoting curriculum, including the concrete planning and writing, the agreement on unambiguous action practices and the planned progress in teaching constituted a concrete motive to advance and join in collaborative action. Without the curriculum process, it would have been difficult to identify the general infrastructure of health promotion.

The collaborative network had a very significant role in constructing and clarifying the infrastructure of health promotion. This was accomplished by

pooling the resources of teachers but also by arranging collaboration with different groups, including parents, pupils, public organizations and other co-operators. In addition, different action groups, such as 'Health School group', 'ENHPS tutor club' and 'Parents' association', were established. In constructing and clarifying the infrastructure of health promotion in schools, it was also necessary to change the general action structures. Changes were made in both the operating environment and the operating methods. The changes in the operating environment were manifested as development of the psycho-social environment of the schools, construction of a more health-promotional physical working environment, such as renovating the workplace, and even as improved school meals. The development of school health services was another concrete target. A greater emphasis was also placed on changing the general operating culture. Teachers had more courage to experiment with different operating methods and new methods to replace or complement old ones.

There also appeared problems in constructing and clarifying the health promotion infrastructure in schools. Problems with staff commitment and the generally confused view of the progression of the health promotion process were the most significant issues that inhibited the construction of infrastructure. The problems in commitment were manifested as difficulties in having the members of the school community take part in health promotion actions, which easily caused the responsibilities to pile up on one person's shoulders. In addition, there were concerns about the reduced school health services because these services play an essential role in the health promotion of not only the pupils but also the whole school community.

### **Clarification of the mission**

The visibility of the clarification of the mission of health promotion was described through the culture and activity of the school community. Health promotion was seen as a part of the school community's culture, including a shared view of and responsibility for health promotion, and as a part of the daily life at school contributing to a more inclusive and pleasant school environment. The concept of health promotion had become clearer, and its meaning as a mission of the school had been recognised, or at least it was no longer commonly questioned. The clarification of the mission was considered a shared responsibility and consciousness of participation. This meant that the health promotion concepts and beliefs belonged to everybody, and that the school staff would work together to support the goals of health promotion.

Clarification of the mission had gradually become visible in everyday school life as a basic aspect of teaching and as an established item of the curriculum.

The clarification of the mission was seen concretely as part of the school community's activities. The schools had health promotion processes of their own and a freedom to do things according to their needs. They had their own focal areas and health programmes, and the school staff attended different educational events. The health promotion process reflected the actions taken by the schools through a continuous process of assessment and development. There was also a freedom to proceed from one sub-goal to the next based on continuous assessment. In addition, the school staff educated themselves, which was also a sign of the clarification of the mission. This clarification was seen in collaborative and communal actions in different environments. There were more actions in small groups of teachers and at the individual level. Parents participated in school activities, and the schools also had other members of the community participate in health promotion.

But there were also problems in mission clarification. Some teachers had a very clear idea of health promotion and showed it by their actions, but a common policy was missing. In some other schools, commitment was less good, and there were uncertainties and even some resistance concerning health promotion among the school staff. Additionally, there were difficulties in communicating to new teachers about the health promotion activities in some schools.

### **Active participation**

The experiential activities of health promotion in schools had a very positive influence on the sense of participation of the school community and its individual members. Motivation increased, and people had positive experiences of success and collaborative action, which enhanced their sense of ownership. The methods of collaborative action influenced people's motivation very much, as described by the staff. They began to take better care of their physical condition, and they were more interested in health promotion. Increased motivation also caused feelings of satisfaction and optimism in action and decreased tension among the staff.

At the school community level, influences were seen in collaborative and holistic learning and action and in an enhanced school spirit. Pupils started to contribute their thoughts to mutual issues. The activity in school community involved everybody in planning and accomplishment. According to the teachers'

experiences, pupils' health learning could be seen in their knowledge, skills and attitudes. Health learning was visible in their actions, health behaviour and their ways to take into account the environment. The teachers described their own learning as learning for life, and health promotion education was regarded as useful for the staff's everyday life.

Experiential action methods were an essential part of school life, and pupils considered them self-evident. For example, in class meetings, pupils debated common issues, such as community spirit, security, bullying and enjoyment. Pupils were willing to learn new things, and they appeared to have substantially improved their debating skills. Teachers received positive feedback about their pupils' good manners, and they felt rewarded by the fact that their pupils' learning was quite active when the experiential action methods were applied. These positive changes also aroused curiosity among the teachers who were not involved in the ENHPS programme. The people who had initially been opposed to health promotion became more positive and felt encouraged to become involved.

As a concrete example of the actions undertaken to foster community spirit, we could mention the recreational days for teachers. Health promotion actions, such as excursions for teachers and pupils, had helped both of the groups to get to know each other better and nurtured good relationships between teachers and pupils and also between pupils. As an example, it was mentioned that goodwill between pupils had increased and the status of marginalised pupils had possibly improved in the class. Informal excursions helped persons to meet each other as their real selves, and the teachers' traditional role changed more towards the role of a facilitator.

### **Curriculum development, planning and evaluation skills**

Health promotion appeared as both a written and an implemented curriculum. The pre-planned process of making a curriculum to promote health included the process of preparing the curriculum, clearly defined procedures and proceeding according to the plans. The process of making the curriculum helped to establish and clarify the basis of health promotion in schools. The essential thing was to allocate responsibilities by, for example, appointing working groups and dividing roles and the workload. At the beginning of planning, it was important to have many people involved. Problems occurred when there was unawareness of the main responsibilities or the responsibilities had never been defined. In addition, the situation proved problematic if there were only one or

two people in charge. The operating practices were more clear-cut when there were established operating principles, which meant commitment to achieving a common goal: “health promotion as a part of daily life in the school”. The need to proceed according to plans was also important in planning, evaluating and creating the curriculum. In this case, the process included evaluation of the need to promote health as a collaborative reflection by the planners. This meant that the strengths of the school community and the problems and threats to its health and welfare were evaluated as well. The planning progressed slowly and mostly in small steps.

Health promotion appeared in the written curriculum either as integrated to the whole school’s curriculum or as a separate area of health education, but it could also be very inadequately itemised. Overall, the main purpose was maximum correspondence between the written curriculum and everyday school life. In the implemented curriculum at the individual level, health promotion appeared in a positive way as non-smoking of teachers and the ability of pupils to show social responsibility by preventing bullying among other things. The school community’s open, functional and rewarding atmosphere appeared as peer support, as a good community spirit between the teachers and pupils and as a positive attitude towards health promotion. Pupils acted as equals during lessons about intoxicants, support pupil events and tutoring pupil activities. The schools became more democratic and open-minded, and both pupils and staff enjoyed being at school better than before. Altogether, well-being became a more interesting issue, the opponents did not question actions any more, and teachers took part eagerly.

The school community’s functionality and encouraging attitude was manifested as participatory and activating operating methods. The pupils began to suggest topics of discussion, and the teaching methods varied. The teachers became more experimental. Health promotion was seen in the implemented curriculum as increased mutual collaboration between homes and other external actors. The school arranged events for parents, such as expert lectures. Teachers contacted parents even personally. Parents took part actively in the school community’s health promotion through parent-teacher activities. They were also interested in attending a curriculum planning group.

The schools worked actively to build the school community’s health promotion image inside the school by posters and also outside the school via the press. Health promotion was seen as part of the school’s profile. In opposite cases, the curriculum of health promotion did not materialise in practice. The problem



was that part of the staff did not participate in health promotion or only did so occasionally. Particularly cleaners and kitchen staff often dropped out of the school community's health promotion action.

## Discussion

The results show that the development of health promotion in schools is a long process, but that health promotion has achieved a valued status in the participating Finnish ENHP schools. The main thing is that the whole process should have its roots inside the school. When a school starts a health promotion programme, the most important thing is to take time to clarify the school's own mission and to change the environment so that it enables commitment to the process. The developing sense of mission motivated loyalty, commitment and confidence in the school community. Empowerment, participation and control over things were essential aspects of health promotion. Empowerment enabled equal participation of the participants in the health promotion process, e.g. the realisation of the curriculum both at the individual level and at the school community level (West 1990).

Health promotion had been adopted into both the written and the accomplished curricula of the participating schools, and the schools seemed to have positive attitudes towards accomplishing successful health promotion in schools and communities. However, the building and development of a health-promoting curriculum is one of the most crucial tasks in multi-professional and multi-disciplinary health promotion in Finnish schools. For example, if the team members do not have the requisite theoretical health-oriented expertise to identify difficult conceptual relationships, or if they understand them to mean dramatically different things, seeking help may also be problematic. When health promotion started to be accepted into the written curriculum and gradually into the everyday routines, autonomy optimally became a shared responsibility. Curriculum work was a concrete way to clarify health promotion in schools. At the same time, working group actions were learned, although that required management. Kelly et al. (2001) found in their study that a manager needs to allow individual teachers a minimum threshold of flexibility, so that they can freely test their creative strengths, while at the same time ensuring that the staff are working towards common goals. The way in which individuals are involved in the planning process has a significant impact on the

outcome, and a more participative approach leads to greater voluntary involvement in the process of accomplishing change. The health promotion curriculum may be seen as a frame or a model of the world that facilitates the empowerment of individuals and the community, supports health learning and enhances cultural change. Thus, the aim in planning the curriculum in health-promoting schools is to integrate health promotion as a part of the school's education in teaching, learning and action. Furthermore, the evident sense of co-ownership appears to encourage critical reflection, while lessening the influence of those who choose not to participate. The health promotion curriculum should be seen as a process rather than a product. From this point of view, it is in continual interaction with the reality where it is used, and this dialectical and dynamic process shapes the issue to serve the needs of the school community and whole society.

However, when the effectiveness of health promotion is judged, the starting point is the evaluation of action in relation to the desired outcome. As the long-term results of health promotion cannot be observed during the school years, the effectiveness of health promotion cannot be measured merely by changes in the health behaviour of children and adolescents. Thus, it is necessary to ensure the quality of the process and to evaluate the experiences of the participants as learning outcomes. Springett (2001) even suggests that health promotion could be characterised as a decision-making process involving a number of key agents whose combined actions contribute, in variable degrees, to the final outcome. Furthermore, the focus of evaluation may not even be the impact of an initiative on health, but rather on the factors considered to contribute to or determine health. The basic questions of evaluation are hence: what has changed, and where is the school going? Thus, in this study, we aimed to identify the elements that improve health promotion at schools rather than the actual improvements in health behaviour. The awakening of self-evaluation by the partners is a central process in health learning, which leads to an internal locus of control within the human being. If the teachers do not possess enough information and fail to engage in discussions about the factors influencing health and the strategies promoting it, the realisation of health education and health promotion will remain inadequate. The results of this study showed successfully that health promotion improvements are also reflected as positive health behaviours of pupils and teachers. Through participatory evaluation, health promotion has a potential to enhance empowerment of both the members and, more widely, the partners of the school community. Thus, as

Springett (2001) states, participatory evaluation is health promoting.

In the ENHPS programme, the main assumption has been that, if the participants are part of a successful co-operative learning group and are empowered by a high level of ownership, trust and mutuality within the group, they may be better prepared to invest their time and resources in establishing similar interactions elsewhere, e.g. with the pupils, parents and colleagues. This includes a sense of ownership in the negotiation and development of the proposed change. Active participation had a positive influence on both individual members of the community and, more generally, the whole school community.

Successful collaboration enhanced the members' feeling of being able to influence the school community. This was shown by the facts that both the teachers and the pupils started to take care of themselves and others, and collaboration between the teachers and pupils increased. Our results show that the teachers were very willing to work with their pupils even outside the school schedule in both formal and informal contacts (e.g. excursions). Health learning consisted of actions, learning by doing and experiential learning. In an empowering health promotion model, such as the model in the Finnish ENHPS programme, the participants' orientation and willingness to search for more successful collaborative learning methods of health education are basic prerequisites of health promotion. Also, pupils are regarded as being capable of representing themselves, making decisions concerning their health and participating in health-promoting activities (Kalnins et al. 1992). By enabling teachers to create supporting structures, efforts towards more profound and self-directed empowerment among pupils can be encouraged.

Concrete possibilities to work together facilitated the building of infrastructure for health promotion. The changes in teachers' roles consisted primarily of movement from isolation to collaboration in professional practices. Functional partnerships were important, as a person working alone did not have a clear view of whether the actions have any meaning, after all. Unclear aims and missions decreased commitment and the motivation to act. The school climate and the existing school culture can be regarded as aspects that determine the conditions for participant-oriented and empowerment-based health education in schools (e.g. Hagquist and Starrin 1997). In our study, clarifying the mission of health promotion required a general change in the school culture, preceded by a certain kind of freedom and autonomy to act. However, the freedom to act can cause confusion, unless there is a planned framework. Deschesnes and co-

writers (2003) even emphasised that one of the key conditions to furthering the implementation of the healthy school mission would be that the path chosen to translate the comprehensive, integrated approach into action should rely on systematic and negotiated planning. It is equally important for tracking the progress of the work to be carried out through the different steps that have been identified in the action plan, for maintaining an adequate level of integration between the different activity domains and for achieving convergence between participants.

## Conclusion and Recommendations

Action methods and practical goals took shape through collaboration between those working at the school, joint decision-making and discussions within the school community. The basic goal was active commitment of the staff, pupils and parents to developing a health-promoting school community. The ENHPS programme and the participatory action research approach applied here had promoted these processes, which arose from education and the everyday life of the school. However, the results of our study showed that schools seemed to lack a clearly defined, shared collective health promotion policy that would have been implemented and everyone's responsibility. In the context of systematic and negotiated planning, the issue of co-ordination takes on special significance, because it is a way of ensuring that every domain of activities is accordant with the contracts and also in line with the written educational curriculum. The fact that every school had a nominated responsible co-ordinator or a co-ordinating team did not seem to be enough. Thus, the principal's duty would be to make sure that a written action plan is made and discussed thoroughly with the staff, pupils and parents and to supervise that it is carried out in the school community. The principal must thus naturally possess the skills needed for this task, such as leadership, management, planning and evaluation skills (Valois and Hoyle 2000). An action plan would be a working tool even in the evaluation of health impacts and could be utilised as a document for political and financial authorities. Thus, collaboration and autonomy of teachers will not require the principal to abdicate his/her authority. Rather, in a collaborative school environment, the professional educational autonomy of the teachers and the managerial authority of the principal should be harmonised (West 1990). In short, the results of our three-

year study show that the collaborative school personnel may have a significant contribution to make to 'a health promotion model of change'. School improvements, curricular reforms and development and leadership of teachers and school nurses are all seen as powerful steps to make their health promotion work more visible, viable and effective. However, the staff, including principals, will need more education to clarify the school's health policy.

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## 15

## The Views of School Health Nurses on Promoting the Health and Well-Being of Young People in Finnish Upper Level of Comprehensive School

*Raili Välimaa*

### Introduction

How am I doing? I didn't sleep very well last night because we have a big examination today and I felt that I didn't have enough time for studying. This test is very important for me because I want to go to high school and I have to improve my grades.

This is not a rare situation for a ninth grader in a Finnish upper level comprehensive school. Plans for the future are becoming more realistic which may add school pressures. Also parents seem to want something, teachers definitely want you to succeed, as do friends, peers ... and the whole of society. And there you are, wondering about your own changing body, trying to figure out who you really are, what you want, and how you can get it. Adolescence is a phase of life in which a child distances herself from her own childhood and from her family. The processes of this distancing and self-discovery are demanding and, at times, also unbalanced.

School health nurses are the core people who hear these kinds of reflections by students. In many cases they are the only people to hear them. Often students don't want to worry their busy parents with their own problems. Or, they believe that parents will underestimate their worries. The process of leaving childhood and entering young adulthood is a complex process. The needs and worries of young people, as well as their resources and capacities, vary to a large extent, which makes it problematic to capture the whole spectrum of adolescent health into one study. However, school health nurses have the possibility of observing students by age groups and of forming a comprehensive picture of their well-being and health.



This study is part of a larger project aiming at analysing how young people, their parents and school health nurses, perceive health and its promotion in different contexts of school and home (Välilä 2000a, 2000b, Halmesmäki et al., 2004). The data were collected during 2000-2002 by interviewing parents, their teenage children and school health nurses. Adolescents attended schools that didn't belong to the European Network of Health Promoting Schools; therefore school health nurses were selected from non-ENHP schools. The purpose of this study is to reveal the views of school health nurses on adolescent health and health promotion, including the teaching of health in upper level secondary schools in Finland.

I will begin by shortly reviewing the Finnish school health system and the role of school health nurses in this system.

### **Basic guidelines for the Finnish school health care system**

Public primary health care is the responsibility of municipal health centres. These health centres run a number of separate clinics and hospitals. According to the Primary Health Care Act, part of the function of the health centres is to provide guidance in health matters and public health education, including family planning advice; to organize medical examinations and screenings for local people; to run maternity and child health units, and also to arrange for school, student and occupational health care services. (Ministry of Social Affairs and Health 1999.)

Public health nursing in Finland is organized using either a sectoral or population responsibility model, or most often, a combination of the two. In the sectoral model, public health nurses offer nursing services to specific age, disease or problem groups, in child health clinics to children from birth until school age. In the population responsibility model, public health nurses work in a specific district with different age groups from infants to older people, or with a range of smaller groups, for example, in maternity and child health clinics and school nursing. (Koponen, et al., 1997.) The emphasis is on family and community, as well as on continuity of care. In both models, public health nursing provides comprehensive preventive and health promotion care as well as clinical nursing to a range of different age groups. (Jakonen, et al., 2002, Ministry of Social Affairs and Health 1999.)

In Finland children start preschool at the age of six and go on to primary school during the year they turn seven. Before school, children and their families visit child health clinics. The role of these clinics is to monitor and support the

physical, psychological and social development of children and, when necessary, to refer them for tests and treatment elsewhere. They also provide support and guidance for families in bringing up their children and coping with family life. (Ministry of Social Affairs and Health 1999.)

### **School-health nurses as health promotion agents in schools**

Traditionally, nursing theory has its foundation in the nurse-client relationship, with specific emphasis placed on the client as an individual. The health promotion approach has a broader conceptualisation of the client, and increasingly the client is recognized as an individual, a group, a family or a community (Kuss et al., 1997). For example, in school settings the client can be an individual student, the family, a group of students or the whole school community (e.g. when dealing with safety issues, school atmosphere etc.).

The tradition of Finnish school nursing began at the beginning of the 20<sup>th</sup> century. The significant laws referring to public health nursing (maternity and child clinics, school nursing) and midwifery came into force in 1944. Currently, school nursing services are generally delivered within the school community. School nursing is a part of preventive and promotive health services. The main targets in school health care services are the provision of student health care, health education and health counselling, and to look after the school environment, and support the well-being of the whole school community. The primary function of school nursing is to identify student resources and to enable students to increase control over, and to improve, their health and well-being. The focus in school nursing is on wellbeing and prevention (Tossavainen et al. 2000.) The educational background of Finnish school nurses used to be as registered nurses, requiring two and a half years of studying with one-year specialisation in public health in college. Nowadays it takes four years to study in a polytechnic to become a public health nurse.

School health nurses have a ringside seat in observing health issues at school. They meet all students at least every second year and they have many opportunities for spontaneous contact with students in school. They also have a reception for students, and many of them give health education (especially sex education) in the classroom or at their own offices. In addition, they work on student welfare committees, and have good contacts with teachers, and often also with parents. Officially, they work in co-operation with other health and welfare sectors. Consequently, they have a good overall picture of the living environment of students in their school. School health nurses are the central

agents in school health services because they work in school. So they have, at least in principle, good possibilities to promote the health and well-being of students even though a lack of resources may make their work complicated at times.

According to laws and statutes every school can be a health promoting school in Finland. Health promoting factors include e.g. safety at school, which is included in Finnish educational legislation: pupils and students have the right to a safe study environment. There is a long tradition of health services at school, free school meals, and high quality teacher education. Health education is included in school health services, and health issues have been integrated into school subjects. In spite of these enabling factors there isn't always complete understanding of the meaning of health in the school context. It is not always easy to combine the views of the health sector with the views of the educational sector. In general, all actions in school may be more or less health promotive. Over the past several years a whole school approach has been emphasized instead of single projects, taking into consideration the viewpoints of all partners involved.

The understanding of health promotion in a school context has been widely influenced by the ideology and strategies realized in The European Network of Health Promoting Schools. Although the data for this study isn't from schools included in this network it is important to be aware of its principles because, in many respects, they pave the way for a general understanding of health promotion and health promoting acts also in schools that do not belong to the official network. The aim of ENHPS is to achieve healthy lifestyles for the total school population by developing supportive environments conducive to the promotion of health. (Turunen, et al., 2000.)

Following the Ottawa Charter, a frequently emphasised principle of health promotion is the empowerment of participants. ENHPS aims to be as decentralised as possible, each country has a national co-ordinator who co-ordinates the programme at the national level and collaborates with other national bodies. Finland has participated in the ENHPS programme since 1993. In the first three-year period (1993-1996) improvements were already seen because teachers appeared to have made health education more efficient and systematic, and collaboration between schools and parents increased (Tossvainen et al., 1996). During the first year of the second triennium (1997-1999) a safe school environment was emphasized, and networking with other schools was encouraged at the international and national levels. Attitudes

toward the ENHPS program generally were positive. However, Finnish schools have emphasized developing structures for health promotion and in the future efforts should concentrate on students' active participation in health promotion in everyday teaching and learning situations (Turunen et al., 1999.) In 2002 Tossavainen and her colleagues found that networking and collaborative methods had increased in ENHP schools, however, networking with other professionals in the neighbourhood community needed to be strengthened (Tossavainen et al., 2002).

It is difficult to compare health-promoting activities, including the work of school health nurses in ENHP and non-ENHP – schools in Finland because of lack of comparative studies. The evaluation of health promotion activities in schools is even more difficult because of the situation within ENHP schools; in some schools even the maintenance of the programme itself seems to depend on a single teacher (Tossavainen et al., 2002).

## Materials and Methods

This study is intended to open up new perspectives in health needs of Finnish adolescents. The data for this small-scale qualitative study were collected by interviewing school health nurses in five schools in a middle size Finnish city in Central Finland in 2000-2001. The criterion for selecting nurses for interviews was that they were employed in an upper secondary school where students were from 13 to 16 years of age. In spite of the small number of respondents the data can be considered adequate because the schools represented typical living environments in Finnish cities and covered about 1700 children (the age group in the town being 2800).

In all, the length of the work experience of the interviewees varied from one year and a half to twenty-four years. The student/school health nurse ratio varied from nearly 800 to nearly one thousand children per nurse. Four of the nurses had more than one school as part of their sphere of responsibility. All the school health nurses were women.

The nurses were interviewed at their workplace at school. Thematic interviews took from one hour to one and a half hours to complete. In face-to-face interviews it was possible to clarify unclear questions and to ask school health nurses to summarize their answers and to reflect on researcher interpretations. Interviews were recorded and transcribed into text form. The actual analysis

began with reading through the transcribed interviews and listening to the audio records in order to gain a good grasp of all of the data. The ideas from content analysis were applied to form thematic entities, which arose from the corpus of material.

This article focuses on children aged 13 to 15 years. This age group was selected for two reasons. First, it is a fact that various health problems usually are more general among students of this age than among younger children (Currie et al. 2000). Secondly, the role of parents in school health services changes in this age group: in the lower classes of grade one through six, when children are from seven to 12 years of age, parents are invited to attend school health nurse check ups, but during upper class health check ups this is not the standard practice. Parents are informed of various school health services given, for example vaccinations and dental care, but their role is not as participatory as it was in the lower level of comprehensive school. The change in the role of parents makes the role of the school health nurse even more vital in highlighting important themes in the health and well-being of an individual student. The school nurse also has an important role in bringing up issues on a community level in the school.

## The Main Results

### **An overall picture of adolescent health in secondary schools**

School health nurses have good opportunities to observe and discuss the everyday life of young people when meeting them during health visits, consultations and during lessons or on less official occasions. Furthermore, they can observe the overall situation in the school.

Usually school health nurses started their review on adolescent health by stating that most adolescents are doing well. However, following comments clarified this statement by explaining that the number of adolescents with many problems has increased. Adolescents may have problems in pubertal development, difficulties in concentrating on schoolwork, learning difficulties, and problems at home. School life itself can create stress in secondary school, but school health nurses thought that one of the reasons for this trend is the great change in family life and structures during the past decades. Many children have to adapt to their own physical, mental, and social development and simultaneously have to conform to major changes in their social and family life.

“Nowadays it is more common that pupils are tired and have different kinds of psychosomatic symptoms, like headache and stomach ache.”

“Tiredness seems to be more and more common. Not only among young people but also among parents. The daily rhythm can be missing in families – families don’t eat so regularly together, adolescents can stay up late. Maybe control is not the thing of today.”

Another feature of family life noticed by school health nurses in their daily work was the minimal amount of time spent together by family members. In many families both parents worked full time outside the home and during the evenings children had different kinds of hobbies or just spent time outside the home with friends. School health nurses reflected that a young person growing up, needs time with parents and the whole family needs quiet time together when members can talk about daily matters or just be together at home. Is life itself considered to be too much of a performance by people? Nurses supported this point of view because many times school health nurses observed that a too busy lifestyle was related to various kinds of problems noted in students.

School health nurses analysed adolescent health mostly using single behavioural and health themes which I integrated into two general themes: health enhancing and health damaging behaviour. It was common that school health nurses talked about health issues in negative terms: smoking, alcohol use and poor eating habits being mentioned much more often than self-care or positive health behaviour. One of the most common worries about adolescent health was the lack of daily rhythm. Many students are awake until midnight watching television, playing computer games or surfing on the Internet. Parents are not always aware of how late their children stay awake because many students have television sets and computers in their own rooms. Furthermore, extracurricular activities can last late into the evening, for example ice-hockey practices run until ten or eleven o’clock at night.

School health nurses thought that an irregular daily rhythm caused different kinds of subjective health complaints, for example headaches and other pains, and even a general apathy. Too little sleep is easily seen in school work because students cannot concentrate, or have learning problems. School worries or conflicts in the family were sometimes the reasons given for an irregular daily rhythm or too little sleep. In these latter cases school health nurses said they have an important role in discussing issues with students and trying

to get the entire family to communicate about the situation. Teachers and co-workers in school health services, psychologists and doctors were important partners in resolving these situations.

“I have an impression that life is nowadays so busy that young people might often think that there is no-one for them to really listen to their thoughts. A school health nurse can be a very important adult who is available just for the young people. And even our time is limited, because the student/school health nurse ratio is so high. But it is important to create time and listen, to be present, and also try to convince her/him that it is important to talk to parents too. I also contact parents if I feel that the situation demands it.”

Many times it is effective to map the entire life situation of a student when resolving problems in daily rhythm and in paying attention especially to health behaviours: amount of sleep, physical exercise and eating habits. It is important to map stressful situations as well as positive things that reveal stress in everyday life. School health nurses have a crucial role in encouraging students to consider their situation in life as a whole. They use their expertise for example to help young people to see that a lifestyle change is a long term process that must be well planned and supported for a long time. Unfortunately time resources for this kind of counselling were quite limited.

Supporting a positive body image was a very important part of a school health nurse's work because of an increase in eating problems and, an increase in obesity, both of which have become rather common. School health nurses saw that it is very important to cooperate with a school's nutritional staff, teachers and parents in this area. They also stated that students in general are quite critical towards body image and the ideal presented in the media. Young people are very aware of the norms and requirements of today's world and in spite of the pressures try to construct their own understanding and direction in life. But in some cases, young people go to such extremes – health damaging dieting or body-building with anabolics, etc. – that they need special help. School health nurse has an important role in finding and helping these young people.

Sometimes even the youngest of students try smoking, but usually smoking becomes more general in eighth grade at the age of fourteen or fifteen. Development and growth, but also school values and general rules, are the viewpoints from which school health nurses consider this issue. Legislation

concerning smoking is very strict in Finland, for example it is prohibited to smoke on school grounds and it is illegal to buy tobacco products under the age of eighteen.

“Smoking is like a forbidden fruit that attracts especially those young people who are somehow unsure of themselves or who have friends who smoke. It would be good to have early interventions but it is not easy, this is an area where we are developing co-operation with other local authorities and families. The most important thing is to be open to this issue, to talk to parents and have clear policies in school.”

School health nurses saw that there were some risk groups that were more vulnerable for health damaging behaviours than others. So called predisposing factors were poor relationships at home, poor school achievement, negative attitudes towards school, an antisocial peer group, insecurity and loneliness. An effective method used by school health nurses was talking person-to-person with these young people about their life situations, hopes, worries and problematic behaviours. Some of them also had possibilities to talk about these issues with entire classes during health classes. They found cooperation with families very important when dealing with student smoking, the use of alcohol or the use of drugs.

This kind of work is very time-consuming and quite often school health nurses felt that they didn't have enough time for it. The solution for this problem would be a smaller number of students per school health nurse and strengthening cooperation with other workers in the field of student well-being (other health professionals, social workers, school psychologists, youth workers, etc.). Cooperation with other school health nurses in the community was seen to be very important in developing and improving the work of the school health nurse. School health nurses had regular meetings where they could discuss these topics with each other and with their superiors. Moreover, continuing education was seen as very important in the present societal situation where adolescent health problems seem to be more wide-spread, with more and more students exhibiting many problems.

### **Freedom and responsibilities**

In the interviews, school health nurses stated their impressions that parents seem to consider their children to be independent people too early. One reason



for this may be the fact that in the upper level of secondary school children have many teachers, and parents don't get as much feedback and information about their child from teachers as they did when the child was in the lower classes. They may simply lack knowledge about their child's behaviour, development and needs. Parental co-operation in the school context can also be very limited.

“In many cases parents may think that their children are more mature than they actually are, children can have too much responsibility or they can make up their mind on ‘wrong things’ (how long to stay up etc.)”

A very good way to be up to date about the developmental stage of one's child is to discuss with other parents and learn from their experiences. If parents don't have enough contact with other parents their understanding of their child's needs and life situation may be too narrow. This may result in a situation where parents give too much responsibility to their child and, more or less, leave him alone with confusing life issues or school problems. In a way, children want to have more independence and parents cannot exercise as much control over them as they did when their children were younger, but parents are still, in this stage of life, the ones that have the overall responsibility.

School health nurses have an important role during parent meetings at school to inform parents about the developmental stages of their children and to try to encourage parents to communicate with other parents, as well as with teachers and school staff. School health nurses can raise public awareness, for example, on mental health promotion by meeting parents and communicating the importance of this area in other public occasions. When talking about the mental health of young people it is crucial to take into account all the aspects of their lives; physical, social and mental health go together.

“It is important to encourage parents to be parents, to be strong in their position and to take the responsibility they have over their children. And this doesn't mean they have to be the model parents, normal family life is enough where parents are the adults and the children can be children even when they are growing up.”

“Friends are so very important for young people, but they also need adults who can act as mirrors for their thoughts and behaviour.”

Social relationships are of crucial importance for the well-being of young people. According to the interviews, school health nurses were sometimes worried about the quality of young people's relationships because individual values seem to be very strong among young people. One perspective, or even solution, for this problem is the discussion of values in school. There have already been quite strong discussions on basic school values over the past few years in Finland. Values play an essential role in the building of the curriculum for the whole nation and for a single school. The National Board of Education gives guidelines for the national curriculum in Finland, but communities and single schools have a say when formulating the day-to-day curriculum for basic education. Discussion of values is a common effort of the whole school, including school health services, but in practice the voices of health professionals can be too 'quiet' and the voices of parents, and especially of pupils and students, can be totally missing. Clearly, there is a need for further discussion on values in different arenas. Teachers and school health nurses have value discussions with students about the value base of daily choices and decisions during lessons and in nurses' offices. These discussions need a confidential atmosphere, social and emotional skills and a sense of community. School health nurses said that teaching emotional and social skills is of great importance. These skills are widely needed in the whole school community, especially in the present societal situation where schools are becoming more multicultural in Finland.

### **Mental health**

School health nurses did not only see the situation of an individual student but they evaluated the whole health sector, especially the way services were organized in the community. They thought that students should have access to all necessary services during school hours in school or in a location as close to the school as possible. One problem in the area of mental health was the availability of services.

"I'm more concerned about quiet pupils than the ones who act out. It is not always easy to find out pupil's feelings about their lives. One way is to use a questionnaire in health check-ups. Pupils bring with them a filled in questionnaire to regular health check-ups and surprisingly there has been marked that the pupil is feeling depressed or low very often. It is a good situation to talk about it with her/him. Another way is to be sensitive with pupils who visit often with minor things; on the background they can have more serious problems."

“If a pupil has mental health problems it is not easy for her/him to go to visit a specialist on mental health because, in general, this means that she/he has to leave school and go to the office by bus. Quite often adolescents forget the appointment, they have to make a new one, which means a great deal of commitment to the treatment – and all this with an unfamiliar person. If the therapeutic relationship is good from the beginning it is easier, but I think that the best solution would be to have these services near the school.”

School health nurses should have a more prominent position when developing health services in the community. Many times they just felt that they didn't have enough time or viable channels through which they could influence these decisions at the community level. One important forum for evaluating and developing the work of school-health nurses and for improving co-operation in the field of adolescent health was the meeting of local school health nurses. Still, school health nurses felt that there could be more cooperation in the field of adolescent health.

### **Identity and self-esteem**

Entering the upper level of comprehensive school at the age of 12 or 13 is a transitional phase in an adolescent's life. Usually, students enter a new school and acquire new classmates. After having only a few teachers in the lower level of comprehensive school, they now have several subject teachers. The whole social world of the school is new, as well as the increase in the student body, with many schoolmates. School traditions and everyday practices can be different. In this phase school children have to find their own place in their own class and also in the school as a whole. When adjusting to the new social order, students have to make several choices. They choose their style of clothing, make-up, and hair, and they choose what social group they try to get into and be part of in school. Schools seem to be like villages with different kinds of subcultures, some of which are highly respected and some of which are of a lower rank. In this process, experimentation with smoking or alcohol can work as initiation rituals by which students try to be part of a specific peer group.

Seeming negligence worked as a general attitude held by some younger students who wanted to protect themselves in a new social situation, that is, in a new social order in a new school. But some students compensated for their lack of self-esteem with a behaviour, which violates the rights of other students, and the school working climate and school rules and regulations.

It is important to strengthen self-esteem of all students, and especially those students with learning problems, social and behavioural problems or home troubles. It is also important that students learn limits by taking responsibility for their own actions. These aims need multidisciplinary co-operation inside and outside the school, but the school health nurse can work as an important intermediary between teachers, social workers and youth workers.

### **Summary: Important issues in adolescent health promotion by school health nurses**

According to the interviews, school health nurses saw school as a very important setting in promoting the health of young people. They have opportunities to see students face to face during health check-ups and to discuss individual issues and problems. Students also feel that usually it is easy to contact school nurses. Health is always contextual, so family and cultural factors as well as societal factors are the basic elements school health nurses have to take into account in their daily work with young people. But the school itself is the most important context, young people and their identity formation being the core in their work.

The views of school health nurses on adolescent health issues concentrated on individual factors, but the social and societal levels (peer groups, family, school community, and town) were important, too. School health nurses stressed that the values and norms of the school are very important when developing school as a health-promoting environment. Health promotion in schools needs different levels, and societal, social and individual approaches are complementary to each other. This demands good cooperation between professionals and pupils and their families.

## Discussion

This article was written during a very interesting national situation. In 2001, the Parliament of Finland passed a law adding Health Education (Health Science) as a new subject in the nine-year comprehensive school program. The National Board of Education gives the guidelines for curriculum and criteria for evaluation, but every school or community has its own plans for the curriculum. Health and social services are involved in this planning process with teachers. School health nurses have an important voice in this discussion, not only

concerning the curriculum, but, also in a wider perspective of bringing up the questions, which promote student health in the school setting. The learning environment plays an important part in the ability children and young people have to learn.

The curriculum is planned by the National Board of Education. In grades one through six, health education is integrated into various subjects, but in upper grades it is an independent subject. The amount of school hours allotted for instruction in upper grades is 114 hours. Lessons are supposed to be divided evenly in each grade, meaning 38 hours in each of the three years. This is a very important improvement concerning young people's equal rights in having access to health knowledge, and in having opportunities to discuss health issues with their schoolmates and teachers.

When selecting content and topics to be taught, certain points of view are highlighted in the curriculum. The criteria through which the content and topics are filtrated could be the following. Topics should be appropriate to the age and developmental level of the students. Topics should be relevant and useful for the adolescent when making choices and decisions in everyday life situations. Topics taught and discussed should help students to cope with problems and to use alternatives and their own recourses. The topics should also meet the criteria of social and global relevance as far as possible.

Earlier research work has pointed to the need of developing health promotion information together with young people, from the starting point of the young people's experiences, problems, and means of coping and understanding of health and health risks (Oinas 1999, 2001, Välimaa 2000a). In this study gender wasn't a very noticeable background factor but school health nurses did state though that gender is an important factor orienting their work. In many cases health issues can be brought up by means that are easier and more familiar with girls than with boys. On the whole, it is usually easier and more routine for girls to talk about health than it is for boys. Even in the speech of boys there can be heard an emphasis in the gender-biased nature of the subject in that they feel that talking about health and taking care of oneself is something for girls and women. (Välimaa 2000b.) These everyday discourses can reflect the fact, as stated by school health nurses, that it is more difficult for boys to seek help from health services than it is for girls.

The social dynamics of the school community and student conceptions of social order in school can vary by gender, too. It is also important for health professionals to think over questions of marginalization, friendships, enjoyment

and bullying at school, as well as the relationships between teachers and students. It is also important to think over themes such as: what kinds of narratives of self do boys and girls have? What kinds of femininities and masculinities are desirable and rejected, or impossible or possible to perform in school? (Tolonen 2001.) Adolescent health should be viewed through the whole school community and its culture – not only individually or based on risk evaluations.

School health education is one important element when promoting the health and well-being of young people in Finnish schools. Other important aspects are school ethos, school health services, co-operation with families and other sectors in the community. Knowledge of one another's work and the awareness of a common goal are important because health promotion should be seen as a unity and not just as a series of unconnected parts. However, school health nurses consider health teaching to be very important and emphasize that the methods used should be based on participation. When talking about the health or well-being of young people as a whole, one has to keep in mind that the results from health education, or other health promoting acts at school, must be measured at an appropriate level (see Nutbeam 1996). When evaluating health implications for the whole school, we should be able to take into consideration all situations occurring in school from dust and ventilation to relationships, co-operation and ethos.

The interviews revealed that the important issues when evaluating the health of young people are school conditions, social relationships and the means for self-fulfilment (Konu et al., 2002.) In interviews, school-health nurses especially brought up the importance of having good friendships at school. In a school where classes are not set up in a traditional way where the same students study together from day to day, but where students choose courses and change classes according to each subject, it is important to have a sense of belonging to a group. During adolescent years friends form a very important, solid basis for everyday life. Without having good social and emotional skills one may feel isolated or left alone. And, without having a permanent group (class) it is very hard to learn these skills. School health nurses see that it is very important to have a good atmosphere in school, which means that one really belongs to the school. Sometimes, time pressures for achieving educational objectives seem to be a barrier for re-negotiating the ways people act in school. There seems to be a need for real value discussions: what really is important in the lives of young people and what can schools offer in this life phase?

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## 16

## Action-Oriented Knowledge, Information and Communication Technology and Action Competence

*Bjarne Bruun Jensen and Venka Simovska*

### Introduction

In this chapter we address the action-focused approach to teaching about health and its interplay with the use of information and communication technology (ICT) within the framework of the health promoting schools approach. The overall framework for the discussion is shaped by the distinction between moralistic and democratic approaches (Jensen, 1997). One of the main distinctive features of the democratic approach concerns the delineation of the overall aim of health education and the health promoting school. Within the democratic approach, the aim focuses on educational rather than health outcomes and it is concerned with the development of pupils' 'action competence' or ability to act to bring about positive changes with regard to health matters whereas the moralistic approach is concerned with promoting information and encouraging behaviour change.

We begin by discussing the concept of action competence and presenting a four-dimensional model of the knowledge 'landscape' which represents a key constituent of action competence. The theoretical discussion is then illuminated with a case study drawing on the work of one group of schools within the web-based international project 'Young Minds' (see [www.young-minds.net](http://www.young-minds.net)). Data is generated through analysis of the website produced by pupils over the course of the project and through interviews with the pupils. The case study sheds light on the specific ways the above mentioned concepts were employed in the schools' work with a particular health topic, namely food and nutrition. Additionally, the experience from the case study points to the new demands that action-oriented teaching and its interplay with the use of ITC and

international collaboration place on teachers. Finally, a few challenges and implications for health promoting schools practice and related research are suggested.

## Action Competence as an Educational Ideal of the Democratic Health Promoting Schools

Action competence has become a central concept in discussions concerning democratic health education and the health promoting school. In contrast to the moralistic 'behaviour modification' approach, the democratic approach actively involves pupils in making their own decisions about health and articulating their own perceptions of a healthy life and a healthy environment. Pupils are thus involved in developing visions for the future and in clarifying personal and societal changes and actions necessary to move towards their visions (Jensen, 1997).

Several attempts have been made to operationalise and define the concept of action competence. Among other things the following constitutive elements have been pointed out:

- *Insight and knowledge*: a broad, positive, coherent and action-minded understanding of health. This component concerns a coherent knowledge of the problem at hand – knowledge about the nature and scope of the problem, how it arose, who it affects and the range of possibilities which exist for solving it.
- *Commitment*: motivation to become involved in change regarding ones own life and in the processes of a dynamic society. This component refers to the promotion of pupils' commitment and drive to work with health problems and to contribute to positive solutions. Both commitment and drive are important because knowledge about a problem is not transformed into action if courage and commitment are absent. In this respect there is a close relationship between knowledge and commitment, as knowledge without commitment is 'empty' while commitment without knowledge is 'blind'.
- *Visions*: ability to go 'behind' the health issues and think creatively. The third component of action competence involves developing visions of what the world could be like in general and how society and environment could be improved in relation to the particular problem of concern. It also concerns

what kind of life pupils would like to live, what kind of family they would like to have etc. This component deals with the development of pupils' ideas and dreams and their perceptions about their future life and the society within which they are growing up.

- *Action experiences*: real experiences from participating individually or collectively in health promoting changes within a democratic framework and considering how barriers can be overcome. The component of 'action experiences' emphasises the benefit of taking concrete action during the learning process. The value of actions can be viewed and discussed from different perspectives but here the focus is on its contribution to pupils' learning and the development of their action competence. Action competence is facilitated through authentic actions carried out by pupils as integrated parts of teaching and learning.

The concept of 'action competence' has been taken up by several of the countries within the European Network of Health Promoting Schools. For instance, the Macedonian network has emphasised the importance of developing pupils' competencies to take action and improve health and health related social conditions in their schools and communities (Simovska and Kostarova-Unkovska, 1998; Simovska et al., 2002). Furthermore, the concept was integrated into the Conference Resolution of the first conference of the European Network of Health Promoting Schools, which was held in Greece in May 1997. Principle no. 3 (out of 10) states:

Empowerment and action competence:

The Health Promoting School improves young people's abilities to take action and generate change. It provides a setting within which they, working together with teachers and others, can gain a sense of achievement. Young people's empowerment, linked to their visions and ideas, enables them to influence their lives and living conditions. This is achieved through quality educational policies and practices, which provide opportunities for participation in critical decision-making. (WHO, 1997)

This conference resolution points to the increasing recognition of action-oriented teaching and of the democratic paradigm within the European Network of Health Promoting Schools.

A number of personal skills have been added to the list of constituents of action competence (Weare, 2000, 2004). These include among others self-esteem, ability to cooperate, self-confidence etc. Finally a 'critical mind' has been discussed as an independent component of action competence (Mogensen, 1997). It must be stressed that it is important to develop all the elements through the educational processes. This is also true of knowledge/insight, which is the topic of the following section.

## Four Dimensions of Action-Oriented Knowledge

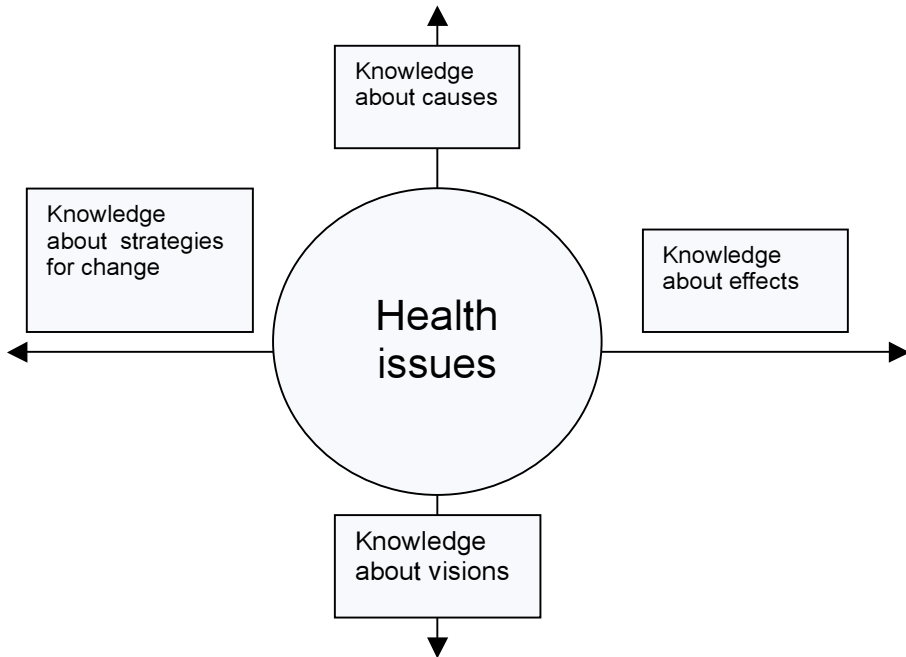
The central argument of the democratic approach to health education and health promoting schools – that the main educational goal should concern the development of pupils' ability to act and bring about change in the area of health – influences the demands concerning the type of knowledge and insight which should be developed by the pupils. In other words, if the aim of a health promoting school is to develop pupils' action competence, the core of the knowledge about health should in its essence be action oriented. Such an action-oriented knowledge can be illustrated using the model in Figure 1 (Jensen, 2000). The four axes illustrate different dimensions of knowledge within which a given health topic could be viewed and analysed.

### 1<sup>st</sup> dimension

What kind of problem is it? – Knowledge about effects

The first dimension deals with knowledge about the existence and growth of health problems in today's societies. This includes the health related effects of conditions in the environment, in our lifestyle, in our social relations etc. This type of knowledge can, for example, be about consequences of a given behaviour (e.g. drug abuse or too much fat in our diet) or consequences of acid rain or bad air quality in city areas or work places. Or it could be about how bullying behaviour in a school affects pupils' health and wellbeing. This type of knowledge will be about statements such as: 'if we do this then this happens!' or 'if the conditions or circumstances are these then the risk of this will increase!'. This knowledge is naturally important, as it is the kind that awakens our concern and attention, and creates the starting point for the motivation to act. So this can be one of the prerequisites for developing action competence. On

**Figure 1.** *The four-dimensional knowledge model*



its own, however, it gives no explanation for why these problems exist or how one might contribute to solving them. This form of knowledge is mainly of a scientific nature. Standing alone, it may contribute to developing concern but such knowledge may lead to action paralysis among pupils.

#### 2<sup>nd</sup> dimension

Why do we have the problems we have? – Knowledge about root causes

The next aspect deals with the cause-dimension of health problems. For example: Why and under what conditions do people become ill, which factors threaten the quality of life etc? Why is smoking more common in certain professional groups? Which conditions in the living conditions have importance for whether use of alcohol leads to abuse? What contributes to the fact that a taxi driver is almost twice as much at risk of dying of a heart disease than an architect? Why

is unemployment connected with a greatly increased illness and risk of death in our societies? What conditions in a school contribute to whether bullying takes place? Who bullies in schools and what is the cause of it? How might social capital in societies or in schools increase people's and pupils' resources and resistance and protect them from disease? Many structures and explanations linked to increasing inequality in health in our part of the world are to be found within this area. This dimension of knowledge belongs mainly in the sociological, cultural and economic areas.

#### 3rd dimension

How do we change things? – Knowledge about change strategies

This dimension deals with knowledge about how to control one's own life and how to contribute to changing the living conditions of society. Which psychological mechanisms are in force when one participates in a group where the group is trying to support its members to change their way of living? If we are trying to change the surrounding structures in school, in the family, at work or in the local community, who do you turn to, how do you go about it and who could you ally yourself with? This area of knowledge is central and decisive for an action-oriented health education placed within a democratic Health Promoting School. It also includes knowledge about how to initiate, facilitate and structure cooperation, how to deal with power relations etc.

#### 4<sup>th</sup> dimension

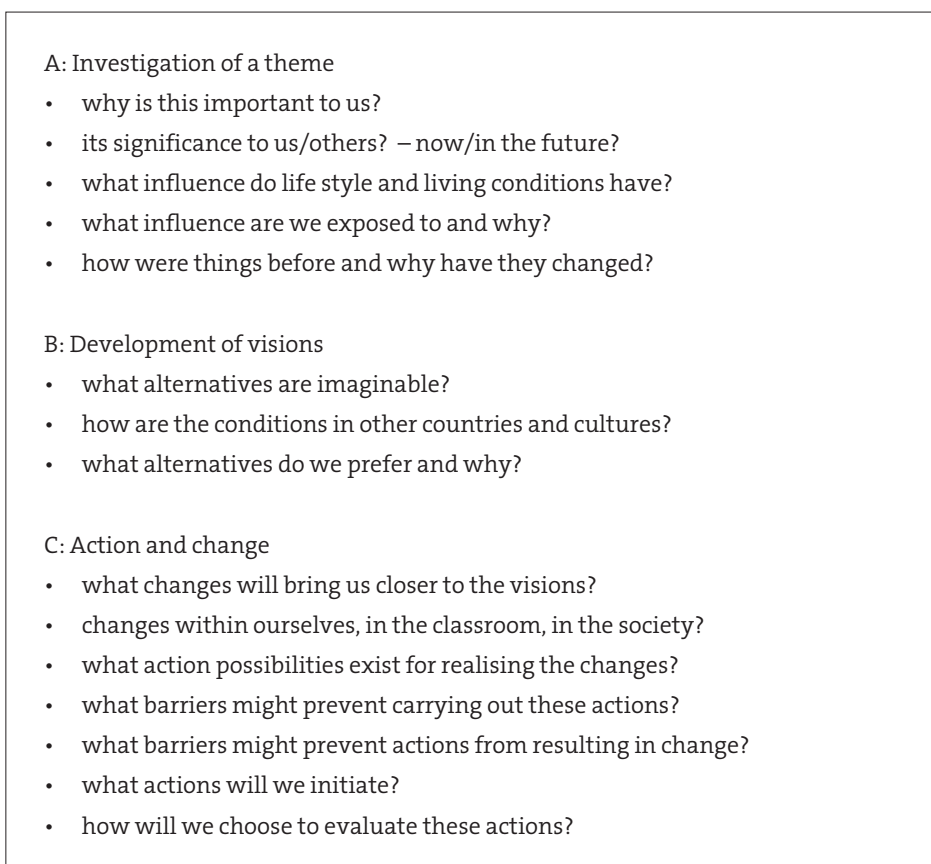
Where do we want to go? – Knowledge about alternatives and visions

The fourth dimension deals with the necessity of developing one's own visions. One of the important prerequisites of the motivation and the ability to act and initiate change is that one has to develop one's own dreams and ideas for the future in relation to one's own life, work, family and society at large, as well as having the support and surplus energy that is needed to act. Knowledge about the conditions in the neighbouring school, about strategies for fighting bullying and improving the social climate at schools in other countries and about other cultures both near and far away can be strong sources of inspiration for developing one's own visions.

## The 'Ivac' – Approach

The Investigation-Vision-Action-Change (IVAC) model provides a framework for the development of teaching strategies which ensure that the insights and knowledge pupils build up during their learning are action-oriented and interdisciplinary and therefore conducive to the development of action competence (Jensen, 1997; Jensen, 2004). As presented in Figure 2, the IVAC-approach assumes a number of perspectives, which a project within the health area should deal with if it is to work in an action focused way.

**Figure 2.** *The main perspectives of the IVAC approach*





The first box in the model deals with reaching a common perception of an actual problem. Pupils have to be actively involved in choosing the subject and they have to come up with answers as to why this subject is important to them. Further, they should also work with the historical dimension. To be able to reach an evaluation of how present day conditions or a given development is influenced, it is important to understand which conditions have contributed (over time) to creating these conditions. Also, a social science perspective is important in order to clarify the causes behind the problem. Even if the problem manifests itself in the classroom or the school (be it in relation to food or the quality of drinking water) the underlying causes will often turn out to be operating outside these contexts. Therefore a framework to observe and analyse health and environmental problems as embedded in economic, cultural and social structures are important here.

The second box deals with the development of visions about the future in relation to the health problems at hand. In other words, this point deals with the pupils developing ideas, perceptions and visions about their future life and the society in which they are growing up.

As shown in the perspectives in the third box, it is also important that imagination is allowed to sprout and foster a wealth of possible actions in connection with reaching some of the visions that have been drawn up. It is of great importance that all propositions are brought into the discussion. The variety of possible actions is discussed in relation to their expected effects and the barriers that might arise. On the basis of these considerations one or more actions are selected to carry out.

In practice students never follow the stages outlined in the model – starting with investigations, moving on to visions and ending with action and change. Instead the reality is much more complex and students might, for instance, start with concrete action; trying to influence the school setting and then, after a while, they realise that they have not decided on a clear target for their actions. Consequently they need to go back to discuss and clarify their visions before redeveloping their action strategy, identifying new partners etc. Rather than seeing the three phases as taking place in a certain order the elements in the IVAC-approach should be viewed and used as elements within a fluid and flexible mental framework which the teacher can use when planning, carrying out and evaluating teaching activities. The IVAC approach does not automatically lead to the development of action-oriented knowledge; nevertheless, it is a good starting point and a valuable tool for guiding teachers.

## Case Study: 'Young Minds' Using ICT and Cross-Cultural Collaboration to Learn about Food and Nutrition

The following case study examines pupils' work with the topic of food and nutrition within the frames of a larger project 'Young Minds exploring links between youth culture and health' (for a more detailed presentation of the Young Minds approach see Simovska and Jensen, 2003). Although the research linked to the project focused on 12 participating classes from different countries in Europe working with three different health themes (i.e., alcohol consumption, food and nutrition and well being in school), this paper will explore the ways in which pupils in four classes in the Czech Republic, Denmark, Netherlands and Scotland worked with the issue of food and nutrition. As mentioned above, data was obtained through the project website ([www.young-minds.net](http://www.young-minds.net)) and through interviews with the participating pupils.

### **Multidimensional knowledge about food and nutrition**

The project work in each of the participating classes was organized according to the main principles of the democratic approach to health education and health promoting schools discussed above. A course was carried out for all teachers involved and among other aspects the concept of action competence and the IVAC-approach were discussed and adapted to the concrete project. Consequently, all teachers and classes shared the IVAC approach, which was implemented throughout their work. In other words, pupils, guided by their teachers, investigated certain aspects of the overall topic, created visions about possible alternatives to the problems identified with the investigations, and took actions in their school or local community in order to bring about changes with regards to the problems.

Information Communication Technology (ICT) was used as a communication and collaboration platform for pupils as well as teachers from the different classes. This enhanced the actuality of the project by providing fast and effective means to include different perspectives on the subject content; providing means for communication with the world outside the classroom, and allowing for play and experimentation with different forms of representation of ideas, opinions and information.

In each class the project work started with a brainstorm, with the aim for pupils to operationalise and delineate the overall issue, identify specific aspects of it, prioritise these aspects and select a few to be explored in greater detail. An

illustrative example is the model below (Figure 3) created in one of the classes, which summarises their brainstorm and outlines the plan for further investigations.

**Figure 3.** *The brainstorm from the Danish class.*

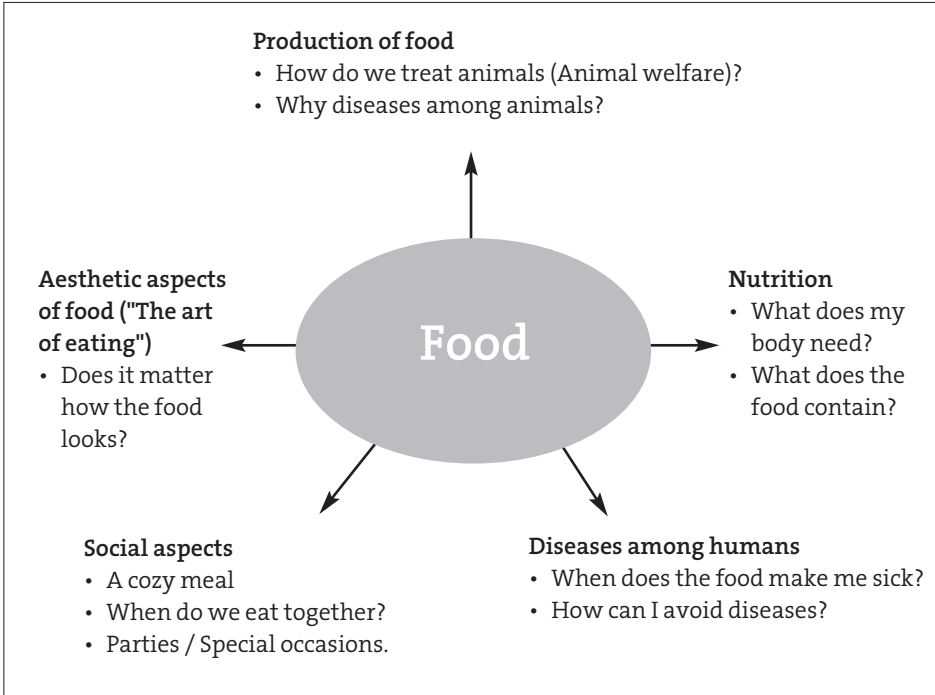


Table 1 summarises the issues related to the overall theme of food and nutrition as well as the sources of information that pupils in the four classes addressed in their school-based projects and in the cross-cultural collaboration and which they presented on the jointly created website.

As shown in the table, in their investigations pupils mainly focused on the social and cultural aspects related to food and nutrition, for example they discussed a typical Scottish meal, traditions in terms of diet related to different holidays, the changing cultural customs over time, and dominant eating patterns in families. Pupils used diverse methods to explore these aspects, such as surveys and questionnaires, interviews with experts in the local community as well as interviews, narratives and essays.

Additionally, collaboration over the Internet among the classes in the four countries encouraged pupils' reflections and exchange of ideas concerning

**Table 1.** *Content and methods in the pupils' investigations*

	Surveys and questionnaires on	Expert opinion on	Pupil generated information about
The Czech Republic	Traditions about food; Culture(s) of eating; Folklore	Places to eat well in the local community/city	School food; School facilities – lunch room and access to food around the school
Denmark	Aesthetic aspects in relation to food and eating; Social aspects in relation to food and eating	Production of food, quality insurance; Risks and diseases related to the production of food; Food and the environment	Nutritional aspects; quality of food; Preferences and choices of young people; Eating culture and the family
Holland	Changes in the eating habits and traditions in Holland over the last 20/30 years		
Scotland	Healthy eating (initiative about providing breakfast in school)		Typical Scottish meal

similarities and differences between different cultures and contexts. This brought authenticity to learning and had a strong motivational effect; pupils were curious to learn about different traditions, possibilities and facilities related to food in the different schools and to learn about the opinions and preferences of their peers in the other countries. The international collaboration strengthened the awareness of the pupils that health problems are both local and global. The mutual feedback and reactions they received from cross-cultural collaboration brought in a number of new (and often provocative) perspectives in pupils' thinking and reflections about their own culture and the taken-for-granted values, attitudes and practices in their own communities. This was additionally inspiring for getting new (local) action ideas and suggestions

for solutions of the health problems relating to food and nutrition. The excerpts below, taken from the interviews with pupils, provide examples of the benefits of the cross-cultural collaboration in the virtual classroom:

The discussions we have had in the web forum were great. And it is great that we have them on the website so we can go back to them when we have more time and think about them... I think it is very interesting to hear about different countries and cultures, because they are different. (Pupil S., Denmark)

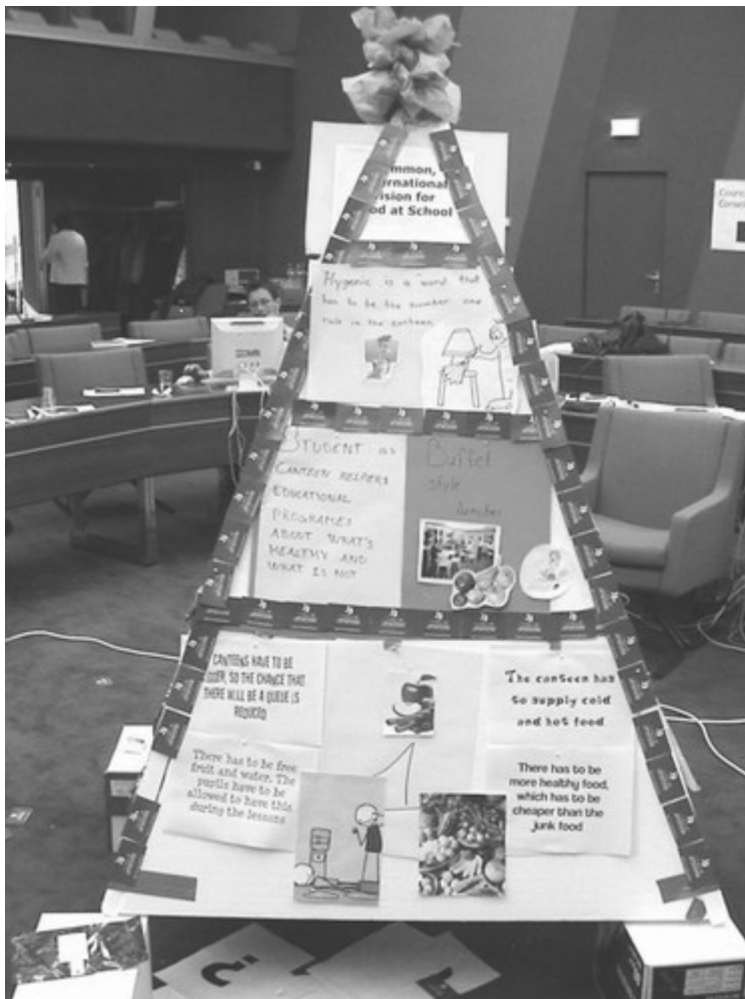
[International] collaboration is important because we are the people who are growing up and will be influencing the things. So [the collaboration] makes it a lot easier to find out the best solutions [to the health problems]. (Pupil D., Scotland)

Moreover, the combination of the IVAC approach with the international collaboration and the use of ICT provided new, stimulating possibilities for joint work across classes, focusing on the practical use of subject knowledge and relating theory and practice. One of the evocative examples is the joint vision that pupils from all four classes created together – the alternative food pyramid. The activity was initiated by one of the participating classes: the pupils in this class invited pupils in the other classes to reflect on the conventional food pyramid and to consider its ‘revision’ so it would include the ideas about social, aesthetical and other related aspects that they explored over the course of the project. The result was a joint food pyramid presented in figure 4.

In contrast to the conventional food pyramid the alternative pyramid emphasises the importance of taking into account the notion of ‘meals’ and the atmosphere around the meals when discussing food and health, in addition to the nutritional quality of the food.

The pyramid was represented as a three-dimensional model and presented in a lively workshop-like manner at two large international conferences where Young Minds pupils and teachers were invited to participate: (a) the ENHPS conference ‘Education and Health in Partnership’ that took place in September 2002 in Egmond, the Netherlands; and (b) the Council of Europe conference ‘Eating at Schools – making healthy choices’ that took place in November 2003 in Strasbourg, France. In an active interaction with the conference participants, the Young Minds pupils discussed the importance of a balanced diet to health,

Figure 4. *The alternative food pyramid (source: www.young-minds.net)*



but also attempted to raise the awareness of the conference delegates about other related aspects such as the social, cultural and aesthetic dimensions linked to food consumption. The ultimate aim of the Young Minds pupils' action at these two conferences was to influence school policies concerning nutrition and food safety.

In addition to the discussions about the pyramid with the conference participants, at the second conference the Young Minds pupils worked cross-culturally to create and publish on the website a shared vision concerning food at school (Box 1).

**Box 1.** *The Young Minds pupils' vision about food at the school*

We think that lunch at school should be served in one big dining room. With music played. You should be able to sit there the entire lunchtime if you wish, allowing you to enjoy your food and take your time over it!! The food should be set out in the form of a buffet (you know, like in hotels) thus covering a wide range of food that doesn't necessarily have to be all healthy. Some could be stodgy so pupils learn to make the right decisions themselves!! There should also be a new foreign food everyday so food is varied and more exciting!! Pupils should also be allowed to request favourite meals, so that they are participating in the decisions!

We also think that fruit and water should be given out free in each class and be allowed to be consumed during the lessons. It should also be made compulsory that healthy eating lessons are given to all pupils, the way in Scotland physical education is compulsory. This means pupils are learning about the importance of food choice as well as putting the methods to practice, hopefully encouraging pupils to take healthy eating beyond the school walls and into the world, teaching others, and most importantly bringing up their children to do the same.

We think that pupils should 'work' as canteen helpers, and they should be educated in health matters.

Again, it is evident that the pupils' vision emphasises social and aesthetic aspects of food and eating as well as nutritional aspects. Also, the pupils point to the importance of having a variety of choices and being empowered and encouraged to make these choices themselves.

In summary, Table 2 uses the four dimensional knowledge model discussed earlier to categorise the health contents that pupils dealt with and published on the website during the Young Minds project.

As shown in the table, the all four dimensions of knowledge discussed earlier were represented in the website materials. In other words, the project's approach shaped by the IVAC model and the use of ICT and international collaboration,

**Table 2.** *Different types of knowledge in Young Minds*

Knowledge	Examples
Effects	Body nutritional needs; Junk food and fast food; Eating disorders
Causes	Social factors, such as traditions, culture, family; Food production, organic vs. chemicals; quality standards; Access to quality food in school, at home; media influence
Change strategies	Establishing a breakfast club with healthy food at school; Improving the quality standards for food production; Careful management of food at home; Lobbying and awareness raising for an alternative food pyramid
Visions about alternatives	Healthy food in the school canteen; Healthy breakfast every morning; Taking into consideration social and aesthetic, as well as nutritional aspects of food (alternative food pyramid)

provided a broader frame in which to work on the issue of food and nutrition and encouraged pupils to generate knowledge about:

- what kinds of health-problems can be identified in relation to food and nutrition (i.e. knowledge about effects)
- why these problems exist (i.e. knowledge about causes)
- how these problems might be solved (i.e. knowledge about change strategies) and
- the 'ideal', desirable situation in regard to the problems at hand (i.e. knowledge about alternatives and future possibilities)



This is in contrast to traditional health education, which is mainly concerned with one dimension of knowledge, that is, the knowledge of effects of health conditions. In this type of information the scientific approach is dominant and the focus is on pupils attaining knowledge about the serious health problems that might affect them, how quickly such problems are evolving, what behaviours leads to risks of illness and so on. This type of knowledge is not necessarily action promoting, especially when it stands alone. Indeed such knowledge can create a great sense of worry, and if this type of knowledge is not followed up by knowledge about causes and strategies for change then it can be associated with breaking down commitment and contributing to action paralysis.

### **Action oriented teaching: teachers' visions, dilemmas and challenges**

Naturally, questions arise about the challenges posed for teachers by the model of knowledge and action-focused teaching outlined above. Teachers from the participating classes reflected on these issues at the conference in Strasbourg and created their joint vision about the key principles of an action-focused approach to teaching about food and nutrition (see Box 2). The teachers' vision emphasises the value of involving pupils genuinely and meaningfully in making decisions concerning food and diet, and empowering them through the process of learning to bring about changes in their own schools and to influence the future in which they will live.

The vision outlines several significant dimensions of the teaching approach indicating that it is conducive to empowerment and development of action competence in pupils. These dimensions include: creating shared visions between pupils and teachers as part of teaching and learning; encouraging pupils' initiative and action; providing and discussing a variety of choices and their connection to pupils' lived experience; ensuring possibilities for pupils to take real-life actions and bring about changes; developing collaboration between school and the local community; using the benefits of the ICT, networking and international collaboration. Clearly, these dimensions concern the teaching about food and nutrition but have relevance for health education and the health promoting schools in a broader sense.

The principles of action-focused teaching underlined in the teachers' vision, as well as in the theoretical premises discussed above, imply new demands and challenges for teachers. One of the challenges concerns the balance between 'stepping back' and ensuring more room for genuine pupil participation on the

**Box 2.** *The Young Minds teachers' vision about food at the school*

- Teachers share their visions of healthy eating with pupils.
- Pupils make their own suggestions and are allowed to action them. Teachers empower pupils immediately (the pupils future is now) if pupils wish to initiate a food change; even if it means spending money.
- Pupils must be allowed to explore 'cool' options to make healthy eating credible to their peers.
- Teachers support pupils through the learning experience – through all classroom subjects – pupils should have democratic opportunities through their committees, and also in impromptu classroom discussions. Initiatives can be political (Scotland) or communal (community and pupils) (Denmark).
- The dynamics of education – empower children democratically early (in primary school) to make healthy eating changes in the school.
- Television and commercial companies present a hurdle because they promote what makes money for them – organic and local. Food supplier can be contacted to supply school canteens.
- If children get a chance to develop their ideas internationally as in 'Young Minds' then they can influence the future in favour of healthy eating.

one hand, and helping pupils navigate through the subject matter on the other. Previous research related to the Young Minds project has shown that when teachers are concerned to provide more room for pupil genuine participation, they often tend to neglect the importance of guiding pupils through the curriculum contents and tend to emphasise emotional growth and non-academic knowledge (Simovska and Jensen, 2003; Simovska, 2005). Thus, it is

essential to point out that action-focused teaching requires a well adjusted balance between guiding and following through pupils' ideas, and helping pupils to focus on the subject matter contents rather than solely on interaction with peers from different countries.

Moreover, the use of ICT in action-oriented teaching with an aim to create democratic, active, networked learning environments puts forward a new role for teachers, that is, the role of a digital communication moderator (Simovska and Jensen, 2003). The use of ICT, if it is to be used as more than a tool, demands new teaching strategies which take place in a hyper-room and which include encouraging non-linear learning, asynchronous as well as synchronous communication, critical selection and reflexivity and experimenting and playing as part of learning. Teachers need to know how to use online resources to stimulate groups of learners. This means that they need more time for planning, quality control and selection of web materials, but also for developing new strategies to advise pupils in the web search, internet links etc.

Further, teachers should know how to build and facilitate effective online educational dialogue, which is conducive to pupils' independent and action-oriented learning. In other words, teachers should know how to encourage exchange and how to turn exchange into knowledge sharing and ultimately into knowledge construction (Salmon, 2001), while at the same time broadening the scope of knowledge so it embraces the dimensions of the social determinants, visions and the managing of change. In addition to social and personal competences as well as the competence to improvise if technology fails, this kind of teaching requires higher level of subject content competence of the teachers. As pointed out by the Danish psychologist Steen Larsen, this kind of teaching requires:

...the professional experienced teacher, being in natural control of the substance. And what does that mean? That means that the content substance is controlled at a level such that it becomes an integral part of the teacher's personality, so he or she does not need to use attention and resources on the professional side but can concentrate all his or her energy on choreographing the educational process. (Larsen, 1998: 22)

We are naturally left with the question of what this 'substance' should contain. We have argued in this paper that the substance of health education should be action-oriented and interdisciplinary, dealing with insights into the connections

between health, people, culture and society. The IVAC-approach and the four-dimensional knowledge model have proven to be helpful tools for teachers to reach this aim.

## Conclusions

In this chapter, we have discussed the concepts of action competence and action-oriented knowledge as key elements of the democratic approach to health education and health promoting schools. In contrast to moralistic health education, which is focused on health information concerning effects of health conditions, the democratic approach emphasises a broader landscape of knowledge which, in addition to knowledge about effects and risks, embraces insights into causes of health problems, visions about possible alternatives and strategies for initiating positive changes.

The ways these concepts are employed in the realities of the practice of the health promoting schools have been illuminated through a case study. The theoretical discussion as well as the account of the case study has shown that in order to work with multidimensional, action-oriented knowledge, teaching should be built on a professional foundation based on interdisciplinary teaching qualification, including the use of the Internet and ICT.

A teacher working in this way should be able to provoke, challenge, stimulate and support pupils in the development of their own visions of a healthy life and the healthy society, together with organising strategies for action towards attaining these goals. The teacher should be in a position to fulfil the consultant role and furthermore, from her or his experience and talent, be able to perceive today's health conditions and health problems from an interdisciplinary and action oriented point of view. These are the main challenges for future professional development programmes for teachers in health education, as well as for educational research.

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17

## **Mindmatters (Germany and Switzerland): Adaptation, First Results and Further Steps**

*Marco Franze*

### Introduction

Health promotion can be realised in various settings where people spend a major amount of their time and whose structures influence people's health. This is particularly true for schools given their central concerns with the development and wellbeing of young people. However, if health promotion is to be effectively introduced into schools then guiding principles and practical guidance for realisation are needed. If such guiding principles are not taken into account by schools it is likely that actions taken will not be successful. To guide school in the development of a health-promoting environment, a number of core principles were identified during the first European Conference on Health Promoting Schools in Thessaloniki-Halkidiki in 1997 (Stewart Burgher, Barnekow Rasmussen and Rivett, 1999). These principles serve to express the values and intentions of health promoting schools (HPS):

- Democracy
- Equity
- Empowerment and Action competence
- School Environment
- Curriculum
- Teacher training
- Measuring success
- Collaboration
- Communities
- Sustainability

Five years later, these principles were further clarified during the Education and Health in Partnership' conference in Egmond-an-Zee. Participants and representatives of national ministries from 43 European countries developed the 'Egmond Agenda'. This document is an important tool for HPS since it includes a collection of critical steps, which ensure a sustainable, systematic and evidence-based process (Young, 2002). In addition to these steps, which describe the process of becoming a health promoting school, HPS should have a specific attitude towards their understanding of health. This may be explained in the following quotation from the European Network of Health Promoting Schools website (address given in references):

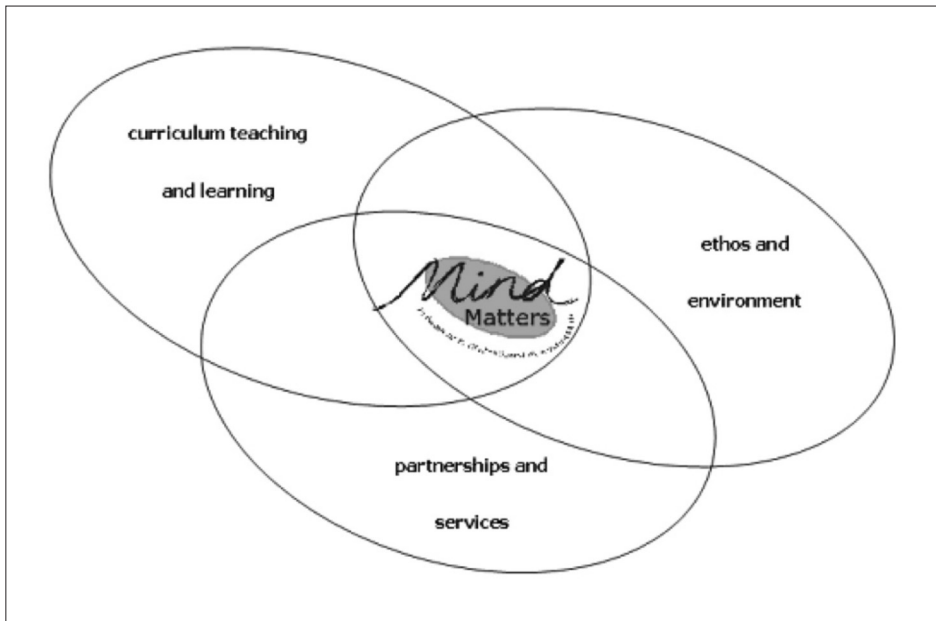
'The health promoting school is based on a social model of health. This emphasizes the entire organization of the school, as well as focusing upon the individual. At the heart of the model is the young person, who is viewed as a whole individual within a dynamic environment. Such an approach creates a highly supportive social setting, that influences the visions, perceptions and actions of all who live, work, play and learn in the school. This generates a positive climate that influences how young people form relationships, make decisions and develop their values and attitudes.'

There are very clear similarities between the HPS approach and the *MindMatters* resource, which will be explained below.

## The Whole School Approach of *MINDMATTERS*

*MindMatters* is a mental health promotion resource for secondary schools (grades 5 to 10), which is originally from Australia (Sheehan et.al., 2002) (See references for web links). It was developed in the late 1990s by the Melbourne, Deakin, and Sydney University, in cooperation with the Commonwealth Department of Health and Aged Care. *MindMatters* addresses school principals, pupils and teachers as well as parents and non-teaching staff and considers a number of levels of schooling as indicated in figure 1. The adaptation of the Australian resource for the German and Swiss background is realized as a cooperation of the University of Lueneburg with Prof. Dr. Peter Paulus as head of the project and five funders (see below, web link given in references). In Germany the launch of the project was September 2002.

**Figure 1.** *MindMatters and the Health Promoting Schools framework*



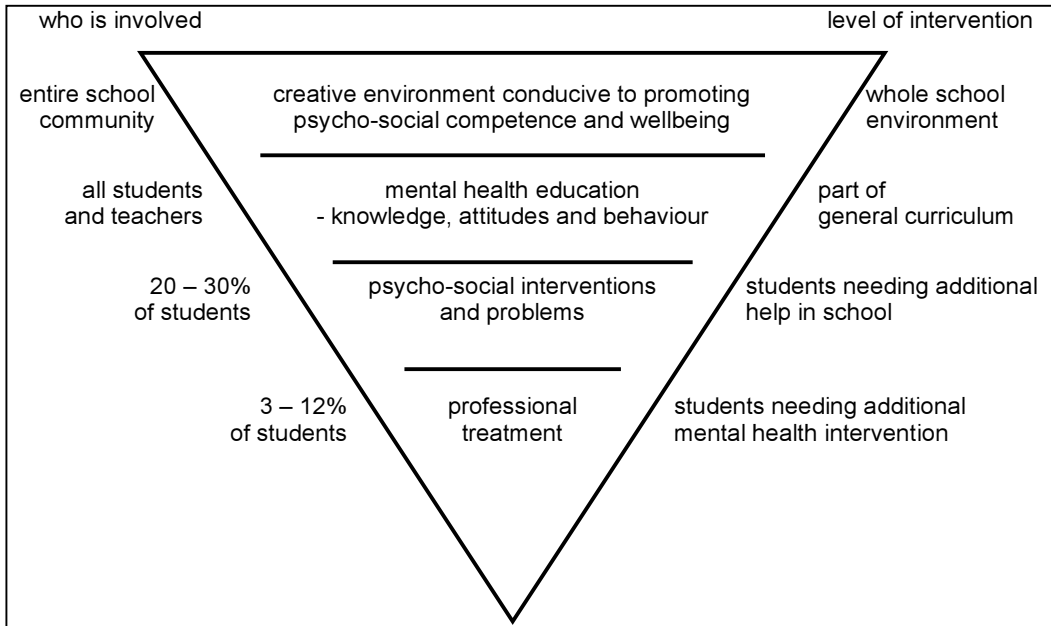
Consistent with the ENHPS definition, *MindMatters* not only addresses specific perceptions and behaviours of individuals but also considers the culture and organizational structures within schools and their influences on health (see Resnick et. al., 1997 and McNeely et. al., 2002). Although actions taken by schools in any one of the three levels indicated in figure 1 are important, the most effective changes will appear when all three levels are considered together. Therefore *MindMatters* includes not only five curriculum booklets but also three booklets that address the area of school development.

The teaching material has been developed for various subjects and age groups. It covers issues of stress, bullying and harassment, loss and grief, and understanding of mental illnesses. The material for school development focuses on the levels of school culture/environment as well as partnerships with and services from outside agencies. It points out possibilities for mental health promotion in these areas. The school-development booklet *LifeMatters* deals primarily with suicide prevention. In this way curriculum activities on mental health promotion are combined with the work of the school leadership and teaching staff, which also includes the creation of a health promoting school culture and school partnerships. *MindMatters* can therefore also be seen



as addressing two levels of the 'Comprehensive School Mental Health' concept of the WHO outlines in figure 2 (Hendren et. al., 1994):

**Figure 2.** *Comprehensive School Mental Health Program*



*MindMatters* mainly addresses the two top levels, which represent the whole school community and parts of the curriculum. Concerning the two remaining levels (students needing additional help in school and students needing additional mental health services) *MindMatters* offers materials as well e.g. for dealing with critical incidents where intensive partnerships and networks with the wider community are supported. So schools should also care for problems and fears of their pupils but also accept support from external experts when needed. This can only be successful when schools are willing to open up to their wider community and to maintain established contacts.

Furthermore it needs to be stressed that *MindMatters* considers a more comprehensive and positive health concept. Links to the salutogenic approach of Antonovsky (1987) as well as to the concept of a Positive Psychology (Seligman and Csikszentmihalyi, 2000) can be drawn. *MindMatters* does not adopt a deficit-oriented viewpoint but strongly endorses the health promoting

resources of the psychosocial context of the school for all its members. This viewpoint can be found as well in the Life-skills approach (Botvin et.al., 1995; Botvin and Tortu, 1988). In this context the concept of resilience needs to be mentioned since *MindMatters* is also designed to enhance resilience. School resilience can also be seen in the degree of connectedness to school, for example Resnick et.al. (1997) point out that a high degree of family and school attachment is a protective factor against misbehaviour and emotional problems. On the other hand academic failure and leaving school early can be consequences of anti-social behaviour and emotional problems.

In line with the ENHPS philosophy, the *MindMatters* programme not only addresses the perceptions and behaviours of the individual but also the school culture and organizational processes since these – like the degree of connectedness – influence people’s health. McNeely et.al. (2002) were able to identify certain factors which influence pupils’ sense of connectedness towards their own school i.e. positive classroom management climates, participation in extra-curricular activities, tolerant disciplinary policies and small school size (cited from Rowling and Weist, 2002). In this respect the aspect of student participation needs to be mentioned, which *MindMatters* considers as part of a ‘bottom up’ perspective. This approach is reflected in the fact that all German and Swiss schools working with *MindMatters* developed a core team, which in some schools included pupils. One school’s core team, for example, consists of a school psychologist, two teachers (female and male), a social worker, a nurse, a principal and a pupil.

Pupils’ participation can also be enhanced by *MindMatters* material, which allow for an objective and school specific audit. Such an audit can show how pupils perceive their school. School managers and teaching staff get an inside view of the pupils’ perception of school and the results can be used to plan further actions. This process can also be seen as a contribution to democracy promotion in schools, empowerment and enhancing action competence; factors which are explicitly named in the core principles of the European Conference on Health Promoting Schools in the Thessaloniki-Halkidiki declaration (Stewart Burgher, Barnekow Rasmussen and Rivett, 1999):

- ‘Democracy: The health promoting school is founded on democratic principles conducive to the promotion of learning, personal and social development, and health.

- **Empowerment and Action Competence:** The health promoting school improves young people's abilities to take action and generate change. It provides a setting within which they, working together with their teachers and others, can gain a sense of achievement. Young people's empowerment, linked to their visions and ideas, enables them to influence their lives and living conditions. This is achieved through quality educational policies and practices, which provide opportunities for participation in critical decision making.

This also influences the area of school environment. The author had the opportunity to discuss results of such a pupils' audit in a German *MindMatters* school. This discussion took place in the context of a *MindMatters* professional development session together with pupils' representatives from different classes. Prior to the discussion, all classes received a *MindMatters* questionnaire (see also the description of the *MindMatters* booklet *SchoolMatters* below) the results of which were summarized with the help of class captains and their teachers.

The discussion focused on two areas which can also be found in the description of the Core Principles under the heading of 'School environment', namely the consideration of the physical *and* social environment. The pupils' priorities turned out to be the improvement of the schools architecture and the behaviour towards each other. These results were then presented to the teachers during their *MindMatters* Professional Development session. By this process teachers were able to get an objective picture of their pupils' perception and to plan further steps together (this provides a good example of the kind of democratic process in education discussed by Jensen and Jensen, 2002)

In addition to the links of *MindMatters* to the three issues mentioned above, the programme illustrates commitment to other Core Principles:

**Equity:** The booklet *CommunityMatters* deals with the consideration of different groups of the school community. This includes homosexuals, handicapped people and foreigners in relation to their specific perception on topics such as: health and wellbeing, connectedness and resilience, bullying and harassment and loss and grief.

**Curriculum:** We tried to produce booklets which are useful for common curriculum issues as well as designed for specific subjects. The booklets of *MindMatters* also emphasize group activities, possibilities to deal with new groups (e.g. new school classes) as well as peer-teaching.

**Teacher training:** In the beginning of the pilot phase in spring 2004, all 32 MindMatters schools in Germany and Switzerland received an initial professional development session to give general information about the programme and its possibilities. The session included specific tasks and activities from the booklets to demonstrate how the programme works and to facilitate the introduction into the curriculum. This method is also used in all of the following Professional Development sessions. There are five of these in total with 2-3 participants from each school. The content of these sessions focused on appreciating successes, exchanging experiences and planning further steps for integrating *MindMatters* into schools. In addition schools have the possibility to ask for a development session designed for their specific needs; this offer is made on a voluntary basis and schools are free to choose the topic.

**Measuring success:** The initial internal monitoring of *MindMatters* (see below) can be seen as one step towards the improvement of the conceptual underpinning and methodology of the programme. In addition, there is also an external evaluation, which is process- and outcome-orientated (see below).

**Collaboration:** *MindMatters* has the support of the ministries of the German Bundesländer Niedersachsen and Nordrhein-Westfalen, together with the organization Radix Gesundheitsförderung, which coordinates the Swiss Network of Health Promoting Schools for the Swiss Health Ministry (Bundesamt fuer Gesundheit der Schweiz). This is one of the five funders of the programme in Germany and Switzerland. The German funders are the BARMER Ersatzkasse (health insurance company) and three Gemeindeunfallversicherungsverbände (statutory accident insurances for pupils on state level).

**Communities:** All the schools are supported to build up a network and to use the possibilities of the environment of the school, e.g. parents and health services. In the booklets on school-development there are also questionnaires on that topic. These give schools the opportunity to evaluate their actual situation concerning their efforts in networking.

**Sustainability:** Although the pilot phase runs from February 2004 to July 2005 there will be continuing support for the pilot schools to ensure further development of the changes introduced by the programme.

### **Initial Testing of MindMatters Material In Germany And Switzerland**

To check on the acceptability of the programme and for the purposes of further planning processes selected material was tested in spring 2003. The schools involved received a booklet on school development (*SchoolMatters*) and two

units each from the curriculum booklets on stress (for grades 7 to 10), bullying (grades 5-8) and understanding mental illnesses (grades 9 and 10) (see website links in references). As was explained above, the whole *MindMatters* package contains of eight booklets. The initial testing was undertaken with a small selection of material.

The *SchoolMatters* booklet includes background information on the concept of the health promoting school as well as tools, which allow an objective view on the schools situation regarding mental health promotion. Those tools refer to the three levels of intervention and enable schools to find weaknesses or areas where change is needed within their school programme development. They can also discover which mental health issues are covered in the curriculum and how. In the area of school culture questions are asked about the quality of relationships present in the school community as well as how the physical environment of the school is seen. Questions are asked about partnerships, which allow schools to find out what kind of cooperation already exist between the school and health agencies in the wider community that can offer additional support when needed.

Through using the audit tool, schools have the opportunity to establish priorities for action to further promote mental health or to strengthen their health promotion activities in general. Furthermore the booklet contains ideas on how to cope with critical incidents. Guidance is given on what an action plan could look like and how a special critical-incident management-team might be organized.

The curriculum booklet on *Coping with Stress* contains background information for teachers (on coping and resilience) as well as two units and a set of games for group building (the games are to promote interactive learning to contribute to the development of important skills). The first unit asks pupils to find definitions of stress and challenge, stressors for young people and pictures/metaphors for stress. The units included sample questions to guide group discussions and an activity sheet. The sheet contains the 'stress-burger' as a metaphor for stress, intended to show that people sometimes feel caught in situations, experiencing pressure from all sides. The second unit dealt with feelings often associated with stress. Another aim of this unit was to show pupils the importance of 'self talk' for the recognition of challenges and how they see themselves. The unit contained activity sheets, which enable pupils to identify positive and negative thoughts which might come up in challenging situations (e. g. a girl wants to go to a party and thinks about what to wear; she keeps thinking that she is too fat and that she will not know how to behave among her class mates).

The curriculum booklet on dealing with bullying and harassment contains background information for teachers and four units (two units for social studies, biology, religion or interdisciplinary lessons and two units for German classes). In groups and with the help of sample questions, pupils are asked to find definitions of bullying, identify different forms of bullying and discuss reasons why bullying and harassment happen. The second unit deals with barriers to seeking help when involved in bullying incidents and pupils are asked to list ideas on activity sheets. The first unit on dealing with bullying in the German class contains an activity sheet for group work with definitions of the terms 'to tease', 'to harass' and 'to bully'. The consequences of bullying for the victim are explored through use of a poem by Karen Crawford and suggested questions.

Have you ever felt like nobody?  
Just a tiny speck of air  
When everyone's around you  
And you are just not there

In the following unit pupils are asked to find terms they associate with teasing, harassing and bullying (e. g. to ignore, to hit, being lonely, sad etc.). These terms are then put together to a cluster map. The results are discussed with the help of sample questions (e. g. What does the diagram show regarding the consequences of bullying in our school community?). The aim of the unit overall is to show the interdependencies of the act of bullying and its consequences.

The curriculum booklet on mental illnesses contains background information for teachers and one unit. It starts with group work where adolescents do a brainstorming on mental health/illness and physical health/illness. Pupils are asked to think of terms they heard when referring to the topic (including negative words like freak, loony). Sample questions are given to guide group discussions. The unit concludes with activity and information sheets, which are written in a way appropriate for adolescents and which deal with treatment possibilities of certain mental illnesses as well as the danger of myths and/or stigma around mental illnesses.

## Monitoring and Results

Five schools from Nordrhein-Westfalen, 8 schools from Niedersachsen and 10 schools from Switzerland participated in the testing. Completed questionnaires were returned from 24 teachers (14 female, 8 male) and 400 pupils (191 female, 186 male) a response rate of just under 80%.

### Feedback from teachers

The participating teachers were asked to use the material as part of their lessons and to read *SchoolMatters*. Via questionnaires developed for the initial testing, they were then asked whether they thought the material was appropriate and relevant. Since only one teacher used the units from the *Understanding Mental Illnesses* booklet, only results for the other three booklets will be presented (see table 1).

Referring to *SchoolMatters*, the tools and the school audits were seen as helpful for ensuring mental health promotion on the levels of curriculum, school culture and partnerships. The material for the school audit was rated as easy to realize, well structured, and of appropriate content. In addition the teachers had the opportunity to make general comments on the booklets. These showed that it was necessary, in developing the programme, to further clarify the transfer of the general ideas of *MindMatters* into practice (see item 6 in table 1). But it needs to be said that the schools received special support and care during the pilot phase by means of professional development (see also explanation of the aspect of teacher training above).

Table 2 gives the results for the curriculum booklets on bullying and harassment, and stress.

Overall the booklets were evaluated positively but answers to open questions revealed that some terms were not appropriate for the addressed age group and that some instructions for pupils needed to be explained:

“Layout too tight, difficult to find something (again)“

“Some terms (...) not suitable for suggested age group, explanations for pupils partly too difficult“

“Difficulties depend on grades; rather too high demands for 5/6 grades“

**Table 1.** *MindMatters – booklet SchoolMatters: Descriptive Statistics (teachers)*

Item	N	M	SD
<u>SchoolMatters</u> gave me a comprehensive overview of the following aspects:			
1. ... the concept of the Health Promoting School.	19	3.42	.76
2. ... the whole school approach as basis of MindMatters.	18	3.50	.61
3. ... the importance of the topic "Mental health" for schools.	19	3.68	.47
4. ... the role of crisis management in schools.	17	3.41	.79
5. <u>SchoolMatters</u> is suitable for planning and realizing mental health promotion in schools.	19	3.16	.68
6. After reading <u>SchoolMatters</u> I have developed concrete ideas how to realize mental health promotion in my school.	18	2.78	.73
7. The <u>SchoolMatters</u> tools are important parts for mental health promotion in my school.	16	3.13	.80
The <u>SchoolMatters</u> audits ...			
8. ... are well structured.	19	3.21	.85
9. ... are appropriate in content.	18	3.22	.64
10. ... easy to use	16	3.06	.85
11. ... ask too much of schools.	17	1.88	.99
The topic 'suicide prevention' ...			
12. ... is addressed in a sensitive way.	11	3.27	.78
13. ... is a first step to realizing the taboo of 'suicide and school' in a helpful way.	12	3.00	.73
14. ... is a too strong focus.	12	2.00	.73
The way <u>SchoolMatters</u> addresses me I perceive as...			
15. ... motivating.	14	3.00	.67
16. ... too euphoric (far from reality).	13	1.85	.89
17. ... precise/clear.	14	3.21	.69
<u>SchoolMatters</u> ...			
18. ... presents new and relevant knowledge.	12	2.83	.93
19. ....deepens and explains in more detail existing knowledge.	12	3.42	.51

1 = do not agree at all; 2 = do not agree; 3 = do agree; 4 = do agree completely

If participants thought they could not judge on one of the items they had the possibility to tick 'I cannot judge'. These answers have not been considered in these results. Only answers in the first four categories were analysed.



**Table 2.** *MindMatters curriculum booklets on 'bullying and harassment' and 'stress': Descriptive Statistics (teachers)*

Item	Curriculum booklet on bullying and harassment			Curriculum booklet on stress		
	N	M	SD	N	M	SD
1. It becomes clear how schools can approach the topic bullying/stress in a holistic way.	9	3.44	.52	13	2.92	.86
The topics of the teaching units are relevant...						
2. ... for pupils.	10	3.60	.51	13	3.38	.87
3. ... for teachers.	10	3.30	.67	13	3.46	.66
In regard to teaching styles and methods the units are						
4. ... easy to realize.	11	3.09	.70	13	3.15	.80
5. ... interesting for pupils.	11	2.91	.83	13	2.85	.68
6. ... a lot of work for teachers.	11	1.91	.70	13	2.23	.72
7. The single steps are well explained.	10	3.30	.67	12	2.92	.90
The work and information sheets for pupils are:						
8. ... attractive.	11	2.91	.94	13	3.00	.91
9. ... easy to work with.	11	2.91	.70	13	2.85	1.06
10. ... appropriate for addressed age group.	11	3.09	.70	13	3.15	.80
11. The sample questions of the units helped to get discussions on the topic going.	11	3.18	.87	11	2.91	.53
12. The booklet is easy to read and well structured.	10	3.10	.73	13	3.15	.55
13. Scientific terms are/vocabulary is used appropriately and/or well explained.	9	3.56	.88	12	2.92	.79
14. The booklet encourages discussions (e.g. among staff).	7	3.29	.75	9	3.11	.60
15. In class discussions on bullying/stress went on after lessons.	9	3.22	.44	11	3.18	.75
The booklet ...						
16. ... presents new and relevant knowledge.	9	2.78	.97	12	2.58	.90
17. ....deepens and explains in more detail existing knowledge.	9	3.56	.52	12	2.92	.79

1 = do not agree at all; 2 = do not agree; 3 = do agree; 4 = do agree completely

If participants thought they could not judge on one of the items they had the possibility to tick 'I cannot judge'. These answers have not been considered in these results. Only answers in the first four categories were analysed.

“Amount of time needed not clear, difficult to realise without training, make clear who is the contact person“

Besides these comments there was some positive feedback as well:

“Results of new groups were convincing“

“New groups build by games needed half an hour to agree on working terms but managed to task which I think of as positive since I so far allowed cliques to work together”

“Sample questions were great“

“Keep going!“

### **Feedback from pupils**

In general, the pupils gave positive feedback on the curriculum booklets as indicated in table 3.

The best results were achieved the booklet on bullying. It should be mentioned that pupils said that they felt they had achieved more action competence when dealing with stress or bullying. However, some remarks suggested that adjustments are needed to make the materials easier to understand. There were also comments that encouraged the German project team to continue their work:

“More space for writing on activity sheets“

“cartoons rotten, look like being meant for 6 – 8 year olds.“

“I would like to have MindMatters 2 hours every Thursday“

“Get the book into schools!“

“Good that we are talking about it, and with MindMatters it was easier.“

**Table 3.** *MindMatters* curriculum booklets on 'bullying and harassment' and 'stress': Descriptive Statistics (pupils)

Item	Curriculum booklet on bullying and harassment			Curriculum booklet on stress		
	N	M	SD	N	M	SD
1. Did you have fun with the MindMatters materials?	209	2.03	.87	163	2.66	.84
2. Did you find the lesson interesting?	211	1.92	.97	163	2.64	.94
3. Was the lesson varied?	204	2.27	1.01	162	2.57	.95
4. Did you like the cartoons?	177	2.12	.97	163	2.69	1.18
5. Did you understand the instructions on the worksheets?	186	2.10	.97	161	2.11	.83
6. Was your teacher able to help you if you had questions?	199	1.51	.71	157	2.04	1.05
7. Was the lesson with the MindMatters materials different than usual?	180	1.87	.72	145	2.10	.71
8. Did you e.g. do more group work?	205	1.40	.52	157	2.15	.95
9. Were there more discussions?	187	1.84	.72	141	2.28	.85
10. Do you think the material is appropriate for kids/teens of your age?	195	1.68	.76	135	2.02	.82
11. Do you know more about bullying/stress now?	207	1.49	.67	143	1.97	.98
12. Do you think bullying is a problem at your school?	173	2.24	.99	not measured		
13. If you ticked 'yes, very' or 'yes': Do you think the <u>MindMatters</u> materials will help to deal with bullying at your school? Do you know better now what to do when you feel stressed?	156	2.08	.86	140	2.21	.84
14. Would you like to learn more about bullying/coping with stress?	194	2.02	.84	156	2.37	.97

1 = yes, very; 2 = yes; 3 = no; 4 = not at all

If participants thought they could not judge on one of the items they had the possibility to tick 'I cannot judge'. These answers have not been considered in these results. Only answers in the first four categories were analysed.

## Consequences

As a consequence of these results efforts were made to adapt the literacy level of the teaching material to academically less successful and younger pupils. The layout was revised so as not to be confusing. Plus, all curriculum booklets used in the pilot phase had an additional section added, which enable pupils and teachers to give a feedback on the material. Another important modification of all booklets was to include resources and contact details of supporting services relevant to the different regions of the pilot schools. Useful Internet sites were also given. Since the Australian MindMatters materials addressed specific aspects of Aboriginal and Torres Strait Islander people's mental health, the German version will also address the mental health of immigrants and/or people with a non-German speaking background.

## Perspectives and Further Steps

Currently, 32 schools are participating in the pilot project, which started in February 2004. The pilot phase ends in July 2005 and the material will then be revised once again based on findings from the pilot evaluation. The resource is then to be distributed more widely in Germany and Switzerland.

A comprehensive evaluation of the pilot phase is being undertaken by an independent team so an objective judgement is guaranteed. The whole concept has been adapted for German-speaking circumstances and focuses on outcomes from the programme as well as on the processes involved. A pre-post test design is being used which will allow for gathering of qualitative (interviews with principals and teachers) and quantitative (questionnaires) data. Unlike during the initial testing data on the effectiveness of the programme will be collected using established scales, for example, for teachers, these will include questionnaires on: emotional exhaustion und occupational stress, optimism and self-efficacy expectations, communication competence in conflict situations, relationships to colleagues, pupils and parents, as well as views of school leadership and school quality. Standardised data will also be gathered from pupils on the following issues: satisfaction with school, test anxiety and view on school climate, positive/negative and aggressive moods, self-concept in regard to academic achievements, and social self-concept as well as self-esteem.

The pre-test phase of the evaluation has produced data from 407 teachers and 2201 pupils, and schools have received school-specific feedback based on these pre-test data. This feedback provided information on how each school compared to other *MindMatters* schools in the beginning of the pilot phase. The next step in the evaluation will involve interviews with principals and teachers on aspects of the programme and its implementation; due to the length of the interviews only selected schools will be interviewed. All schools will also participate in an evaluation workshop where the results of the pilot phase will be presented in great detail. This will provide an important impulse for future, sustainable work in the pilot schools after the pilot phase has been completed.

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18

## Computers Don't Matter in the End: An Experience of Empowering Children in Macedonian Schools

*Kristina Egumenovska*

It would be good if we get computers, but even if we don't, computers don't matter that much now because now we know if we want we can make our visions become reality one day.

### Introduction

This chapter addresses three key issues in health education and health promotion: empowerment, action competence and participation as intertwined experiences within the health promotion enterprise. 'Redundancy in meaning' has emerged regarding these concepts as they are often used loosely without precise definitions. Hence, a brief theoretical discussion is required initially to establish a framework before presenting a case study of the 'Selection, Investigation, Vision, Action and Change' approach (S-IVAC) as one participatory and action-oriented strategy to health promotion in Macedonian schools. This chapter concludes by proposing some implications from the project described for promoting health in children within different layers of action for health.

### **The Macedonian context**

Geographically and much more politically, the country is a 'South-Eastern European country' which has experienced a range of significant social problems in recent years, including: weakening social cohesion, tensions around ethnicity with the prevalence of an ethnic politics of identity, economic instability, and rapid social and political change. Many of these conditions are widely recognized as causes of health and development problems among children and youth



(UNICEF, 2000). One key dimension here is the exposure to huge changes and their associated uncertainties. Democracy-oriented transformations have affected the lives of children and young people, and rejected the belief that young people are passive recipients of social values, economic goods, and political goals. In addition, widespread ignorance about the role and responsibility of individuals in promoting their own health has been challenged. The time when repressive environments were supportive of moralistic health education and could protect youth from confronting issues of individual responsibility for their risk behaviour has ended.

The school environment has changed in recent decades as well. Whereas previously, the major discipline problems facing teachers were: talking, chewing gum, making a noise, running in the halls or wearing improper clothing, now the problems are: absenteeism, vandalism, gang warfare, drug and alcohol abuse (Pitcher and Poland, 1992). At present, participatory strategies to health promotion need to be included in the training of school staff and to become a part of our daily practices if schools are to be safe and healthy.

### **Specific challenges facing schools**

The Macedonian government accepted 300,000 refugees from Kosovo in 1999, one third of whom were school children who needed to be rapidly integrated into regular classes in primary schools. Significant issues emerged specifically in relation to the health of children – could their health be promoted given their circumstances, and could their sense of personal control over their lives be enhanced?

The Macedonian Network of Health Promoting Schools (MNHPS) undertook initiatives to help schools affected most severely by their new intakes. Three levels of action became a part of the psychosocial assistance to schools under risk. Firstly, a research project was undertaken which included 65 schools in the region, to assess schools needs and capacity. In participation with schools' representatives jointly defined criteria were agreed to identify 10 schools where the risks for the mental and emotional health of children and adults appeared greatest. Of these schools, three chose to support and actively participate in pupils' projects in the school community, in order to contribute to the promotion of health in children and their empowerment for coping with difficult situations. Secondly, crisis teams were created and were trained in a series of seminars for the purpose of raising sensitivity and internal support in strengthening of the school community. And thirdly, university students were

recruited to run schools projects as a form of external support to the school community in the process of overcoming the crises. It is this third initiative which is the specific focus of the present chapter.

### **A theoretical perspective**

Three key issues in health education and health promotion – empowerment, action competence and participation – are viewed as intertwined experiences within the health promotion enterprise. Clarification of these concepts is needed to establish common perspectives for further discussion.

### **Empowerment**

Power is neither inherent in individuals, nor is it maintained in isolation from the social context. Power is a process that occurs in relationships, which consequently implies the possibility of empowerment seen as a process of change. In this text empowerment is understood as a process of change in an individual's narratives of themselves and their social reality, which takes place within the context of relationships and further seeks for change in living conditions on an individual or community level. As a relational process, empowerment is as multidimensional and multilevel as human relations are – thus we speak about psychological, social and economic-political empowerment, which operate on an individual, group and community levels, respectively (see Rapaport, 1987, 1995; Wallerstein, 1992; Ward and Mullender, 1991).

As a concept, empowerment is meaningful only if it recognizes that power cannot be given (nor lost). Empowering individuals or a group reinforces a subtle form of control (Labonte, 1994), and hence we can only create and provide the opportunities and support that others need to become 'empowered' themselves (but not by themselves only) in the context of relationships. Empowerment also involves recognition that values such as collaboration, caring, and compassion, are as equally relevant as autonomy or self-determination.

### **Action competence**

There is a general assumption in the educational literature that active learning through experimentation and practical activity in general, is more educationally effective because it promotes greater interest and understanding than more traditional approaches. On the other hand, it might be questioned whether active learning necessarily develops understanding, which can be transferred to new

situations, and gives young people a capacity to do something with the material they have learned? This question is especially significant in relation to health, as ideally we want young people not only to know about health issues but also to relate what they know to the realities of their daily lives.

It is here that the concepts of action and action competence within the democratic paradigm of health education are of particular significance (on the moralistic vs. democratic paradigms in health education, see Jensen, 1997).

Jensen (1997) argues that within the democratic paradigm of health education, action has two key characteristics. Action 'should be purposefully directed at solving a problem and it should be decided upon by those carrying the action' (Jensen, 1997: 425). Furthermore, conscious making up of one's mind is the point where action differs from behaviour and behavioural change, and addressing the causes and solutions of problems is the point where action differs from activity (Jensen and Schnack, 1994).

Discussing some of the theoretical premises of action competence, Uzzell (1994) states that action competence can be regarded as a trait or characteristic within people that is learnt, but 'this could lead to an individualistic interpretation of the concept with a focus on training for particular behaviours' (Uzzell, 1994: 89).

From a cognitive development position, action competence is developmental and sequential. The 'stage theory' conception of action competence suggests that younger children are qualitatively less competent to understand the problem or to undertake action than older children (Piaget, 1928, 1929 in Estes, 1999). Several commentators have questioned this position (Rozin, 1976 according to Uzzell, 1994, also Cox, 1991 and Gelman and Baillargeon, 1983 according to Estes, 1999) and have suggested, for example, that children differ from adults in how easily they can generalize their competencies but not in terms of their competencies *per se* (see also Estes's findings, 1999).

Action competence can also be seen as a social process, because 'one cannot be action competent by oneself' (Uzzell, 1994:95). Uzzell remarks that the need to understand action competence as a social process is even greater if the notion of democracy is introduced and suggests that the concept should be developed as something tangible and achievable.

A programme of research and development in the Danish University of Education has been instrumental in 'grounding' the concept of action competence within curriculum theory. Within this programme, four components of action competence are proposed: knowledge, commitment, vision and experience of

action, all of which are underpinned by critical thinking as an independent component (see more in Jensen, 1994, 1997, 2000; Schnack, 1994; Jensen and Schnack, 1994). In this chapter action competence is understood as a capability and courage to act within a social context in order to bring about change.

### **Participation**

Participation is used with a meaning of genuine participation, as understood within Hart's model of participation. (Hart et al, 1998; Simovska, 2000; Simovska and Jensen, 2003). What fundamentally separates genuine participation from quasi-participation is choice – choice to make decisions, to take actions, to collaborate, to share power and to share meanings. But it is inappropriate to equate children's participation with children's determination because the highest possible level of participation is not a 'do-it-yourself' engagement, it is not child initiated and directed, but involves, as Hart proposes, child initiated shared decisions with adults. Participation is grounded in shared praxis where praxis is understood as 'action based on reflection' (Tones, 1994: 177). That is why through participation, empowerment and action competence can meet. Both are or will remain ideals without participation, without shared praxis. Actually, the dynamic underpinning empowerment encompasses clarifying individual's beliefs of control and values held for oneself and community, as well as the process of reattribution-if social learning theory is to be used. In other words action will not happen if one hasn't transformed the internal feelings of powerlessness and this can only be achieved through participation in sharing meanings within the social context. Also it is in praxis where action competence can be built, articulated and re-examined; it is achieved through participation in sharing decisions and influencing health-related conditions.

Moreover, they are all particularly central for democratic education and health education and promotion. While re-thinking the relationship between democracy and education, Schnack (2000) calls attention to three terms introduced by Klafki, which are relevant for making overt the values underpinning genuine participation as well. The values underpinning genuine participation are: self-determination, co-determination and solidarity. Self-determination is linked to responsible freedom and autonomy. Participation is not to be equated with self-determination alone, but with processes of co-determination linked to equality, 'one strives in principle to equal out the balance of power' (Schnack, 2000: 110) and solidarity (care and compassion). Hence, it is argued that genuine participation is a shared praxis underpinned

by, and conducive to, self-determination, co-determination and solidarity. As Schnack notes:

‘The members of a democracy are not spectators, but participants; perhaps not all equally active all the time, of course, but all potential participants, who decide themselves what to be involved in, when and why. In this sense, then, education for democracy means being educated, qualified, to be a participator.’ (Schnack, 2000: 110)

From a health promotion perspective, participation is about a process of learning. Specifically it is about relational learning, which inevitably engenders change along a continuum starting with an individual’s perceptions, notions and values, and moving towards working relationships with others and the establishment of collective praxis, which in turn facilitates reflection on individual values. This transformational cycle implies that action and reflection are intertwined in a process that is not linear in structure, even though the sequential nature of the description makes it sound as such. From the health promotion perspective what matters is how, for what purpose and in what kind of context children learn. Yet, the content is not irrelevant, but rather re-thought and broadened.

Finally, the idea of children’s genuine participation, just like the idea of freedom or equality, is never prior; it is a provoked reaction on adults’ practice. The understanding adults have of the extent to which children can independently evaluate situations, give meaning to events, and suggest and decide upon appropriate actions, is often limited. Adults, for instance, may give fairly negative and qualified answers to questions like: ‘Can children initiate and realise something on their own?’ ‘How seriously should their perceptions, opinions and ideas be taken into account?’ ‘Are they capable of evaluation and analysis of their own life, actions and living conditions?’ The more adults are willing to explore these questions and make them overt, the greater the possibility that the children will gain opportunities for an equal participation in things that matters to them.

## Method

The methodology used in the work with the children described here is highly participatory. The S-IVAC approach (adopted by Jensen, 1997, originally as IVAC) consists of the following phases: Selection, Investigation, Vision, Action and Change. The difference from the original IVAC model is not structural. 'Selection' was added to the Macedonian approach so as to emphasise that children should firstly experience the right to choose and select. To use the language of Gestalt psychology of perception – it is put to the fore in the Macedonian approach, while it remains in the background in the Danish approach, which does not implies it doesn't exist. This strategy provides opportunities for children to express the capacities they posses. Using this strategy, they have a chance to propose, to initiate, to realize action, to plan, and to express; in other words to take an active role in changing processes.

### **Health promotion enterprise – a case example**

The school *Naim Frasheri* in the multiethnic city of Tetovo was one of the three schools in which Psychology students had the task to organize and guide the pupils in work on their own projects for improving the conditions and the general atmosphere in the school. The main objective of the pupils' projects was to develop their action competence; they needed to increase their knowledge, commitment, visions and experience of action, i.e. to take an active role in the process of change. This included:

- Transforming the children's role embraced by the traditional meaning of the notion 'pupil', into active and meaningful individuals by replacing the actual way of working 'for them' with working 'with them' in the school community life;
- Involving children in the experience of active participation in HPS projects, and
- Developing pupils' ideas and initiatives in changing school life conditions

The yearlong project was carried out with Albanian-speaking children, 13-14 years old, with two workshops per a week, ending in January 2001.

The health promotion enterprise started with a workshop to explore children's perceptions and understanding of health. We offered them a 'circle of health' (with empty areas to be filled with their own understanding of notions such as:

healthy child, healthy family, healthy school, healthy community etc.) based on a holistic concept of health.

The participatory and action components of health, absent at that moment, were to be developed further once the children had gained experience in taking over their new role in the school community, by expressing their own ideas and initiatives for change, and making them happen through their projects. In this way, the children and the participating adults could see how they defined something so abstract and complex as health, and from this point we started the process of promoting health.

*Selection* – Includes making a list of different issues and selecting the most important one related to children's lives and school on which they would like to take action. Through brainstorming the children proposed a long list of different issues regarding their school that they wished to improve in order to become a healthier school. Every child had the opportunity to vote for three (most important in her/ his view) of them. Then, several ways of including all other schoolchildren in selecting only one out of these three issues were discussed. In that way from the very start the importance of giving every child a chance to be informed and express its own thoughts was introduced, and their negotiating skills were challenged as well. They proposed several ways and after discussion, agreed on one of them. The selection phase ended with choosing computers and computer classes as most important for these schoolchildren and with informing everybody in the school what has been chosen. The fact that children decided on a certain issue of importance to them, was for us, an issue strongly connected with their well-being and their health.

*Investigation of a theme* – Pertains to exploring the actual and historical state of the issue decided upon in the selection phase. This phase involved further clarification of the issue by dividing it into its components and investigating each aspect in turn. Computers and computer classes as a chosen issue was investigated through posing many questions, including: 'What does having computer classes mean to us?' 'How much money do computers cost?' 'What about other schools – do they have computers?' 'How did they get funds to buy them?' 'Who can teach this kind of subject?' 'What kind of classroom do we need?' 'When were computers invented, by whom and why?' 'Why is it so important to have computer classes right now?' After the investigation the school students made wall-posters to keep other children informed about their work.

In this phase, every child has the opportunity to choose which aspect of the chosen issue they want to work on. In addition, they have a chance to see the importance of the information in decision making process and using the data for meeting their needs. When children explore an issue in this phase, they are broadening what can be called 'knowledge about causes' and 'knowledge about effects' (Jensen, 2000). This can partly be de-motivating since it broadens the complexity of a problem, but then children are introduced to the next phase.

*Visions* – Developing one's own ideals is as important as other steps in this approach. These ideals could be represented with different kinds of media chosen by children such as drawing, sculpting, making music, role-playing, writing etc. The landscape of knowledge now embraces another important dimension – knowledge about alternatives and visions (Jensen, 2000). The children put aside the real situation and have space to fantasise on the issue they have chosen. This phase has a special setting: relaxed atmosphere, non-limited time to fantasise in places they prefer. Comparing this phase to other phases, this one is less structured, and is a very good introduction for the phase of action. Children are encouraged to start the action phase regardless of how far away their ideal may be, because any small change concerning the issue is a step further towards the ideal.

*Action* – Action phase is about planning concrete action steps and realizing them. Children make an action plan answering the questions: who, what, how and when? and then by anticipating possible barriers and finding out alternative ways of resolving them. The landscape of knowledge broadens still further to include 'knowledge of strategies for change' (Jensen, 2000).

This is how one student described their experience of this phase:

"Our first action in this phase was going to the principal and inform him about every thing we have done during our work on the project. To tell you the true we were very frightened because we did not have a chance to contact him before and we thought that he might not want to talk with us. That was a barrier for us and we did not now how to face with it. Fear was in our souls. However, in the phase of vision we learned that whatever happens we must not stop in a half way, we encouraged went to his office and the contrary happened. We encouraged that much because of the



support he expressed that we thought we are ready to do everything and to get over any other barrier. We do not know how to tell you but the fact that the principal had an ear for our needs was a step further. When we explained him our needs we felt as adults not like eight graders. We had great help from this meeting and after we wrote the application, we send it to the Ministry of education together with the principal.”

Role-play was used to help the children overcome the barriers they felt within themselves about speaking with the Principal. Writing an application was another barrier and they needed to make additional investigations about how it should be written.

A third action the students decided to undertake was to organize a meeting where they would present their work in front of the parents, teachers and other children, to provoke discussion and share their experience. Both parents and teachers were very constructive, open to self-criticism for not engaging in a dialogue with the children so far and expressed their support of children’s participation in the Health Promoting School projects. The development of good relationships between staff and pupils is central point for the Health Promoting School agenda. In this case, the increased adult interest in the children’s activities was noticeable, but it was only in the end of the project. Their altered perceptions might be a good start for future actions taken by children. This was actually the first time in the school’s history that children had initiated a debate on matters that concerned them.

## Evaluation Process and Results

The evaluation approach undertaken of the project involved naturalistic inquiry in which qualitative data were gathered (field notes, materials produced during the project etc.) and their content analysed (Patton, 1987). Open-ended questions were also used as a basis for discussions with the young people. Workshop facilitators acted as participant observers of the process and provided field notes of their observations. Thus, an internal evaluation was conducted, with an emphasis on participant experiences, interactions, decision-making patterns, and programme activities.

The main aim of the evaluation was to explore the applicability of the SIVAC approach to health education and promotion in a different context (different

country, school system and different pressing concerns) from the one in which it was originally developed. In addition, we were interested to gather information directly from the school children of their experiences of the initiative

The primary evaluation questions were:

- How did children value their own experiences, and the efforts and changes made, both during the process and once it was completed?
- Were there any differences in children's notions of health before and after being involved in this action oriented health promotion project?
- How was the S-IVAC method in education and health promotion perceived by the children as participants, in terms of its strengths and weaknesses?

The first question is fundamentally about the purpose of the health promotion initiative and evaluation and was posed on the basis that evaluation should build the capacity of individuals. Asking children to articulate their experience and to create personal meanings taking into account the whole process and not merely the end result, has the potential to contribute to the transforming effects of the project. We came up with an open question of what children count as change, so that every child could express their own point of view. When children themselves are asked to evaluate their own experience in terms of what has or hasn't been achieved or changed, then the evaluation can be seen as part of the empowering and learning process.

Changes that children expected to happen in this case did not happen. They did not get the computers. They did receive an answer from the Ministry of Education, which supported them in their striving for change. This letter was an event in the school (for the teachers also). What actually happened was a changed sense of priorities. The outcomes that children valued at the end of their health promotion enterprise differed from the original outcome they worked towards. This can be seen from their statements, describing what they valued and learned:

“More free communication with our Principal and teachers, in fact, we stopped being fearful in making contacts with the adults.”

“We learned to listen to one another.”

“We feel free to express our thoughts, even they might be wrong for someone.”

“By working on this project, we did not feel as pupils, but we feel as persons, because you listen what we have to say.”

“It made it easier for me to make decisions in life; to tell freely what’s insufficient in our school.”

“I feel more valuable, meaningful and useful.”

“If teachers knew what this work means to us they would have supported us, but the support I get from other pupils is much more important to me.”

“It would be good if we get computers, but even if we don’t, computers don’t matter that much now because now we know if we want we can make our visions become reality one day.”

The second question adheres to the constructivist epistemological paradigm since it recognizes that knowledge is a ‘constructed representation subject to continual change’ (Gendron, 2001:110). It implies that having an experience in action reflects on one’s perceptions and understanding of social reality, relationships with others, which further reflects on and transform future praxis. The change in the way children defined health can be seen in Table 1:

The third question pertains to assessing the plausibility of the method in a different context. The process of delivery is a critical element in the development of health and health enhancing strategies. Therefore, process evaluation is needed in order to know whether a lack of outcomes were due to inadequate implementation or to ineffective methodology. A continuous information feedback mechanism was established in order to adjust our interventions during each phase of the method. For instance, before moving to the next phase children summarized the outcomes of the previous stage, and spoke about their likes/dislikes, and experienced difficulties or easy parts in that phase.

From the evaluation process undertaken several things can be outlined. Every child thought that through this approach they made a difference.

**Table 1.** *Defensive and Proactive Defining of Health*

BEFORE	AFTER
<b>Healthy Family is</b>	
<ul style="list-style-type: none"> <li>• When children obey their parents</li> <li>• Where there are no quarrels</li> </ul>	<ul style="list-style-type: none"> <li>• When all members are close to each other, communicate and feel free</li> </ul>
<b>Healthy Child is</b>	
<ul style="list-style-type: none"> <li>• Who goes on the right way</li> <li>• Who associates good companions</li> <li>• Well behaved</li> </ul>	<ul style="list-style-type: none"> <li>• Aware of its own qualities, and qualities of others</li> <li>• Who has empathy when parents behave unlogically</li> </ul>
<b>Healthy school is</b>	
<ul style="list-style-type: none"> <li>• Clean, ecological</li> <li>• When the school yard is green and not contaminated</li> <li>• Clean classrooms</li> </ul>	<ul style="list-style-type: none"> <li>• When pupils feel psychologically healthy and believe that things in school depend on them</li> </ul>
<b>Healthy community is</b>	
<ul style="list-style-type: none"> <li>• When relations between people are good</li> <li>• When there is no war</li> <li>• When there is no danger</li> </ul>	<ul style="list-style-type: none"> <li>• Where everyone can express freely its ideas and thoughts, discuss about it with others</li> </ul>
<b>Healthy environment is</b>	
<ul style="list-style-type: none"> <li>• Unpolluted nature</li> <li>• Peaceful people prepared on anything</li> <li>• Clean air, clean streets and many parks</li> </ul>	<ul style="list-style-type: none"> <li>• Multinational, where there is place for everyone even for 'marsonians'</li> <li>• Depending on healthy people</li> </ul>

Participation in the project through the S-IVAC method was described in the following terms:

“...learning something new in a different way”

“...serious approach for realizing our ideas”

“...solution for many problems in every kind of situations”

In this kind of work children formed several expectations of teachers: real engagement in the project; to do and initiate something similar; to help in the realization of making things change. All children felt that this approach should be the way of teaching in their classrooms.

## Discussion

This chapter argues that within health promoting schools children ought to actively experience potentially effective shared praxis underpinned by and conducive to self-determination, co-determination and solidarity. It also gives an example of how through participation in a project for improving school conditions, children's empowerment emerges and in turn becomes a base for their new priorities. The outcomes that children valued at the end of their health promotion enterprise differed from the original outcome they strived to achieve. This contributes to the increasing attention being paid to alternative types of evidence in health promotion and is in line with the stance that evidence in health promotion is a contested issue (Raphael, 2000). Traditional quantitative data analysis approaches are inappropriate for understanding human experience which is an essential component of what constitutes health promotion activities (Raphael, 2000). The fact that children had a chance to take an active role in changing processes – to propose, to initiate, to realize action, to express their thoughts, to participate in developing their own visions, was valued more than the outcome expected in the beginning of the project. More importantly, this shift caused by their empowerment, doesn't imply lessened commitment to change things – on the contrary. The S-IVAC approach fosters action by involving children in formulating questions, collecting and interpreting data and taking action upon them, thus it provides an impetus for

change, because it relates knowledge to action. The effectiveness of the project can be attributed also to the inclusion of university students as workshop facilitators, representing for children the unspoken link to the adults' world. In addition, before taking the role of workshop facilitators as university students we were not only trained in S-IVAC methodology, but we also went through the whole process using this method working on our own projects, struggling for our own visions. This made us more competent and sensitive when deciding on workshops' contents and dynamic in the work with children; in fact, it increased the intervention efficacy. Our experience with this particular project has proved the strength of the participatory strategy in providing a rare opportunity for children in times of crises to express their potentials. In such conditions, free pupils initiatives and actions through HPS Projects are seen as a new source of a school's capacity to buffer the impact of unwilling changes brought about with social transformation. Our effort using S-IVAC as a tool can be simply described as stimulating children inside the context of their own experience. This stance adheres to Vygotsky's thought about the nature of learning process – that knowledge is built in social context, in which each individual is affected significantly by the actions and ideas of others, and is complementary to Freire's view that knowledge and values exchange take place in a dialogic process.

Interestingly, one child's statement, serves to highlight the importance of a discussion about the moralistic vs. democratic paradigm within education as a whole:

“By working on this project, we did not feel as pupils, but we feel as persons because you listen what we have to say”

Two points can be mentioned relating to this statement. First, the notion of 'pupil' is distinguished from the notion of 'person'! They are felt like contrasting constructions. Second, being a person implies having a negotiating power whereas being a pupil involves having no power to negotiate. This confirms the view expressed earlier that children's empowerment and children's genuine participation is possible only within the context of relationships in which adults are prepared to listen and share power.

The next critical point for the HPS initiative is working to ensure that enhancing children's ideas and supporting their participation becomes part of

our daily practices. [Single experience in action oriented teaching versus sustained educational experience is thus an important issue to be considered (see also Ferreira and Welsh, 1997).] Selected data on a representative sample from a recent survey of the attitudes of 13- to 15-year-olds in Denmark (see Jensen and Jensen, 2002) on health, inequality in health and action for health, indicate that:

‘...pupils have substantial action competence but are given relatively few opportunities to apply it. Thus, the challenge for schools is not to develop pupils’ action competence [which they already have according to the results....] but to find opportunities to allow pupils scope for action’ (Jensen and Jensen, 2002: 32).

This finding doesn’t expel action competence as an overrated issue from the curriculum of the HPS, but rather emphasizes the importance of generating greater scope for action, so that action competence can be really exercised and enhanced as a sustained experience.

Underneath pupils’ competence to act in relation to health, lies one important issue – their notion of health. Besides the changes in children’s priority in the given case example, changes observed in the children’s perceptions and notions of health is also of strong relevance for the plausibility of the S-IVAC method in a different cultural context. Defensive and narrow definitions of health (with negative premises and focus on physical health) were apparent at the very start of the project, reflecting the existence of moralistic education paradigm. At the end, in contrast, children’s definitions of health were positive and holistic recognizing the interdependency of the elements. It is important to note that this change was not due to any discussions about the notion of health through the process, but rather was an intermediate effect from their participation in an action-oriented project. A typical question asked from the position of ‘local pragmatism’ (Sarkanjac 2001: 42, see footnote 1) would be: ‘Ok, children redefined health, so what?’ Our response would be to agree that notions in themselves don’t lead to action, yet ideas are action-connected and important for at least two reasons. First, they influence how children behave in regard to their health, with very real consequences-positive or negative, in other words, they are related to their behavioural patterns, more often referred as ‘lifestyles’. Hence, it is argued that children’s participation should include defining the concept of health itself. And second, discussions of adults on children’s health

including the perspectives of children, their own views and interpretations of different health dimensions could bring a broader understanding focus to the issue, allowing for listening to children to become an equally important policy-making tool since their notions often reflect both their visions and the gaps in adults' practices.

The final issue to be addressed is the foundation of lifestyles – living conditions. Not only should children participate in defining the concept of health itself but this discussion must be broadened to include the inequality dimension. Are living conditions considered as determinants in children's notion of health? What are children's viewpoints towards different determinants of health? As Jensen and Jensen (2002) note:

'Inequality in health must become an important topic in future health education if schools are to play a role in strengthening the potential of future generations to contribute to reducing inequality in society.'  
(Jensen and Jensen, 2002: 21).

Including children's understanding of social inequalities in health is therefore another implication for future actions of the Health Promoting Schools.

Hopefully, the results reported here, together with findings from similar initiatives can become a starting point for other participative action oriented approaches in schools in order to make them truly health promoting.

## Conclusion

Several conclusions and implications related to health promotion in children can be outlined:

The debate over moralistic vs. democratic paradigms in health education is still an ethical issue within health promotion practice since it is strongly connected with adults' perception of children and their manifested attitudes towards them. Existing adults' constructions of children as passive subjects and active agents reflects as parallelism in children's constructions of themselves as pupils and persons. Additionally, the debate over genuine participation of children (in HPS projects for instance) is also a response to adults' practices (not praxis). Hence, the needed teacher's competencies should be underpinned by the values of self-determination, co-determination and solidarity as well.



The change in children's priorities as a result of their empowerment affirms the need for greater pluralism in considering the nature of evidence in health promotion. Evidence should extend to the lived experience of children as an essential component of health promotion activities, to the meanings and interpretations provided to events by individuals, because what qualifies for evidence is influenced by constant interaction between facts and values, the existing worldviews. Moreover, 'changes that occur as a result of health promotion activities are complex, emergent, and frequently unique to individuals and situations' (Raphael, 2000: 358). At the same time, the effectiveness and quality assurance in health promotion must focus on enabling and empowerment (Raphael, 2000) because health promotion is about enabling people to improve their health.

The S-IVAC method has proven to be a powerful tool for children to build and exercise through genuine participation their action competence and plausible in a different cultural context. Highly participatory learning tools such as S-IVAC can contribute to generating greater scope for action and thus making action competence a sustained educational experience within the HP Schools.

Children's participation should include defining of the concept of health itself. Moreover, the discussion with children should include their understanding of social inequalities dimension, the living conditions and attitudes towards the determinants of health, especially because HPS ethic strives for creating generations that will contribute to a better society. In other words, Health Promoting Schools should provide opportunity for children to experience potentially effective shared praxis underpinned by and conducive to self-determination, co-determination and solidarity.

## Footnotes

1. Sarkanjac argues that this question which refers to anything brought from outside into the world of the local values, turns into philosophical and is part of the catachresis as a modality of resistance to 'epistemic violence' (Spivak's term) opposed by the Western theoretical establishment. In it, the knowledge is not rejected, but (mis)used. From a political perspective, accepting the necessity of the catachresis as a modality of resistance, Sarkanjac refers to more fundamental questions of one's own identity, personal efficacy, language, history, nationality, while I here use it from the position of an author rejecting the delay of efficacy or action which is also one integral aspect of that local pragmatism position.

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## Upbringing as a Way of Supporting Adolescents' Health Learning – Views of Parents in the Finnish ENHPS

*Hannele Turunen, Kerttu Tossavainen and Harri Vertio*

### Introduction

The study is a part of the Finnish European Network of Health Promoting Schools Project. Finland joined the European Network of Health Promoting Schools (ENHPS) in 1993 (Tossavainen et al., 2004). The mission of the Finnish ENHPS emphasises collaboration with families as one of the core principles of action and support for families in bringing up their children is very important. They are also in line with the Egmond Agenda that was formulated in 2002 as a resolution of a conference held to discuss the progress of health-promoting schools in Europe. The Egmond agenda underlines the importance of fostering relationships between schools and families as a new tool to help to establish and develop health promotion in schools and related sectors across Europe. The previous study of the Finnish ENHPS reported advance in line with the goals of the programme. The teachers mentioned most commonly as a positive event related to health promotion in the schools 'the special school health day' that was planned and implemented in collaboration with parents, pupils, school nurses and other agencies (Turunen et al., 2004).

In Finland progress has been made in the health and education policies in line with the objectives of ENHPS. Firstly, the government resolution on the Health 2015 public health programme by the Finnish Ministry of Social Affairs and Health (2001) emphasises health promotion as a key target in each phase of the lifespan. In promoting the health of children and adolescents, the resolution presumes cooperation with parents and schools. Secondly, when the Finnish Government amended the law on comprehensive schools, health knowledge became a compulsory subject for all class levels. Additionally, cooperation

between schools and parents was emphasised in the national curriculum. This administrative document defines the school-parent co-operation in such a way that children and adolescents live in the spheres of influence of both school and home, which requires interaction and co-operation between them in supporting healthy growth and high-quality learning. The national framework curriculum constitutes the basis for drawing up local curricula, which is usually done by municipalities. The practices of school – parent co-operation should be defined in the curriculum at the school level in co-operation with the municipal social and health care authorities (National Board of Education 2004).

The partnership between school, family and community has been identified as a key condition enabling the implementation of comprehensive school health approaches (Deschesnes et al., 2003). Deschesnes et al., (2003, 391) point out that parents and community as stakeholders should be part and parcel of the partnership between school, family and community and participate in the decision-making process and work jointly towards enhancing personal development, social integration and educational achievement of children.

Many indicators show that Finnish society has succeeded in implementing health care and education for children and adolescents. In the Human Development Annual Report 2001 published by the United Nations Development Programme (UNDP, 2001), Finland was ranked tenth in the world. Additionally, the Report of State of the World's Mothers 2001 published by Save the Children (2001) shows that Finland ranks fourth among 94 countries on the Mothers' index and first among 144 countries on the Girls' investment index. Furthermore, Finnish young people seem to manage well at schools, as shown by the OECD (Organisation for Economic Co-operation and Development) PISA (Programme for International Student Assessment) study, which provided international comparative data on schooling. The PISA (2001) study carried out in 2000 compared 15-year-old pupils' performance on reading literacy, mathematics and science in 32 countries (28 OECD and four other countries). The results showed Finland to be the top country in reading literacy, third in science and fourth in mathematics. Social background correlated with pupils' performance in Finland, as in the other countries: pupils with high-status social background performed better compared to those with a less advantageous background, but in Finland the difference was smaller than the OECD average. (Väljjarvi et al., 2002, Willms 2003) These rankings are naturally very satisfactory from the Finnish perspective.

However, it was surprising that, in the PISA study, Finnish pupils and especially principals evaluated the school climate to be much more negative than the average in the other countries. Finnish comprehensive school is facing problems caused by social development and changes in pupils' values and behaviour patterns. (Väljjarvi et al., 2002) Furthermore, Finnish young people show seriously unhealthy behaviours. The ESPAD (European School Survey Project on Alcohol and Other Drugs) study of 30 European countries showed that the prevalence of smoking among Finnish adolescents aged 15-16 years has stabilized around 27%, and in an international comparison, intoxication during the last 12 months was more common among Finnish young people (73%) than the average for the other countries (52%). Moreover, Danish (39%), Finnish (29%), British (28%) and Irish (27%) adolescents had been drunk 10 times or more often in the past 12 months. Lifetime experience of illicit drugs was much less common in Finland (10%) compared to some other ESPAD study countries, such as the United Kingdom (36%) or the Czech Republic (35%), but it is increasing all the time. (Hibell et al., 2000) Depression has also increased among young Finns. Pelkonen et al., (2003) found that 13% of females (n=116) and 9% of males (n=69) had depression in young adulthood. Additionally, overweight and obesity of children and young people have also increased (Rimpelä et al., 2004).

At present, the unhealthy behaviours of young people are a very important topic of public discussion in the Finnish society – why do young Finnish people use intoxicants that much? And who has primary responsibility for the upbringing of children – the parents or the authorities or both? These questions seem to be common in other countries, too (e.g. Hill and Morton 2002). The reasons for that have been searched at the macro level from phenomena inherent in Finnish society, such as unemployment and polarisation of the population, as well as at the micro level from the changes in the structures and functions of Finnish families. It is clear that school is a very important health promotion arena for pupils, but it could also be a health promotion arena for parents and families and serve as a forum for pupils and adults (teachers, parents, school nurses, school doctors, etc.) to discuss and share opinions and views of health issues collaboratively. In developing health knowledge and ways to understand pupils, the significance of family and especially the parents is evident. The crucial questions are: How aware are parents of their role in parenting their children from the health perspective? For example, what kind of values do they relate to health, and do they have enough updated knowledge of health issues

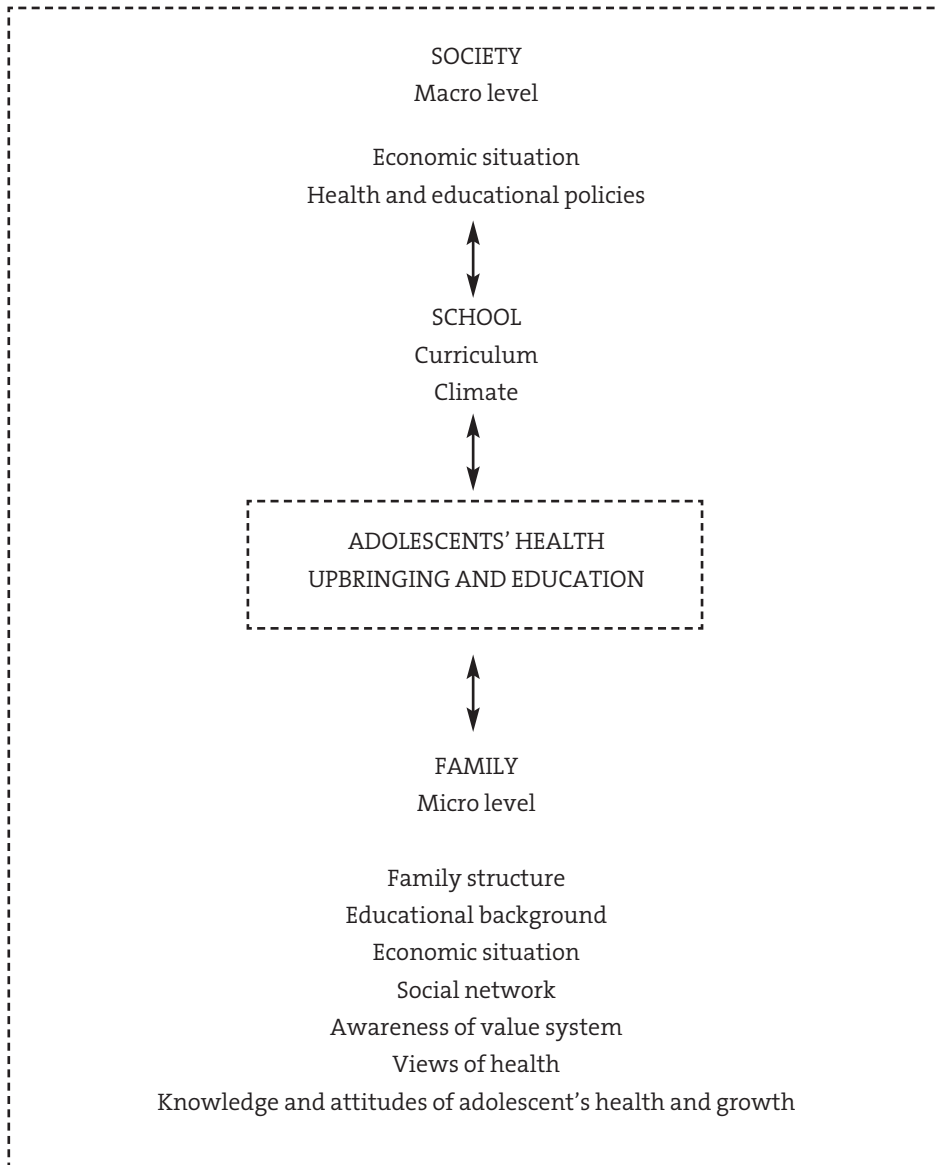
in rapidly changing information society? This paper focuses on the assessments of Finnish parents whose children study in the schools that belong to the ENHPS programme concerning the upbringing of their children to adopt healthy lifestyles.

## Co-operation between Schools and Parents in the Health Education of Children

The overall goal of education is to promote pupils' learning and growth into citizens who are well balanced and have healthy lifestyles. Additionally, education sustains parents' primary responsibility for upbringing their children. However, Good et al. (1997) noticed in their case study that the roles offered to parents by school officials are frequently limited, and insufficient communication may leave parents out of the decision-making processes. Henricson and Roker (2000) emphasised that there is growing recognition of the fact that the parents of teenagers need support, because it seems that the extent to which parents should control the behaviour of their adolescents in relation to sex, health and day-to-day activities is unclear. Koetting O'Byrne et al. (2002) found in their study concerning parenting style and adolescent smoking that parenting styles with high levels of intimacy and autonomy, which are characteristic of a healthy parent-child relationship, supported adolescents' non-smoking. In addition to adequate parenting styles, parents may need more knowledge about issues that affect health. Allott and Paxton (2000) found in their study that parents and teachers lacked confidence, knowledge and skills in discussing drugs with young people.

It is important to recognise features that characterise families fostering children's healthy growth (Figure 1). Lee and Goddard (1989) present the following seven characteristics of well functioning and healthy families: 1) time and involvement for being together, 2) shared power, decision-making and rules among family members and a balance between limits and flexibility, 3) loyalty and unity that emerge as a commitment to family welfare, 4) values and religious orientation, which give a strong moral base of values and spiritual beliefs, 5) emotional closeness and support between family members with expression of positive feelings and appreciation for each other's efforts and accomplishments, 6) open and clear communication without blaming others for their feelings and 7) coping and problem-solving with confidence in their ability to face and solve problems.

**Figure 1.** Features related to adolescents' health upbringing and education





## Purpose of the Study

This study examined parents' evaluations concerning how they support the healthy growth of their children in the age range of 13-16 years who studied in the Finnish ENHP schools. The following specific research questions were addressed:

- 1) What kind of upbringing values do parents sustain to promote adolescents healthy growth?
- 2) What kind of upbringing attitudes do parents hold concerning adolescents healthy growth?
- 3) What kind of knowledge do parents have about adolescents healthy growth?

## Data, Methods and Participants

The data were collected using a semi-structured questionnaire from the parents (N=471) of pupils aged 13-16 years in two Finnish European Network of Health Promoting Schools. The questionnaire included background questions and Likert-type items (1= very important / much, 2= important / much, 3= somewhat, 4= not very important / little, 5= not at all important / very little) related to the research questions. The response rate was 63%. The data were analysed statistically using frequencies and percentages by SPSS/WINDOWS.

The respondents were mostly pupils' mothers (89%). More than half of the parents (61%) were 40-49 years old. The youngest was 27 and the oldest 71 years old. Most of the parents (87%) were married or co-habiting, 9% were divorced, 2% were single, and 2% were widowed. The most common basic education of the parents was elementary school (42%), and about one quarter had senior secondary school education. The parents' professional education included vocational education in 42% of cases, college education in 28% and university education in 10% while 20% of the parents had no professional education. Many respondents were employed full-time (72%) and considered their family's economic situation to be relatively good (61%).

## Results

Table 1 shows the parents' assessments concerning their upbringing values. The parents appreciated family-internal values, such as family members' health, close relationships between family members, good future of children and harmony in family life as very important values and a basis of their upbringing, whereas being together with the whole family, relationships outside the family and societal activity were not considered equally important values in upbringing.

**Table 1.** Parents' assessments of their upbringing values (n= 298)

Upbringing values	% Importance				
	Very	Fairly	Unsure	Little	Not at all
Health of family members	94	6			
Close relationships between family members	91	9			
Future of children	87	12	1		
Harmony in family life	83	17			
Being together with the whole family	63	36	1		
Work	59	40	1		
Education	57	40	2	1	
Balance between work and leisure	56	39	5		
Good physical condition	52	45	2	1	
Healthy food	45	53	1	1	
Enjoyment of life	44	47	5	4	
Family's financial well-being	38	60	2		
Relationships outside family	33	60	5	2	
Healthy lifestyle	32	62	5	1	
Hobbies / leisure time interests	25	65	8	2	
Religion	15	44	14	20	7
Variety in everyday life	10	53	21	14	2
Slim figure	3	36	17	38	6
Youthful look	2	30	19	38	11
Societal activity	2	37	23	30	8

Table 2 presents the parents' assessment of their upbringing attitudes, which shows that they considered as important the acceptance of adolescents and close and openly trusting relationships between family members. Surprisingly, the Finnish parents' upbringing attitudes like polite and good manners of adolescent, enjoyment of school, pleasant leisure time activities, good relationships with relatives and spending time with the family were less emphasized.

**Table 2.** Parents' assessments of their upbringing attitudes (n= 298)

Upbringing attitudes	% Importance				
	Very	Fairly	Unsure	Little	Not at all
Adolescent feels him/herself to be accepted in the family the way she/he is	91	9			
Adolescent has close and openly trusting relationships with family members	90	10			
Adolescent's health is good	88	12			
Adolescent would not damage her/his future with unhealthy lifestyle choices during adolescence	83	17			
Adolescent can express her/his feelings openly by talking	82	18			
Adolescent accepts diversity and respects other people	79	18	3		
Adolescent has good friends, with whom she/he can trust and who she/he can discuss important things	73	25	1	1	
Adolescent enjoys her/his life in her/his youth	72	25	2	1	
Adolescent is polite and has good manners	58	40	2		
Adolescent has friends with whom she/he spends her/his time	54	42	3	1	
Adolescent enjoys school	51	48	1		
Adolescent has pleasant leisure activities	48	48	4		
Adolescent keeps up her/his relationships with relatives	21	65	8	6	
On weekends adolescent spends her/his free time with family	21	62	12	5	

The parents assessed the amount of their knowledge concerning intoxicants, adolescents' development and maintaining adolescents' health and wellbeing. Overall, they appeared to lack knowledge about intoxicants, as the proportion of parents with much knowledge varied within 18-54%. More than half of the respondents assessed themselves to have little or no knowledge about the signs of adolescents' drug use (Table 3).

**Table 3.** *Parents' assessments of their knowledge of intoxicants (n= 298)*

Intoxicants	Amount of knowledge %				
	Very	Much	Some- what	Little	Not at all
Harmful effects of smoking on adolescent's health	54	40	6		
Harmful effects of alcohol on adolescent's health	51	42	6	1	
Harmful effects of drugs on adolescent's health	50	39	10	1	
Harmful effects of joint use of medicines and alcohol on adolescent's health	50	28	10	12	
Harmful effects of solvent abuse (sniffing glue etc.) on adolescent's health	43	37	14	6	
Harmful effects of snuff on adolescent's health	39	30	20	8	3
Signs of drug use in adolescents	18	30	36	13	3

Furthermore, the parents considered their knowledge concerning adolescents' development inadequate (Table 4). Many parents said they had only some or little knowledge about the changes in adolescents' behaviour related to puberty, adolescents' development into independent and responsible adults and the changes in adolescents' emotional life and ways of thinking.

**Table 4.** *Parents' assessments of their knowledge of adolescent development (n= 298)*

Adolescent development	Amount of knowledge %				
	Very much	Much	Somewhat	Little	Not at all
Changes in adolescent's body during puberty	42	44	13	1	
Adolescent's sexual development	32	48	19	1	
Changes in adolescent's behaviour during puberty	27	48	22	3	
Adolescent's development into independent and responsible adult	26	49	23	2	
Changes in adolescent's emotional life	21	49	26	4	
Changes in adolescent's way of thinking	19	46	32	3	

Table 5 indicates that the parents lacked knowledge of many common issues related to maintaining adolescents' health and well-being, such as the meaning of parents to adolescents, adequate night time sleep or rest and the significance of exercise and friends. The proportion of parents with 'very much knowledge' in these areas varied from 14 to 43%. The parents appeared to lack knowledge especially about the services of school health care and the symptoms of depression in adolescents.

## Discussion

The results show that the Finnish parents of secondary school pupils emphasized family-centred values, such as the health of family members and close relationships between family members, and that their upbringing attitudes

**Table 5.** *Parents' assessments of their knowledge of maintaining adolescent health and well-being (n= 298)*

Maintaining adolescent health and well-being	Amount of knowledge %				
	Very much	Much	Somewhat	Little	Not at all
Meaning of parent to adolescent	43	48	9		
Adolescent's adequate night time sleep/rest	42	49	9		
Prevention of sexually transmitted diseases in adolescents	39	43	16	2	
Meaning of exercise to adolescent's well-being	37	48	15		
Meaning of friends to adolescent	34	54	11	1	
Adolescent's healthy diet	33	51	15	1	
Suitable contraceptive methods for adolescents	30	40	27	3	
Adolescent's skin care (spots, acne)	29	45	24	2	
Services of school health care	26	44	27	3	
Acting in emergency situation at home	20	36	39	5	
Symptoms of depression in adolescents	14	30	43	12	1

were also family-centred. These family-centred values are characteristic of well functioning and healthy families, as concluded by Lee and Goddard (1989) based on their review of family models. In that respect, the pupils in the ENHP schools had good prerequisites for healthy growth. Values and attitudes related to external relationships, such as relationships outside the family or with relatives, and societal activities were appreciated less highly. Similar results emerged in the PISA study. Social communication was less common in Finnish families compared to the OECD average (Väljörvi et al., 2002). Also, in our earlier study on the use of collaborative teaching and learning methods in the Finnish ENHP schools, only 21% of the responding teachers considered collaborative methods to be commonly used in their schools (Turunen et al., 2000). However, the shift towards collaborative teaching and learning methods helps to empower pupils to take real responsibility for their actions in the long run (Jensen 2000, Tossavainen et al., 2004). The fact that pupils learn to share their views and to argue for health and choices related to health openly with

their classmates and teachers, hopefully deepens their acquisition of appropriate health knowledge and also develops the important skills to make health-related choices generally in life. This is an important development task even in school – parent cooperation. It would be important to outline jointly strategies to educate and bring up children so that they grow into empowered citizens and capable of taking care of their healthy lifestyle. As a matter of fact, the teachers in the Finnish ENHPS have already noticed this and started to work towards this goal. They reported that the most positive event that had taken place in their school during the time the school had belonged to ENHSP was the collaboration with pupils and parents in planning and organizing the school health day in an extended process (Turunen et al., 2004). This is in line with Lee and Goddard's views who emphasise the importance of enlarging health education from the pupils to the whole families.

The present results showed that parents lacked knowledge of even 'traditional' issues, such as smoking, alcohol and, especially, drugs. Drug use among adolescents has been a minor problem in Finland, but it has been increasing rapidly. Moreover, the responding parents assessed themselves to lack knowledge about adolescents' development as well as even such everyday issues as the adequate amount of sleep, exercise and healthy nutrition. Several parents reported a lack of knowledge of school health services and symptoms of depression. However, parents have a very essential role in recognizing and helping their children to get help for depression. It is clear that Finnish parents need more high-quality health knowledge and opportunities to discuss adolescents' health issues. Healthy schools are important arenas and 'role models' for other schools, firstly, because they act actively with both parents and pupils to give and share high-quality health knowledge collaboratively in order to promote adolescents' health and wellbeing, and secondly, because they disseminate their good practices in other schools, too.

In Finland, the National Comprehensive School Curriculum presumes co-operation between schools and parents and it is evident that parents should be encouraged to discuss more broadly health topics with their children to support adolescents' health learning and healthy behaviours. Our previous studies show that Finnish ENHP schools are working to strengthen the school – parent collaboration. In addition school health personnel are important partners in this co-operation, and they should have up-to-date health knowledge to be shared in joint situations (e.g. Tossavainen et al., 2004, Turunen et al., 2004). The announcement of Deschesnes et al. (2003) highlights the importance of the

partnership between school, family and community as a key condition to furthering the implementation of comprehensive school health approaches, and that is the aim in developing health promotion further in the Finnish ENHP schools.

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**Section III**  
**Comparative Studies**



20

## The Development and Evaluation of a Mental Health Promotion Programme for Post-Primary Schools in Ireland

*Mary Byrne, Margaret Barry,  
Saoirse NicGabhainn and John Newell*

### Introduction

This chapter describes the development, implementation and evaluation of 'Mind Out' a curriculum-based module promoting positive mental health amongst 15-18 years olds in the Irish school setting.

The health promoting school framework includes the curriculum as one of its three major components (WHO, 1997). Traditional topic-based approaches to health education have, however, been found to be of limited value (Mentality 2001; Lister-Sharp et al., 1999). Instead, multi-component programmes that target multiple health outcomes in the context of a co-ordinated whole-school approach have been found to be the most consistently effective (Patton et al., 2002; Greenberg et al., 2001a). According to this framework, preventive interventions are directed at risk and protective factors rather than at specific problem behaviours, and the focus is on the promotion of resourcefulness and generic coping skills.

Such an approach calls for comprehensive classroom-based health education programmes, developing broad-based skills and social competencies that address the predictors of multiple health behaviours in young people. Within this context there is an opportunity to apply generic personal and social skills to defined topics. One such area is mental health.

Mental health has been defined as:

The emotional and spiritual resilience which enables us to enjoy life and to survive pain, disappointment and sadness. It is a positive sense of well-being and an underlying belief in our own and others' dignity and worth (Health Education Authority, 1997).

Mental health is a resource not only for individuals but for their communities and the wider society (Harden et al., 2001). The World Health Organization, in collaboration with the World Bank, has estimated that by the year 2020 mental health problems will become the greatest burden of disability in the developed world (Murray and Lopez, 1996). Amongst young people and children, epidemiological data suggest that the overall prevalence of mental health problems can be up to 25% at any one time (Mental Health Foundation, 1999).

The school setting has been repeatedly endorsed as a major setting for mental health promotion (e.g. WHO, 2001; USDHHS, 1999). A number of publications in recent years have reviewed school-based interventions aiming to promote positive mental health (Mentality, 2003; Patton et al., 2002; Greenberg et al., 2001a; Harden et al., 2001; Wells et al., 2001; IUHPE, 1999; Lister-Sharp et al., 1999; Durlak and Wells, 1997; Tilford et al., 1997). The international evidence-base to date has led to a general consensus that while there is a need for further research, 'it is possible to have a positive impact on children's mental health through school-based programmes' (Wells et al., 2001:84). It is also acknowledged that the benefits of mental health promotion in schools can extend far beyond the prevention of mental disorders, into multiple domains of functioning (Barry, 2002).

In Ireland, Social, Personal and Health Education (SPHE) is a broad-based curriculum programme focusing on the development of generic skills for health within a supportive whole school environment (Department of Education and Science, 2000). The Irish Network of Health Promoting Schools was established in 1993 (Lahiff, 2000). SPHE is due to be introduced as a mandatory subject for 15-18 year olds from September 2006. This project sought to meet the need for high-quality resources on positive mental health for teachers to implement the new SPHE curriculum with this age group. Thus the *Mind Out* programme was designed to be delivered within the context of a broader health education framework (SPHE), and to be embedded within the even wider context of the supportive school culture and ethos of a health promoting school.

## Programme Development and Implementation

The content of the programme is rooted in the theoretical literature surrounding risk and protective factors associated with positive mental health in young people. At the individual level these factors include: coping style, repertoire of

coping skills, social competence, cognitive style, positive self-related cognitions, self-esteem, optimism, locus of control, supportive relationship with an adult, positive peer relationships, attachment to and networks within the community, and access to support services (Mentality, 2001; Commonwealth Department of Health and Aged Care, 2000b). Thus the aim was to strengthen protective factors and reduce risk factors in order to enhance young people's resilience in the face of stress (Davis et al., 2000).

Programme materials were developed in consultation with teachers, pupils and health promotion practitioners. The consultation process allowed identification of themes and issues that were relevant to the eventual programme users. This was followed by a review of international programmes and evidence in the area. Existing programmes were assessed with a view to compiling a balanced selection of items that would complement each other while meeting the needs expressed by students and teachers. Many of the *Mind Out* components were drawn from two programmes in particular: the Australian *Mind Matters* programme (Commonwealth Department of Health and Aged Care, 2000a) and the Irish *Lifeskills* materials (McAuley, 1996; 1997). The draft *Mind Out* materials were the subject of a pilot study (Byrne and Barry, 2001) before the main evaluation study took place with revised materials.

The programme aims to provide opportunities for young people to promote their own mental health through an exploration of stress and coping, sources of support, emotions, relationships, and supporting others. The specific objectives of each session are detailed in figure 1.

Two programme manuals were compiled, one containing ten curriculum-based sessions for implementation during the first year of the programme, and the second containing three 'booster' sessions designed to follow on from the original ten in the second year. Most of the thirteen sessions include some activity-based exercise (e.g. moving to different corners of the room to indicate choices, playing a team game) as well as time for reflection and discussion, either in small groups or as one large group. Students are rarely required to write, and the emphasis is on experiential learning.

### **Teacher Preparation and Support**

One or more teachers from each of the randomly selected intervention schools in the main study (see below) volunteered to deliver the module and agreed to attend a training session beforehand. Four regional one-day training sessions were attended by 33 teachers from 22 schools. During the day, teachers:

**Figure 1.** *Programme content and objectives*

TITLE	OBJECTIVES
<b>Year 1</b>	
Session 1 Setting the Scene	Establishing the focus and rationale for the module; Exploring understandings of 'mental health'
Session 2 How Young People Cope	Identifying a range of positive coping strategies suitable for different situations of challenge or stress.
Session 3 Is it the Same for Boys and Girls?	Exploring gender differences in coping styles.
Session 4 Group Support	Examining the negative and positive effects which groups can have on individuals; Raising awareness of networks of family and friends as sources of support.
Session 5 Managing Emotions 1: Dealing with Anger & Conflict	Exploring appropriate ways to express anger and to deal with situations of conflict.
Session 6 Positive Self-Talk	Learning to use rational thinking skills to control negative thoughts and emotions.
Session 7 Managing Emotions 2: Dealing with Rejection & Depression	Discussing the feelings of rejection & depression and how to deal with them positively in oneself & others.
Session 8 Visitor	Showing the 'human face' of professional and voluntary mental health support services.
Session 9 Getting Help	Improving attitudes towards seeking help.
Session 10 Conclusion	Concluding the programme appropriately, according to what has arisen in previous sessions.
<b>Year 2</b>	
Session B1 Stress Spotting	Exploring the role of images, metaphor and language in shaping how we cope with or perceive stressful situations.
Session B2 Mope, Hope or Cope	Building a collection of coping strategies which can be drawn upon during stressful or challenging times.
Session B3 Guided Relaxation	Experiencing a practical relaxation technique in the form of a guided relaxation on a cassette tape.

- explored meanings of mental health and mental illness and the rationale for school-based mental health promotion;
- learned what young people themselves have said about issues affecting their mental health;
- examined the *Mind Out* programme materials together;
- discussed expectations, hopes and concerns about teaching the programme.

After the initial training session, ongoing telephone support and consultation was offered to the teachers for the duration of the programme. In addition, a six-page introductory section to the Teacher's Manual gave important guidelines such as 'dealing with difficult situations in the classroom', 'factors enhancing resilience' and 'the role of the teacher'.

Teachers were asked to keep in mind a number of procedural guidelines when implementing the module, as follows:

- *Mind Out* should be delivered in the context of a wider health-education programme and not as a stand-alone module;
- the Teacher's Manual should be followed as closely as possible;
- teachers delivering the programme should have some previous experience of teaching health education;
- small class sizes are beneficial;
- a double class period is preferable over a single period;
- the programme should be delivered at least once a week over ten consecutive weeks, with the booster sessions taking place one year later;
- ground rules should be agreed between the class and teacher during the first session.

## Research Methodology

The evaluation study was designed to assess a number of aims, three of which are the specific focus of this paper:

- to assess the impact of the programme on pupils' knowledge and awareness of mental health issues, their attitudes towards mental health difficulties in others, their hypothetical behavioural intentions and their general mental well-being and coping skills;



- to investigate whether the programme effects are greater than those of a standard health education programme;
- to explore the effects of different levels of teacher fidelity to the process of programme delivery.

### Study Design

The evaluation research study employed a randomised controlled experimental design, with measurement up to one week before and one week after implementation and again at 12-months follow-up, using the written questionnaire described under 'measures' below. Figure 2 illustrates the design of the first year of the study, which is then explained in more detail:

**Figure 2.** *Study design*

CONDITION	INTERVENTION PROGRAMME (n=521)		NO PROGRAMME (n=539)		STANDARD PROGRAMME (n=692)	
	Solomon 1	Solomon 3	Solomon 2a	Solomon 4a	Solomon 2b	Solomon 4b
TIME 1	Pre-test (n=307)	-	Pre-test (n=341)	-	Pre-test (n=349)	-
	Intervention	Intervention	-	-	Standard Programme	Standard Programme
TIME 2	Post-test (n=218)	Post-test (n=303)	Post-test (n=268)	Post-test (n=271)	Post-test (n=207)	Post-test (n=485)

### *Use of Two Control Groups*

One of the questions posed by the study was whether the *Mind Out* programme could have particular positive effects beyond those that might be achieved by a more general health education programme without an explicit focus on mental health issues. This was assessed by employing two types of control group – Standard Programme (SP) and No Programme (NP). SP groups were defined as those who received a regular (e.g. weekly) health education or personal development class during the time that the intervention group was receiving the *Mind Out* programme. NP groups were defined as those who received no formal classes in health education or personal development.

### *Use of the Solomon Design*

The Solomon Four-Group Design was used to detect the presence of any 'pre-test sensitisation' (Solomon 1949). Pre-test sensitisation means that the exercise of completing a baseline questionnaire before beginning the programme influences the students' response to the programme. Any significant effects found after the programme may be due to the baseline questionnaire (pre-test) rather than the programme itself, making it impossible to generalise results to a non pre-tested population. By asking only half of the pupils in each group to complete a questionnaire at pre-test stage, the Solomon Design adds a higher degree of external validity to the study in addition to its internal validity, and is therefore 'the most desirable of all the...basic experimental designs' (Helmstadter 1970:110).

### **Sampling**

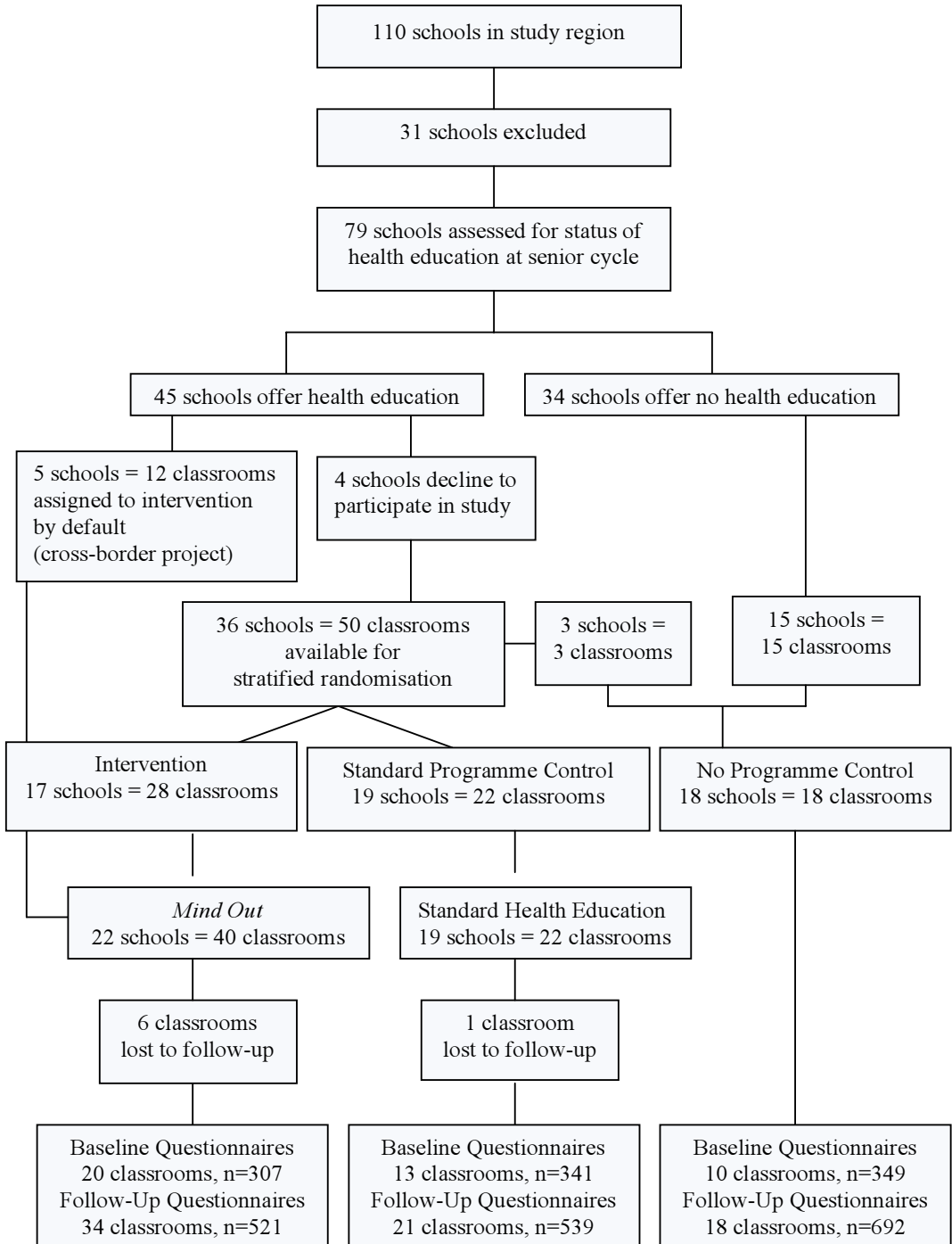
There were 110 schools in total in the study region, which was geographically defined by funding authority boundaries. Figure 3 illustrates how schools were assigned to each condition. Thirty-one schools were excluded from the study (because of participation in the pilot study or another mental health programme, remote location or use of Irish as a primary language). The remaining 79 schools were assessed by telephone interview with the principal, deputy principal, or class co-ordinator for the degree of health education offered to 15-18 year olds. Thirty-four schools were found to offer no formal health education to this age group, and therefore could not be considered as intervention schools.

Forty-five schools were eligible to deliver the *Mind Out* programme. Five of these were automatically assigned to the intervention group, as they were involved in a wider cross-border community-based mental health promotion project which was linked to this study. Forty schools were invited to participate in the study, either as intervention schools or as Standard Programme control schools. Four declined to participate.

The remaining 36 schools were stratified according to the following variables:

- Size of school (greater or less than 300 pupils)
- Gender structure of school (mixed, boys only, girls only)
- Urban or rural location (town with greater or less than 5000 inhabitants).

Figure 3. Flow of pupils through the study



They were then randomly assigned to Intervention or Standard Programme Control conditions. The control group was over-assigned in the expectation of greater attrition from this group.

When the numbers for these groups were finalised, an equivalent number of students was sought to make up the No Programme Control Group. The 34 schools where 15-18 year olds received no formal health education classes were stratified and randomly selected until the desired number of clusters had been reached. A number of students attending three of the Standard Programme schools were found not to be receiving health education classes at the time of the study, and they also joined the No Programme Control group.

Approximately half the students in each group completed baseline questionnaires, according to the Solomon Four-Group Design. A total of 997 valid questionnaires were completed at this time.

Thirty-four clusters of students began receiving the *Mind Out* programme. Six intervention classrooms and one Standard Programme Control classroom were lost to follow-up. A total of 1752 students across the three conditions completed follow-up questionnaires.

## Measures

A combination of qualitative and quantitative techniques were used in a triangulation of methods to ensure the validity of the study (Nutbeam 1998; Phillips et al., 1994). Five different approaches were used: pre-post written questionnaires for students, activity-based evaluation workshops for students, weekly written process reports for teachers, post-intervention review sessions for teachers, and school ethos questionnaires.

This paper will focus on the results of the main evaluation measure, a pre-post written questionnaire for students. The questionnaire has been developed and piloted with young people in recent years (Byrne et al., 1999). It was designed to assess the impact of the programme on pupils' knowledge and awareness of mental health issues, their attitudes towards mental health difficulties in others, their behavioural intentions and their general mental well-being and coping skills. The questionnaire included:

- A vignette (Barry, 1994) describing a person their own age ('Joe') showing symptoms of depression. Respondents are questioned about their levels of concern, possible causes and solutions, hypothetical behavioural intentions in reacting to the case, help-seeking behaviours and attitudes to professional services.

- Five items assessing self-rated personal skills relating directly to the content of the programme, such as dealing with anger and conflict, positive thinking and talking about emotions.
- The GHQ-12, a shortened version of the original 60-item General Health Questionnaire (Goldberg, 1972), a widely-used measure of psychological distress.
- The 'Brief COPE', an abbreviated 28-item version of the COPE inventory, a multi-dimensional scale assessing a broad range of coping responses (Carver et al., 1989; Carver, 1997). Nine of the fourteen coping scales were employed as variables of interest in this study.
- Pupils' attitudes towards the programme itself were also assessed using a combination of open-ended and closed-ended questions.

### **Analysis**

When intact social groups (e.g. classrooms or schools) are assigned to study conditions, as in this study, standard statistical techniques are inappropriate (Donner and Klar 1994; Murray et al., 1989). This is because a degree of intra-group dependence is usually inevitable and the assumption of independence between subjects is therefore violated. Failure to account for the dependence between individual observations and the cluster to which they belong can have profound implications for the analysis of such studies (Wears, 2002). One solution to this difficulty is to perform an aggregated analysis at the level of the cluster (Campbell and Grimshaw, 1998), and for this reason multilevel modelling techniques were employed in this study (see 'testing for differences between groups' below).

Analysis was conducted on 58 response variables using the computer package SPSS (version 11).

### *Testing for Pre-test Sensitisation*

Using the Solomon Four-Group Design, a 2 x 2 between groups analysis of variance was carried out on the four post-test scores (Campbell and Stanley, 1963). The factors were treatment (intervention or control) and pre-test (yes or no). Any pre-test sensitisation was detected by a significant interaction, followed by a simple effect for treatment amongst those present at baseline, but not amongst those absent at baseline.

### *Programme Fidelity*

Every effort was made to ensure that the *Mind Out* programme was delivered as closely as possible to the way it was intended to be delivered. However, as with any programme, conditions between schools and even classrooms vary widely. In order to monitor this variation, intervention clusters were divided into two categories according to how faithfully the programme was delivered.

This process of categorising into 'High Fidelity' and 'Low Fidelity' intervention groups was based on a number of criteria described by Greenberg et al. (2001b) in their conceptual model of implementation for school-based preventive interventions: timing, dosage and quality of sessions, student absenteeism and responsiveness, and teacher experience and engagement/commitment. Assessments of criteria were drawn from written teacher reports, review sessions, individual interviews, observations at training sessions and student questionnaires.

### *Testing for Differences Between Groups*

693 students who had completed questionnaires both at baseline *and* post-intervention were eligible for inclusion in the remaining analyses (Intervention=218, Standard Programme (SP) Control=268, No Programme (NP) Control =207).

Continuous variables were analysed by fitting a multilevel (i.e. mixed effects) model of the change in response over time. The following fixed effects were controlled for: gender, socio-economic status, school year-group (as a proxy for developmental level), school size, school gender profile, and school location. School and classroom were included in the model as random effects, to account for the possible hierarchical structure of the data. Categorical response variables were analysed using binary logistic regression, with the factors listed above included as covariates in the model.

Three main comparisons were conducted on each separate response variable:

- Intervention students were compared with all control students.
- Intervention students were compared with Standard Programme Controls and No Programme controls separately.
- Intervention students in classrooms where the programme was deemed to have been delivered with a high level of fidelity to the process of programme delivery ('high fidelity') were compared with 'low fidelity' intervention students.

## Results

### **Pre-test Sensitisation**

A pre-test effect was detected for three of the 27 continuous variables: level of concern for Joe (vignette character), intention to avoid Joe, and reported substance use as a coping mechanism. Where a pre-test effect exists, any significant treatment effects that are found to occur are rendered unreliable as the treatment effect is known to have occurred only for those students who completed a baseline questionnaire (Walton Braver and Braver 1988). Therefore no analysis requiring pre-test scores was conducted on these three variables.

### **Cluster Effect**

Estimates of covariance parameters for the random effects indicated that there was no evidence of any significant intra-cluster dependence in the model, either at the level of the school or the classroom. This suggests that the results of individual students were not significantly influenced by their presence in any particular school or classroom.

### **Characteristics of Participants**

Table 1 illustrates a range of demographic and school characteristics of the three experimental groups. Despite stratified sampling in the early stages of the study, some group differences were evident amongst the 693 students who contributed data to the main analysis. Initial and post-hoc analyses revealed significant differences between all three groups in gender, socio-economic status, year group, school location and school gender structure. School size was also significantly different except between the intervention and Standard Programme groups ( $p=0.50$ ). However the mean age of students in the three groups did not differ significantly.

### **Attitudes Towards the Programme**

Overall the programme was well received by both teachers and pupils. Teachers judged the materials to be age-appropriate and user-friendly. The programme was thought to be neither too long nor too short and the balance of activity-based exercises with discussion-type activities was praised. Benefits to the teacher-pupil relationship were noted as well as overall benefits to students.

The majority of students themselves enjoyed the programme and reported perceived gains in many areas, in particular an increased ability to cope with

**Table 1.** *Characteristics of pupils and schools<sup>#</sup>*

	Intervention (n=218)	SP Control (n=268)	NP Control (n=207)
<b>GENDER***</b>			
Male	47.7	32.5	23.7
Female	52.3	67.5	76.3
<b>AGE AT BASELINE</b>			
Mean	16.19	16.24	16.30
Standard Deviation	0.95	0.57	0.67
Minimum	13.77	15.09	15.02
Maximum	18.41	18.76	17.99
<b>YEAR GROUP***</b>			
Transition Year/Year 11	39.0	53.4	12.1
Pre-Leaving Cert/AS-Levels	46.3	46.6	80.7
Leaving Cert/A-Levels	14.7	0.0	7.2
<b>SOCIO-ECONOMIC STATUS***</b>			
Non-manual occupations (SES 1-3)	62.9	66.4	81.1
Manual occupations (SES 4-6)	32.2	33.2	17.9
Unemployed	5.0	0.4	1.0
<b>SCHOOL SIZE**</b>			
Large (n>300)	87.6	89.6	69.6
Small (n<300)	12.4	10.4	3.4
<b>SCHOOL GENDER STRUCTURE***</b>			
Mixed	90.8	57.1	21.7
Girls Only	4.6	35.4	66.2
Boys Only	4.6	7.5	12.1
<b>SCHOOL LOCATION***</b>			
Urban (n>5000)	14.7	28.0	78.3
Rural (n<5000)	85.3	72.0	21.7

<sup>#</sup>(values are percentages, except age)

problems and emotions, and improved interpersonal relations. During the qualitative activity-based evaluation workshops students gave their verdict on the programme to their peers, saying that the programme was well targeted at their age group and benefited male and female students equally. Over three-quarters of students in the workshops said the programme would make a difference to their lives outside the classroom. However, the programme had a greater appeal for girls than for boys.



## Group Differences

This section presents a summary of significant group differences that were found while controlling for other covariates and the hierarchical structure.

**Table 2.** Significant group differences in reaction to vignette character (Intervention-Control comparison)<sup>#</sup>

Response Variable	Intervention (n=218)		Control (n=475)		Sample Estimate [confidence intervals]	p
	pre	post	pre	post		
<b>'What do you think Joe should do?'</b>						
Recommend pull himself together* (binary)	17.0	12.8	10.8	14.9	1.67 [1.02, 2.75]	0.04
Recommend talk to teacher / school counsellor* (binary)	28.9	37.6	33.1	32.4	1.62 [1.06, 2.46]	0.02
<b>'If I found myself feeling like Joe...'</b>						
I would talk to a friend* (scale range 1-5)	62.4	68.8	67.1	63.7	0.25 [0.03, 0.47]	0.03
I would contact organisation/ professional** (scale range 1-5)	24.3	32.4	28.1	23.9	0.30 [0.08, 0.51]	0.01
<b>Knowledge and attitudes towards seeking help from an outside organisation / professional person</b>						
Recommend contact organisation/ professional** (binary)	24.3	30.7	28.3	29.3	1.97 [1.26, 3.09]	0.003
Ability to name organisations** (binary)	47.7	52.3	43.4	43.8	2.00 [1.28, 3.12]	0.002
Don't Know any organisations* (binary)	7.7	1.8	3.9	9.6	8.08 [1.07, 61.31]	0.043
Recommend contact The Samaritans*** (binary)	29.8	52.6	28.2	32.2	3.28 [1.78, 6.02]	<0.001
Recommend contact counsellor* (binary)	19.2	18.4	36.4	27.4	0.45 [0.20, 0.99]	0.05
Recommend contact local doctor* (binary)	11.5	7.9	14.6	14.4	0.29 [0.10, 0.81]	0.02
Attribute diagnosis of clinical depression** (binary)	31.2	28.4	39.8	42.1	0.47 [0.28, 0.80]	0.005

<sup>#</sup> Pre/post values are percentages. Sample estimate is probability of improvement (binary variables) or change over time (continuous variables).

### *Intervention – Control Comparison (All Controls)*

Reaction to the vignette character Joe (a teenager showing symptoms of depression), was more positive amongst intervention students after taking part in the programme than amongst control students. For example (see table 2), when asked ‘What do you think Joe should do?’ control students were significantly more likely to select the option ‘Pull himself together and get on with his life’ ( $p < 0.05$ ), while intervention students were significantly more likely to choose ‘Talk to a teacher or school counsellor’ ( $p < 0.05$ ).

Students were then asked what action they would take if they found *themselves* feeling like Joe. Table 2 illustrates that intervention students were significantly more likely after taking the programme to report that they would a) ‘Talk to a friend’ ( $p < 0.05$ ), and b) ‘Contact an outside organization or a professional person for help’ ( $p < 0.01$ ).

The remainder of table 2 summarises significant intervention-control differences in attitudes towards seeking help for someone like Joe, and knowledge of appropriate sources of support. A significantly higher proportion of intervention students thought Joe should ‘Contact an outside organization or a professional person for help’ ( $p < 0.01$ ). These students were then asked to state *which* organizations or professionals they thought it would be a good idea for Joe to contact. Intervention students were more likely to give a response here (compared with no response) after taking the programme ( $p < 0.01$ ), and were less likely to respond ‘Don’t know’ ( $p < 0.05$ ). They were also more likely than the control group to recommend The Samaritans ( $p < 0.001$ ) and a Counsellor ( $p < 0.05$ ) in response to this question. However, students in the control group were more likely to recognise symptoms of clinical depression in the vignette character ( $p < 0.01$ ), and to recommend the local doctor as a source of support ( $p < 0.05$ ).

No significant programme effects were detected by the GHQ-12 or the Brief-COPE, which were used in this study to measure coping strategies and general mental well-being. Mean responses to these two standardised psychometric scales are summarised in table 3.

### *Gender Differences*

Separate analysis of males and females revealed a stronger response from female students to the *Mind Out* programme. In addition to significant improvements in all the variables reported above, female intervention students were more likely than female control students to have spoken about their ‘joys and sorrows’ to a friend during the previous month ( $p = 0.07$ ) and were

**Table 3.** Mean (SD) GHQ-12 and Brief-COPE scores (Intervention-Control comparison)

Response Variable	Intervention (n=218)		Control (n=475)		p
	pre	post	pre	post	
GHQ-12 [scale range 0 – 36]	10.69 (5.02)	10.73 (5.97)	11.14 (5.91)	11.40 (6.32)	0.56
<b>BRIEF-COPE SCALES [scale range 2 – 8]</b>					
Active Coping	4.52 (1.62)	4.54 (1.46)	4.64 (1.64)	4.50 (1.65)	0.79
Denial	2.95 (1.46)	2.94 (1.35)	3.06 (1.51)	3.15 (1.62)	0.53
Substance Use	2.98 (1.67)	3.17 (1.71)	2.65 (1.35)	2.83 (1.59)	0.49
Use of Emotional Support	3.88 (1.69)	3.99 (1.72)	4.09 (1.81)	4.14 (1.77)	0.67
Use of Instrumental Support	3.60 (1.60)	3.85 (1.65)	3.87 (1.74)	3.93 (1.75)	0.11
Behavioural Disengagement	2.88 (1.21)	2.85 (1.39)	2.88 (1.27)	2.72 (1.36)	0.35
Positive Reframing	4.44 (1.64)	4.35 (1.66)	4.37 (1.60)	4.29 (1.55)	0.82
Planning	4.38 (1.68)	4.21 (1.56)	4.42 (1.67)	4.35 (1.68)	0.65
Self-Blame	3.90 (1.73)	3.65 (1.73)	3.99 (1.84)	3.95 (1.83)	0.12

significantly less likely to say they would 'Ignore the problem as much as possible' if Joe was in their class ( $p < 0.05$ ). Male intervention students, on the other hand, were significantly different to their counterparts in the control group on only two of the above variables: naming The Samaritans as a resource ( $p < 0.05$ ) and recommending that Joe should 'Talk to a teacher or a school counsellor' ( $p < 0.05$ ).

#### *Intervention – Standard Programme – No Programme Comparison*

Two different types of control groups were used in this study to assess whether the effects of the *Mind Out* programme extended beyond those of a more general health education curriculum. If the benefits of *Mind Out* were no greater than those of a general GH health education programme, very few significant differences would be expected between the intervention and Standard



Programme (SP) groups, while the intervention and No Programme (NP) control groups would differ to a far greater extent.

Table 4 illustrates significant differences between a) intervention and SP control groups, and b) intervention and NP control groups. The *extent* of the differences was similar, with each control group differing from the intervention group on a total of 12 variables. The *nature* of the differences varied. Four variables were common to both groups: intervention students were significantly more likely than both types of control student to recommend that Joe contact an outside organization or professional person for help ( $p < 0.05$ ) and to be able to name suitable organizations ( $p < 0.01$ ;  $p < 0.001$ ). They were less likely to respond 'don't know' when asked to name organizations ( $p < 0.05$ ), and to believe that Joe was clinically depressed ( $p < 0.01$ ).

The SP control group were significantly more likely than the intervention group to specifically name the GP ( $p < 0.01$ ) and Childline ( $p < 0.01$ ) as resources for Joe, but less likely to name The Samaritans ( $p < 0.001$ ), counsellor ( $p < 0.05$ ) and psychologist ( $p < 0.05$ ). They were also more likely to tell Joe to 'pull himself together' ( $p < 0.05$ ), while intervention students were more likely than SP students to report that they would talk to a teacher or another adult if Joe was in their class ( $p < 0.05$ ) and that they would talk to a friend if they found themselves feeling like Joe ( $p < 0.01$ ).

The NP control group were more likely than the intervention group to use negative coping strategies such as denial ( $p < 0.05$ ) and self-blame ( $p < 0.05$ ). They were also significantly less likely to recommend that Joe should talk to a teacher or school counsellor ( $p < 0.05$ ), and to say they would contact an outside organization or professional person for help if they found themselves feeling like Joe ( $p < 0.01$ ).

Overall then, separate analysis of the two control groups revealed that they differed from the intervention group in somewhat different ways but to a similar extent, indicating an intervention effect over and above that of a standard health education programme.

#### *High Fidelity – Low Fidelity Comparison*

Eighteen (53%) of the thirty-four classroom clusters where *Mind Out* was delivered were deemed to have implemented the programme with a high level of fidelity to the process of programme delivery. A separate analysis was carried out on these groups in the expectation that the likelihood of positive effects is associated with the degree of faithfulness to programme components.

**Table 5. Significant group differences, High Fidelity–Low Fidelity comparison<sup>#</sup>**

Response Variable	High (n=119)		Low (n=99)		Sample Estimate [confidence intervals]	p
	pre	post	pre	post		
Recommend contact organisation /professional* (binary)	26.9	37.0	21.2	23.2	0.49 [0.26, 0.92]	0.03
Recommend talk to a teacher or school counsellor** (binary)	27.7	42.0	30.3	32.3	0.17 [0.04, 0.69]	0.01
Sympathetic reaction to Joe** (binary)	14.7	10.5	31.5	23.7	4.12 [1.64, 10.39]	0.003
Intention to talk directly to Joe* (scale range 1-5)	38.1	41.2	42.4	27.1	0.41 [0.06, 0.75]	0.02
Recommend contact Childline** (binary)	22.0	13.6	29.6	37.5	3.48 [1.34, 9.03]	0.01
Recommend contact The Samaritans** (binary)	40.0	48.5	20.4	58.3	6.30 [1.75, 22.70]	0.005
Recognition of depression or suicide* (binary)	54.3	48.2	25.0	33.0	0.50 [.028, 0.89]	0.02

<sup>#</sup>Pre/post values are percentages. Sample estimate is probability of improvement (binary variables) or change over time (continuous variable).

Table 5 summarises the significant differences between high and low fidelity groups. Students in high-fidelity groups were significantly more likely to recommend that Joe seek help from an outside organization or a professional person ( $p < 0.05$ ) and that he talk to a teacher or a school counsellor ( $p < 0.01$ ). The number of sympathetic comments such as ‘I feel sorry for him’ or ‘I have a lot of pity for this poor boy’ had decreased for both groups after the intervention, but to a significantly lesser extent for high fidelity groups ( $p < 0.01$ ). High fidelity students were also more likely to report that they would talk directly to Joe about his difficulties if he was in their class ( $p < 0.05$ ).

However, low-fidelity groups were more likely to name Childline as a source of support ( $p < 0.01$ ), and although numbers naming The Samaritans had increased for both groups the increase was significantly greater for low-fidelity groups ( $p < 0.01$ ). The proportion of students who commented that Joe could be depressed or suicidal had also significantly improved for the low-fidelity group relative to the high-fidelity group ( $p < 0.05$ ).

## Discussion

A number of positive programme effects emerged from this study, falling broadly into three categories:

- A trend towards more constructive action in seeking help for self and others.
- Greater compassion and understanding for the needs of a young person showing symptoms of depression.
- Raised awareness of support services available to young people.

This last finding included an increased knowledge of The Samaritans amongst many intervention students, which may reflect the success of the 'Visitor Session' in a number of schools where a Samaritan volunteer was invited to meet the students. Programme benefits extended beyond the effects of a standard health education programme.

The control group made unanticipated relative gains over the intervention group on just two variables: they were more likely to recognise the symptoms of clinical depression and to recommend the local doctor as a resource. These findings might be explained by the visit of a speaker from 'Aware', a voluntary depression awareness organization, to at least one large control school during the week before collection of post-test data.

Given the short duration of the first year of the programme (ten sessions), such initial results overall are encouraging. Analysis of 12-month follow-up data, including additional 'booster' sessions for some students, is not yet available but will enrich the findings with a broader perspective. One concern is that boys appear to have responded to the programme to a lesser extent than girls. One explanation may be that mixed-gender class groups were significantly more common in the intervention group than in either of the two control groups (91%, 57% and 22% respectively), and the NP control group had a particularly high proportion of girls-only class groups (66%). Nevertheless, gender differences in relation to mental, emotional and social issues are well established (Emslie et al. 2002; Gallagher and Millar 1998) and a similar trend amongst a different group of Irish students was reported by Nic Gabhainn and Kelleher (2000) in their evaluation of a more general health education programme. The question arises as to whether programmes should be designed to target single-sex groups separately. Weare (2000) recognises that the two groups have different needs, and that this should be borne in mind when

planning educational strategies for emotional competence building. However, she sees this difference as 'a difference in emphasis, not kind' and concludes that both sexes need to learn the complete range of skills required to develop emotional competence. A number of strategies to redress the gender imbalance in response to *Mind Out* may merit further investigation, e.g. recruiting more male teachers, delivering the programme to single-sex groups, and emphasising methodologies most appropriate for boys such as activity-based learning.

This study raises a number of methodological issues. The complexity of the study design, while having the advantage of allowing for the possible effect of clustering also demanded the rigorous pursuit of the Solomon pre-test effect, an exercise which may not have entirely merited the consequent loss of data. This in turn led to imbalanced strata: following initial stratified randomisation to experimental condition, random assignment to Solomon groups was not stratified. Loss of the 'pre-test only' students for the main analysis rendered the three experimental groups non-equivalent on a number of characteristics including gender structure, discussed above in relation to its potential effect on gender differences found in the study. Finally, no independent observation ratings of programme delivery in class were possible, leading to difficulty in corroborating reports from teachers and students which guided the process of categorisation into 'high fidelity' and 'low fidelity' classrooms.

Another point to note is that the programme appears to have had the greatest impact in the domains of awareness raising and intentions to behave in a hypothetical situation. Questionnaire items relating to specific skills (such as the nine distinct coping scales included from the 'Brief-COPE' measure) returned non-significant results on the whole. This raises the question as to what extent a weekly curriculum-based programme can hope to achieve major behavioural gains in promoting positive mental health amongst young people during a difficult and stressful period of their lives. The principle of the 'spiral curriculum', including follow-up booster sessions one year later as *Mind Out* does, goes some way towards acknowledging the complex processes involved in supporting young people's emotional development. However, the classroom is only one arena of many which may influence this development. A supportive school environment and links with other settings where young people spend the rest of their lives, greatly enhances the impact of curriculum-based approaches to positive emotional and mental health (WHO 1997). In this study, findings from a self-report questionnaire on School Ethos revealed positive and



supportive school environments in both intervention and control schools alike. However, there was a perceived lack of information on and availability of referral services in the community for students or staff in distress. The development of the *Mind Out* curriculum materials was seen as the necessary first step towards building a system-wide approach to mental health promotion in Irish schools. Whole-school approaches to positive mental health, which include changes to the school ethos as well as curriculum input, have been shown to be effective elsewhere (Commonwealth Department of Health and Aged Care 2000a; Battistich 1989; Haynes 1990).

In addition, a wide range of implementation factors are critical in determining the success or failure of curriculum-based materials (Greenberg et al. 2001b). This was evidenced in this study by the fact that students in classrooms where the module was delivered with a high level of fidelity to programme materials showed greater improvements than students in 'low-fidelity' classrooms. This underscores the crucial importance of pre-intervention training sessions for teachers of the *Mind Out* programme. These sessions should include guidance for teachers in identifying the core elements of the programme that may contribute to its effectiveness, as well as those elements that are amenable to adaptation in particular circumstances. Programme implementation issues are further discussed in Byrne et al. (in press).

This evaluation study has shown that the *Mind Out* programme can have positive short-term effects on a range of student outcomes in a variety of school settings in Ireland. The introduction of the Social, Personal and Health Education curriculum for 15-18 year olds may create an opportunity for the programme to reach large numbers of students in years to come. The development of the *Mind Out* materials can be seen as one step towards the widespread adoption of a whole school approach to promoting positive mental health in the future.

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## Acknowledgements

The authors would like to acknowledge the contribution of Ms. Anne Sheridan, North Western Health Board towards the design of the programme materials. Thanks also to the staff and pupils of all the schools who participated in the study. This project was funded by:

- European Union Programme for Peace and Reconciliation.
- Health Promotion Unit, Department of Health and Children, Dublin.
- Irish Research Council for the Humanities and Social Sciences.
- National Suicide Review Group, Ireland.
- Western Health Board, Galway, Ireland.

## 21

## Is the Social Climate More Secure in Health Promoting Schools? A Comparative Research Study

*Miluse Havlinova and Michal Kolar*

This chapter will present the main results of a research study entitled ‘Social Climate in Environment of Primary Schools in the Czech Republic’ carried out in schools across the country in 2001-2002. The study was initiated by the Ministry of Education and designed and co-ordinated by the authors with an interdisciplinary team. The Ministry of Education wished to find out whether there are more favourable conditions for the prevention of negative behaviour (especially peer abuse) in schools that concentrate on creating a social climate of quality (such as those schools participating in the Health Promoting Schools (HPS) Network) than in those that do not.

### Introduction

The present study started from the assumption that a school climate which does not threaten pupils, teachers and parents, and which makes everybody feel safe, will tend to nourish mental and social health, improve the quality of the teaching/learning process and consequently promote personal development.

This assumption is built on the outcomes of several studies (see Havlinova and Schneidrova 1995) that have demonstrated a relationship between social health disorders among the members of a community and the quality of the social climate in that community. The social climate of a school, therefore, is defined by the habitual ways in which members of the school community perceive, judge and respond to what goes on in the school, class or staff body. More specifically, social climate can be regarded as a set of generalised attitudes and

capacities to perceive processes taking place in the school, class or staff body, and the emotional responses of pupils and teachers to these processes.

Emphasis is put on the ways climate is perceived by its actors (pupils, teachers) rather than what it is like 'objectively'. This is because subjective points of view are what influences their thinking, decision-making and acting (Havlinova, Kopriva, Mayer and Vildova 1998). On the other hand the impact of experienced social climate is influenced by rules of conduct and also by the school ethos or 'hidden curriculum'.

Knowing how people feel in the social environment of a school (i.e. knowing the social climate of a school) may serve as a means of evaluating the school's overall situation. In the Czech educational system the role of the 'hidden curriculum' in the pedagogical process and school management started to be taken in consideration relatively recently.

### **Conditions for creating social safety in Health Promoting Schools (HPS)**

The above-mentioned facts have given shape to one of the strategies developed within the HPS programme, namely making social environment and social climate subject to cultivation by means of pedagogical planning and school management. The HPS programme is a comprehensive programmes concentrating on the potential of the 'hidden curriculum' as an important tool for education.

Due to the educational purpose of the HPS programme, people working in health promoting schools have an opportunity to employ their knowledge of the ways social environment works in their school. In this way they can transform a variety of previously unplanned factors into a tool of education. The fact that social climate is controllable to some extent enables us to change it, re-shape and develop it to achieve a sense of security perceived by people in the school and to influence desirable social and educational patterns.

The central principles, which guide HPS in promoting social safety involve respect for individual needs and the creation of conditions necessary for meeting those needs (Havlinova et al., 1998):

- They provide each individual with opportunities for personal development
- They set rules of organization and living in advance
- They ensure that all people who are going to use the rules should participate in their establishment

- They require that everybody should obey the rules, and the rules should not be changed without common agreement
- They strive to cultivate interpersonal relations among all people at school by means of humanistic methods and attitudes such as respect, trust, tolerance, appreciation, participation, empathy, openness and helpfulness

### **Bullying as a significant aspect of the school environment**

As bullying represents one of the most serious risks of negative social behaviour, we have decided to use the symptoms of bullying as an indicator of the quality of social environment and experienced climate in a classroom and school.

Local research studies in the Czech Republic carried out over the past six years at various types of schools have shown that about 20% of children are subject to bullying (Csemy, Provaznikova, Razova and Sovinova, 2001). This in practice means that bullying has become a serious problem for the whole society that should be dealt with urgently. We define bullying as an asymmetric, usually repeated violence among pupils. It is represented by situations in which one or more pupils deliberately abuse a classmate or several classmates, using aggression (Kolar 1997, 2000 and 2001; Olweus 1993, 1994 Olweus and Limber 1999; Smith and Sharp 1995). It has to be seen as a relationship of dependence between the aggressor and the victim, and as a serious disorder of interpersonal relationships within a group of pupils (Kolar 1997, 2000, 2001).

If pupil relationships are affected by advanced bullying, there cannot be a positive social climate in the group. If a class is affected by the initial forms a positive climate may persist, but its quality and stability is threatened. This situation is favourable for effective treatment of the whole group by means of the basic intervention programme (Kolar 2001).

There is no doubt that the problems of peer abuse, bullying, and other anti-social behaviours taking place in schools have become very urgent. In response to this urgency, the concept of a safe social environment in schools has been extended. Whereas in the past, a safe social environment in schools and classrooms was achieved merely by establishing the emotional safety necessary for efficient learning, the maintenance of physical security must now also be specifically assured in order to achieve a safe social environment.

### **Hypotheses explored in this study**

Two hypotheses were the starting point for the research reported in this chapter:



1. In schools purposely caring for the quality of their social environment students perceive the social climate as safer than their peers in schools without such a programme.
2. In schools caring for their social climate there should be more favourable conditions for coping with cases of anti-social behaviour in some students.

Evidence relevant to the first statement will show whether the goals that the HPS programme sets for its schools (see the Programme of Health Promotion in Schools, 1998) were met. Evidence relevant to the second hypothesis will show whether schools with a safe social environment make their students more resilient to bullying, than their peers in regular schools.

## Research Design

### **Samples of schools and pupils**

A sample of 66 complete primary schools (complete meaning classes 1-9) participated in the research. Half were schools participating in the Health Promoting School network and the remaining 33 schools were not part of the network and served as a control group. Schools in the HPS group were spread across the whole of the Czech Republic. Similar schools were then chosen in their respective areas to be included in the control group. Schools in both groups resembled one another in all aspects with the exception of their membership in the HPS network.

Data were collected from a total of 4,088 pupils in equal numbers in higher school grades (i.e. 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> grade) with an equal representation of boys and girls. Besides pupils, data were also collected from their teachers. The number of teacher questionnaires received back was higher in the HPS group than in the control group.

### **Methods of data collection**

To test the research hypotheses, questionnaires were the major means of data collection. The Czech adaptation of the standardised *CES Questionnaire (Form A): How I Feel In My School and Class / For Pupils* adapted by Lasek and Mares (1991) was used. This questionnaire provides an assessment of the subjective perceptions of each respondent. It consists of 23 issues related by a common topic and grouped in several dimensions. We used the following six dimensions

that were identified in the Czech population by the authors of the Czech adaptation:

- D1 – Teacher’s help to pupils
- D2 – Pupils’ concentration on tasks
- D3 – Relations among pupils in the class
- D4 – Pupils’ interest in lessons
- D5 – Peace/order in the classroom
- D6 – Transparency of rules
- D1 – D6 Total Social climate – all dimensions

Additional questionnaires were also employed: the *Questionnaire on Bullying in School for Pupils* and the *Questionnaire on Problems of Bullying in School for Primary School Teachers*. In addition, the *Questionnaire about the School for Headmasters* was used to obtain data about each participating school.

Some amendments were made to the anonymous *Questionnaire on Bullying in School for Pupils* but it continued to conform to the basic principles of the English version (Smith and Shu 2000). The questionnaire was amended in order to go more deeply into whether children had been subject to bullying. Questions in this section were differentiated to make it possible to judge indirectly whether the child has been subject to initial or advanced stages of bullying. Another important difference lies in that questions concerned the whole school year.

### **Organization of research**

Selected schools were asked to participate in the research during their preparatory teacher meetings at the end of August. In September 2001, specially trained professionals visited all 66 schools, which had agreed to participate. They administered the questionnaires in each school during one school day as a rule. There was a requirement that no teachers be present in the classroom while pupils were filling out the questionnaires.

### **Statistical procedures**

Results of the study were evaluated by basic statistical procedures including one-dimensional analysis of variance (ANOVA) and correlations of selected variables. The participants were classified according to the three following criteria: gender, school grade and membership in the HPS programme and were

compared. The most important aspect consisted in the comparison of the HPS and Control groups.

## Main Results and their Interpretation

### *Social climate in primary schools is almost independent of gender and very dependent on school grade*

Values for six dimensions of social climate in the *CES Questionnaire* and the overall score were compared in categories according to gender and school-grade (6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> grade). We found that social climate was generally unrelated to gender. The only dimension in which boys differed from girls was Teacher's help to pupils, in which girls scored statistically higher than boys ( $p < 0.001$ ). This result suggests that girls find it easier to ask for help than boys do, or teachers are more ready or willing to help girls than boys, or both statements are true.

On the other hand, social climate proved to depend strongly on the age of pupils. In comparison with the higher grades of primary school (8<sup>th</sup> and 9<sup>th</sup>), the grades classified as lower (6<sup>th</sup> and 7<sup>th</sup>) differed significantly on all six dimensions of social climate as well as the total score ( $p < 0.001$ ), the difference being to their advantage in all cases. It appears, therefore, that lower grade pupils feel better at school than their older schoolmates do. This is related not only to the distance of the grades from the end of compulsory school attendance, but also to the age of pupils and developmental characteristics accompanying it.

### *Schools in the HPS group have a safer social climate in most dimensions than schools in the control group*

There was a statistically significant difference between the two groups on four of seven indicators of social climate as identified in the *CES Questionnaire*, all of them in favour of the HPS group. No comparison resulted in a statistically significant advantage of the control group. The four differing dimensions are as follows (Table 1):

- D2 – Pupils' concentration on tasks
- D4 – Pupils' interest in lessons
- D5 – Peace/order in the classroom
- D6 – Transparency of rules

**Table 1.** Statistical characteristics of CES dimensions and differences between HPS and Control samples

	HPS		Control		Difference
CES Dimensions (Czech adaptation 1998)	N=2059		N=2029		
	Mean	SD	Mean	SD	p-value in favour of
D1 Teachers help to pupils	9.56	2.34	9.42	2.44	0.072 n.s.
D2 Pupils' concentration on tasks	10.46	2.84	10.06	2.83	0.001 HPS
D3 Relations among pupils	10.14	1.98	10.08	1.99	0.325 n.s.
D4 Pupils' interest in lessons	7.79	2.28	7.60	2.17	0.008 HPS
D5 Peace / order in classroom	5.55	1.98	5.41	1.96	0.027 HPS
D6 Transparency of rules	8.30	1.32	8.25	1.37	0.228 n.s.
CES Total	51.78	8.04	50.82	7.94	0.001 HPS

There were no significant differences between the two groups in the remaining three dimensions (Relationships among pupils in the class, Teacher's help to pupils and Transparency of rules).

It appears therefore, that the greater sense of safety that the HPS pupils feel leads to their overall positive focusing on tasks and impacts the educational process as a whole. This can be seen as a result of the teacher's work to create a climate in the classroom that serves to motivate children rather than to threaten them. Relationships among classmates, on the other hand, seem to be similar in both groups.

If we extend the better results of the HPS group by the borderline result in the dimension of 'Teacher's help to pupils', in which the HPS group scored slightly better than the control group, we can conclude that HPS seem to be more successful in improving the teacher-pupil relationship in the educational process, while the quality of the relationships among pupils has been affected less by the programme. The fact that relations among children also develop at places other than school, mainly without the presence of adults, may be one of the reasons. If teachers want to make improvements as part of the HPS programme implementation, it is easier to change their own attitudes to children rather than the relationships that exist among them; the former can also be more easily evaluated.

The *CES Questionnaire* may not be the optimum tool for examining pupil relationships in the class, as it puts slightly more emphasis on the teacher-pupil

relationship. Nevertheless, the fact that the research has demonstrated that HPS schools have established teacher-child relationships that make children feel safe reflects an essential progress towards a safe and stimulating social environment in schools.

*Schools in the HPS network are more ready to face antisocial behaviour of individuals and groups of pupils and in the HPS group there are significantly more pupils who would recommend their school to a friend.*

The *Questionnaire on Bullying* included three questions aimed indirectly at finding out the quality of social climate in a school. There was a significant difference between the two tested groups in the answers to one of the questions, namely 'Would you recommend your school to a friend?' In the HPS group there were significantly more pupils who answered in the affirmative than in the control group ( $p < 0.001$ ). For schools in the HPS set, this result represents a good evaluation indicator of their quality.

*In the HPS network schools, significantly more factors protecting pupils from bullying were found*

In all related questions, statistically significant differences between the two groups were found, with all of them being in favour of the HPS group ( $p < 0.001$  –  $p < 0.05$ ). It was found that pupils in the HPS group:

- Ask their teachers for help about bullying more often
- Perceived the effect of the teacher's help more positively
- Have more trust that their school can protect them from bullying
- Are better informed by teachers as to what to do if somebody begins to threaten or bully them

It is worth noting that in the HPS group there are more pupils who spend their time in various leisure groups and clubs. This outcome makes it apparent that the HPS pupils can rely more on their school and teachers and cooperate with them. The fact that these pupils spend more time doing extracurricular activities at school must not be neglected either, as it means they are engaged in cultivating their personal development during their free time.

*There is a higher percentage of admitted bullying in the HPS group*

The above-mentioned finding was examined using two variables contained in the *Questionnaire on Bullying*: 'Has anyone from your class/school ever harassed (hurt) you?' and 'Have you ever harassed (hurt) anyone from your class/school?' Outcomes concerning the percentage of admitted harassment in a school /class showed a significantly higher number both of witnesses and victims of bullying in the HPS group (44%) than in the control group (38%). There were questions that required an unambiguous yes/no answer. Children were asked whether they had witnessed bullying and whether they had experienced bullying at least once by someone in their class or school.

As this outcome fully depends on the respondents' willingness to admit to the occurrence of bullying or refusing to do so, we seem to have made a very important discovery: In the HPS group there are significantly more pupils who are ready to face bullying. They are aware of the existence of bullying, and they are able to recognise, name, admit and talk openly about its various expressions.

We shall not be satisfied by psychological explanations about a higher sensitivity of some pupils in comparison to others, as the cause of the above-mentioned phenomenon lies elsewhere. This sensitivity is a result of the systematic and long-term effort of schools that train their students in identifying manifestations of antisocial behaviour and approaching openly the emergence of bullying in their school. Data from questionnaires filled out by teachers seem to support this interpretation indirectly. There is a significant statistical difference between teachers in the HPS group and those in the control group with regards to three issues:

- The HPS teachers see the problem of peer abuse as more serious than their counterparts from the control group
- Their estimate of the percentage of bullying in their school is higher, and
- In principle they know how to treat cases of peer abuse in their schools

*Bullying takes subtler forms in pupils of the HPS group*

The *Questionnaire on Bullying* includes questions that provide information about the forms of peer abuse from the subtlest in the verbal area all the way to harshest expressions of physical violence. A ten-point scale was used to describe the various forms of bullying. The outcomes show that the subtler forms of bullying are more frequent in the HPS group, while its harder forms prevail in the control group. In the middle of the ten-point scale the level of the

occurrence of bullying in both groups is at approximately the same level. With regards to physical peer abuse, there are more pupils who mention only one form of physical bullying in the HPS group. In the control group, on the other hand, there are more pupils who mention several forms of physical bullying. This is in accord with the fact that the overall number of pupils mentioning the presence of bullying is much lower in the HPS group.

If we analyse the answers concerning the forms of bullying, we can see that the HPS pupils are not exposed to any more peer abuse than their peers in the control group. The outcomes show that the number of the forms of physical aggression is lower in pupils of the HPS set. From this, we could indirectly conclude that the HPS group includes less advanced physical abuse. That would confirm our assumption that the HPS programme is successful in preventing the harshest forms of bullying and that the HPS schools have thus made the first step towards the elimination of the anti-social phenomenon of peer abuse.

## Discussion

Among the presented research outcomes, there are at least two that are in a way questionable and call for more discussion on methodological issues in researching the quality of social climate in schools.

First, why were some positive changes in HPS found between teacher and pupil (T-P) but not between pupil and pupil (P-P)? As far as relationships among children are concerned, the research study has not proven any significant differences between the HPS group and the control group. In the area determined by the quality of teacher-pupil relationship, however, the differences were significant in favour of the HPS group.

An explanation might be that teachers find it easier to improve the climate and establish conditions for a safe class environment in those relationships that they take direct part in, in situations where they communicate with individual pupils or the whole class. That is why changes in teacher-pupil relationships might be visible sooner than changes in relationships among pupils, because the former are products of the teacher's self-improvement.

There are only indirect ways for teachers to use to improve the quality of relationships among pupils. Furthermore, there is a number of various interpersonal links grounded in after-school time, and these might not be

impossible to trace and improve indirectly either. They can only be changed in more complex ways and on a long-term basis.

In our opinion, both types of interpersonal relations (T-P, P-P) should be evaluated by means of specifically constructed tools. That is because the acquired results indicate that it would be possible to trace the various stages in the development of social climate if we verified the hypothesis presuming that intentional effort of teachers first changes teacher-pupil relationships while relationships among pupils take more pains and time to change. Schools might find it useful to know their current stage of development in this respect.

Second, in the HPS group, there is a significantly higher number of pupils complaining about being harassed (44%), although the percentage of affirmative answers is high in the control group as well (38%). To understand the mean value of 41%, a brief analysis is necessary.

We have to realise that the data leading to the above-mentioned figure were acquired by means of a survey questionnaire containing a Yes-No option to two direct questions, not by a psychologically constructed tool (as is for example the case in the CES questionnaire). The questions were formulated in the following way: Has anyone from your class/school ever harassed (hurt) you? and Have you ever harassed (hurt) anyone from your class/school? Firstly, the question does not ask about bullying, but harassment in general. Secondly, it is not a question eliciting so-called hard data, but a psychologically determined assessment of a certain experience. Thirdly, in contradiction to the contents of the question the type of answer is given in unambiguous manner, as if clear objective data were being gathered.

We need to be careful, therefore, in claiming that we have achieved a reliable figure for the proportion of bullied children in Czech schools. As far as research methodology is concerned, it is necessary to revise the use of survey questionnaires that strive to find out about such a complex and sensitive phenomenon as is bullying, for example, by asking a range of carefully formulated questions.

The outcomes of the answer on harassment reveal another fact that is reflected in the comparison between the emergence of reported harassment in the HPS group and the control group. As we have mentioned in the results section, HPS pupils report bullying in a significantly higher measure than their peers in the control group. What does it mean? Is there a worse situation in these schools, which would be in contradiction to the unambiguous outcomes from the CES questionnaire, which showed the perceiving of social climate in



the class as safe by the HPS pupils? Or does it indicate the level of openness on the part of the respondents towards negative social interactions in their classrooms and schools? Perhaps in schools that encourage children to be more open, pupils are not afraid to admit possible harassment. As they are brought up to be more sensitive to the ways people behave to one another, they reported even subtler forms of harassment such as vulgar words or coarse acting. Moreover, teachers and pupils in HPS schools were more precise in identifying and distinguishing various forms of harassment and humiliation. Pupils in the control group of schools, which had a lower total amount of reported harassment, produced more examples of harder forms of psychological and physical harassment.

## Conclusion

The hypotheses of the present research study were supported – the HPS schools do meet the objectives set by the HPS programme. Pupils in these schools feel and assess the social climate as safer than their peers in schools without the programme.

The research results are convincing in showing the HPS programme to be an effective tool for the establishment of a safe social environment / climate in schools. Its effectiveness is reflected in two aspects: improving conditions for the learning of pupils, and improving social life of both teachers and pupils in the school environment.

In addition, the systematic effort of health promoting schools to cultivate their social environment is reflected in positive changes of attitudes such as an increase in openness to problems, more trust between teachers and pupils, and the school's help to pupils. These attitudes are of crucial importance if the school is to cope with the expressions of anti-social behaviour of pupils or whole pupil groups.

The findings on bullying provide valuable up-to-date information on the development of a general attitude of schools to negative phenomena existing within them. At the moment, HPS have achieved a higher level of openness concerning bullying (thanks to an effective complex prevention) while the outcomes of the schools in the control group might indicate that there is not less bullying among their pupils, but that its symptoms are still harder to identify and admit.

If a school strives to understand its own social environment / climate and make them safe, it thereby increases the effectiveness of the educational process and has a large positive influence on the quality of life of all its members in the following respects:

- It enhances the motivation and capacity of pupils and teachers to implement tasks important for improving the quality of education
- It promotes positive experiences, reduces risk of stress and anxiety states and in the long run promotes balanced self-confidence and mental resilience in adult life
- It enhances the sincerity and collaboration of pupils, parents and teachers in school and beyond it

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## An Evaluation of the Impact of Health Promoting Schools in Latvia 1993 – 2000

*Silva Omarova, Vizma Mikelsons and Ilze Kalnins*

### Introduction

In 1993 Latvia accepted a World Health Organization invitation to join its European Health Promoting Schools (ENHPS) project (WHO, 1997, 1998). Through this project it was hoped that schools in Latvia would reform their pedagogic practices and create health promoting environments for their students as part of their response to the rapid changes in social values and attitudes that accompanied the regaining of independence in 1991. From a modest beginning involving ten pilot schools, the project has grown to a national network of one hundred and fifty schools managed through a National Office and four Regional Methodology and Support Centres. A summary of the development of the project in Latvia is shown in Table 1.

In this chapter we present an evaluation of the impact of the Health Promoting Schools Project in Latvia (HPS) based on a comparison of sixteen HPS and sixteen matched control schools. The evaluation focused on the four objectives that were chosen as priority areas for Latvia:

1. The introduction of health education in schools (theoretical and methodological preparation of teachers, development of health education programs)
2. The development of a health promoting physical and social environment in the school (students' active involvement in decision making, implementation of health promotion projects to improve the school, students' attitudes to school, relationships with fellow students and with teachers)

**Table 1.** *Development of the Health Promoting Schools (HPS) project in Latvia*

1992 - 1993	The Ministry of Education accepts an invitation from the World Health Organization to join the European Health Promoting Schools (EHPS) project. A national co-ordinator is appointed. Information about the intended project and invitations to participate are advertised in teacher training courses throughout Latvia
1993	A National HPS office is established. Ten pilot schools are chosen following WHO recommendations that the project should begin on a small scale. The schools chosen are located in small towns and in rural areas that may have less access to new ideas and training opportunities. Geographically the four regions (provinces) of Latvia are represented.
1993 - 1996	Intensive teacher training is begun to acquaint teachers with the principles of HPS and methods for its implementation. Training includes weekend courses and summer school. In each school, teachers form a school health team that takes the initiative for developing and implementing one project per year to improve the health and well-being of students.
1996	Following success with the first 10 schools, 21 more schools are added to the network.
1997	An HPS Advisory Board is formed with representation from the WHO Liaison Office in Latvia, the Ministry of Education, the Ministry of Health and Social Welfare, and the Centre for Health Promotion.
1997	As the number of schools wishing to join the network increases, 4 schools from the first cohort of schools are designated as regional training centres (Regional Methodology and Support Centres). The number of schools joining increases steadily and is currently around 150

3. The development of students' life skills (competence to engage in health promoting lifestyle behaviours and development of positive relationships with others)
4. The development of collaborative relationships between the school and parents, other schools, municipal government, and the private sector

## Evaluation Methods

The evaluation, carried out in 2000, involved a comparison between 16 HPS schools and 16 matched control schools. The 16 HPS schools, included 9 out of the 10 schools that had been in the project since 1993. The tenth school was excluded because it was an elementary school that did go past grade 4. The remaining 7 HPS schools were randomly chosen from the second wave of 21 schools that joined the project in 1996. Each control school approximately matched for size was located within a 50 km. radius of an HPS school in an area with similar geographic and socio-economic characteristics. All students in grades 5, 9 and 12, who were at school on the day of the evaluation, participated in the study. Grade 5 was chosen because in this grade, health education is a compulsory subject. Grade 9 was chosen because most students have already had some health education and have also studied health in their biology classes. Grade 12, the graduating class, was chosen because the students have had extensive opportunity to learn about health in the course of their various required subjects. Together these three grades include students who have had exposure to HPS principles and methods in different ways.

Both quantitative and qualitative data were collected. A survey questionnaire was administered to students during class time. Teachers were also asked to fill out a questionnaire. Interviews were carried out with school directors, student leaders of the Student Council, and the school health team. The purpose of the interviews was to collect supplementary information about school life to assist with the interpretation of the survey questionnaire data. The health promotion projects carried out to improve the school were also examined.

A total of 2170 survey questionnaires were received from students; 1001 from the HPS and 1169 from the control schools. Only 10 student questionnaires were deemed invalid. The relatively small sample size reflects the fact that in the early years of HPS in Latvia the schools included in the project were smaller

schools located in small cities and towns and especially in rural areas. In Latvia the HPS deliberately focused first on such schools in order to support education reform in areas where there was greater need for community development and less access to new concepts and teacher training opportunities. Among the ten initial schools that joined the HPS project, the size of the student body ranged from 40 to 650 students. A total of 462 survey questionnaires were received from teachers; 234 from HPS (50.6% response rate) and 228 from control schools (49.4% response rate). The teachers who refused to fill out the survey questionnaire stated that they lacked time, did not wish to participate, or wished to protest against the government's disregard of teachers' needs.

SPSS for Windows 8.0 was used for statistical analyses. Given the categorical nature of the data and the fact that the distributions were rarely normal the Mann – Whitney non-parametric statistic with 2-tailed tests for significance was used. The Mann-Whitney test is one of the most powerful of the non-parametric tests and is an excellent alternative to the t-test when measurement is weaker than interval scaling.

It is important to note that this evaluation does not represent a randomized controlled clinical trial. Rather it is an evaluation of a very broad, action-oriented, practical initiative that was carried out in many different ways among participating schools. First, while all HPS schools had to accept the HPS objectives, their translation into action was never prescribed. HPS teachers and the school health team could design their own approach or use whatever methods they chose to create a health promoting physical and social school environment, to develop students' life skills, or to develop collaborative relationships between the school and parents, other schools, municipal government, and the private sector. The only requirement was that each year the school health team had to plan and implement at least one project related to one of the objectives. The activities undertaken were unique to each school. Projects tended to focus on improvements to the physical environment of the school (e.g., landscaping school grounds, painting school rooms) or on promoting healthy lifestyles (e.g., health fairs, AIDS day, growing produce in the school garden, first aid courses) (Kalnins, Puskarevs and Golubeva, 2001).

Second, the activities were carried out by school health teams, which again could vary greatly from school to school. In some the team was a particular grade, in others the team could include students from a number of grades, and in a small school it could be the whole school. However, the health promoting efforts of the school health team were expected to permeate the whole school.

Given the enormous variability in how HPS was instituted in each school, and the differences in the length of time that the HPS schools had been in the project, the intent of the evaluation was to look for broad overall impact pertaining to each objective. We were particularly interested in consistent patterns of differences between the HPS and control schools across several questions pertaining to a particular theme that could be interpreted as evidence that the HPS schools had had a significant impact. To demonstrate consistencies, we have included relatively lengthy tables that present as much of the data as possible. However, in the text, for illustrative purposes, we only highlight particular percentage points. With respect to indicators about the school environment where there is less consistency in the findings we have also shown the indicators for which significant differences were not found. We did not analyse the data by traditional indicators such as age and gender because given the nature of HPS school teams, the projects implemented and the manner in which they were implemented, differences, if found, could not be linked to any particular aspects of HPS activity.

## Evaluation Findings

In answer to the question, 'Have you studied the subject – health studies?' 90.4% of the HPS students and 81.9% of the control school students reported that they had. Thus, the majority of the students in both groups of schools had had health studies and their answers regarding health education and promotion can be considered representative. In the following sections we present data from teachers and students for each of the four HPS objectives.

### 1. Impact of HPS project on the introduction of health education in schools

In order to achieve an impact consonant with the principles of HPS and the curriculum standards of the Ministry of Education and Science, the HPS project sought to establish health as an integral part of school curriculum and policy. Therefore, support from the school director was sought. Training courses in health education were developed to provide teachers with theoretical knowledge about health and interactive teaching methods for health education. The curriculum guidelines of the Latvian Ministry of Education and Science stipulated that, except in grade 5 where health education is a separate and



**Table 2.** *Teachers' perceptions of health education and promotion in the school (% respondents)*

Survey question	HPS	Control schools	
<i>Is the development of a health promoting environment important for your school?</i>			***
very important	34.1	21.9	
important	58.2	54.3	
unimportant	3.0	19.0	
very unimportant	0.9	1.9	
hard to say	3.9	2.9	
<i>What percentage of teachers in your school in your opinion, are involved in health promotion activities in the classroom and the school?</i>			***
up to 10%	11.6	9.5	
11 – 30%	14.2	12.7	
31 – 50%	18.9	16.7	
51 – 70%	18.0	10.0	
71 – 90%	13.3	8.1	
91 – 100%	10.3	3.6	
hard to say	13.7	39.4	
<i>Have you attended any in-service training courses about some aspect of health education in schools?</i>			***
yes, have attended a number of courses	34.4	14.3	
yes, have completed one course	18.8	11.2	
no, haven't attended any	46.9	74.4	
<i>How do you rate the availability of resources for health education at your school?</i>			***
completely adequate	35.2	17.2	
insufficient	37.8	37.8	
very scarce	9.0	33.9	
hard to say	18.0	11.1	
<i>What proportion of the teachers in your school integrate health education into other subjects (outside of grade 5 where health is a compulsory subject)?</i>			***
all teachers	11.6	5.8	
most teachers	36.6	25.9	
some teachers	20.3	15.6	
a few teachers	11.6	21.4	
no teacher	2.2	4.5	
no answer (don't know)	10.3	24.1	
other answer	7.3	2.7	

<i>What percentage of your students in your opinion, are involved in health promotion activities (classroom activities, elective subjects, sport, and other extra-curricular activities)?</i>			**
up to 10%	0.4	4.9	
11 – 30%	8.2	10.2	
31 – 50%	15.0	17.8	
51 – 70%	24.9	23.1	
71 – 90%	23.6	16.4	
91 – 100%	18.9	12.0	
hard to say	9.0	15.6	
<i>Does your school have an active 'health team' responsible for co-ordinating health promotion activities inside as well as outside the classroom?</i>			***
yes, it operates actively	80.3	11.4	
yes, but it tends to exist on paper	7.9	4.1	
no, we don't have one	2.2	36.1	
I don't know, I'm not informed	9.6	48.4	

Statistically significant difference: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

compulsory subject, health education should be integrated into all subjects. Therefore, the HPS project also sought to assist teachers of other subjects to gain knowledge and teaching skills about health. Furthermore, new teaching materials were acquired. Each school was also asked to form a school health team to develop and co-ordinate health promotion events for the school.

*The teachers' perspective* Table 2 summarizes teachers' perceptions about the introduction of health education into the curriculum. Overall the responses show that the HPS project served to raise teachers' awareness and engagement in health.

In comparison to control schoolteachers, more HPS teachers stated that the development of a healthy school environment is 'very important' and 'important' for the school (92.3% vs. 76.2% for control school teachers). A larger proportion of them (41.6% vs. 21.7%) said that over half (51% – 100%) of the teachers in their school are involved in health promotion activities. HPS has also had a significant positive impact on teachers' motivation to upgrade their qualifications. More HPS teachers reported participating in at least one or more in-service training courses on health education (53.2% vs. 25.5% respectively). HPS teachers were also more satisfied with the availability of teaching resources (35.2% vs. 17.2%). Finally, more of the HPS teachers said that 'all' or

'most' teachers in their school integrate health education into their subjects (48.2% vs. 31.7%). Integration is very important given that health is not a separate subject after grade 5.

One of the basic principles of HPS is an emphasis on active participation by students. Table 2 shows that 67.4% of HPS teachers, as compared to 51.5% of control schoolteachers thought that at least half or more students are involved. In addition, 80.3% of the HPS teachers as compared to 11.4% of the control schoolteachers confirmed that their school has an active health team to coordinate health education and promotion activities and projects. The health team often operates under the direct supervision of the school director and may include the teacher responsible for health education, social studies teacher, other teachers, the school's medical officer, psychologist, parents and other students. The fact that teachers in the control schools also identified the existence of an active health team indicates that HPS methods had been adopted by their schools even though they are not members of HPS.

*The students' perspectives* Table 3 shows that HPS students were more aware that health is important in their school. Three-quarters (75.4% vs. 58.0% control students) of them 'agree' or 'agree more than disagree' that a lot of attention is being paid to health in their schools.

**Table 3.** *Students' perceptions of attention paid to health in the school (% respondents)*

Survey question	HPS	Control schools	
<i>In our school a lot of attention is devoted to students' health.</i>			***
agree	35.1	19.8	
agree more than disagree	40.3	38.2	
disagree more than agree	18.4	28.5	
disagree	6.2	13.5	

Statistically significant difference: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

## 2. Impact of HPS on the school environment

The World Health Organization characterizes HPS as ones that constantly strive to create an environment that supports learning along with the physical and social development of its students. A high priority is placed on democracy; that is, the participation of students in the decision-making processes of the school.

It is believed that participation encourages the growth of self worth and self-respect in both students and their teachers. HPS also stresses that schools should have policies that ensure fair treatment for everyone and state clearly that discrimination, bullying, and physical violence are unacceptable. In this section we present teachers' and students' perspectives on decision-making processes in the school, and the consideration given to students' needs and preferences in the creation of health promotion programs in the classroom and in extracurricular activities.

*The teachers' perspectives* Overall both HPS and control teachers described their relationships with school administrators as good, business-like and productive. With students they were described as mutually co-operative, understanding and supportive. In practical terms teachers noted that 'Each does his or her own job; either teaching or learning'.

HPS teachers thought that their students were involved to a greater extent in the setting of school policy. Frequency counts showed that more of them noted that school policy decisions were made by the School Council rather than by the school director, administrators or teachers alone.

In addition, more HPS teachers than control school teachers reported that students' needs and preferences are respected 'to a very great extent' when health education activities are being developed in the classroom (14.7% vs. 3.6%,  $p < .001$ ) and as part of the extracurricular activity program (17.0% vs. 14.0%,  $p < .05$ ). HPS teachers noted that they use questionnaires to gauge student interests.

*The students' perspectives* Indicators to explore students' perceptions of their school environment included their evaluation of the atmosphere in the school and the classroom, as well as relations with the 'class-master' (see translation notes) teacher, other teachers, and classmates. The indicators probed subjective and emotional aspects of the school and classroom environment through Likert scale response dimensions represented by like/dislike, nice/not nice, fair/unfair, satisfied/unsatisfied. Table 4 summarizes the indicators on which significant differences were found between HPS and control schools while Table 5 lists the indicators showing no differences.

Of the eleven indicators used to assess overall school environment, five showed significant differences (Table 4) while six did not (Table 5). Significantly more students in HPS noted that they like their school (32.5% vs. 29.1%), that it is a pleasant and enjoyable place to be (44.2% vs. 41.7%), that teachers assess them fairly (31.8% vs. 27.6%) and that a lot of attention is devoted to students'

**Table 4.** *Students' perceptions of the school environment: Indicators showing significant differences*

Survey question	HPS	Control schools	
<b>Overall school environment</b>			
<i>How do you like your school?</i>			*
I really like my school	32.5	29.1	
I like my school more than dislike it	48.7	49.2	
I dislike my school more than like it	15.3	17.5	
I don't like my school	3.2	3.8	
<i>Our school is a pleasant, enjoyable place.</i>			*
agree	44.2	41.7	
agree more than disagree	35.2	33.4	
disagree more than agree	13.8	16.4	
disagree	6.7	8.5	
<i>The teachers judge the skills and knowledge of the students fairly.</i>			*
agree	31.8	27.6	
agree more than disagree	37.7	39.2	
disagree more than agree	22.2	22.7	
disagree	8.3	10.5	
<i>A lot of attention is devoted to students' health at our school.</i>			***
agree	35.0	20.0	
agree more than disagree	40.0	38.0	
disagree more than agree	18.0	28.0	
disagree	6.0	14.0	
<i>The school's code of conduct is strictly adhered to.</i>			**
agree	22.0	27.1	
agree more than disagree	31.4	31.4	
disagree more than agree	33.0	28.4	
disagree	13.6	13.2	
<b>Classroom environment</b>			
<i>The students in our class enjoy being together.</i>			***
always	10.2	7.5	
often	30.6	26.2	
sometimes	39.3	39.2	
rarely	17.8	22.7	
never	2.1	4.4	

<b>Relationships with other students: Physical violence</b>			
<i>During this school year have you been beaten-up, punched, or subjected to physical pain in some other way?</i>			***
no, never	73.6	79.9	
yes, sometimes	22.7	17.6	
yes, often	3.7	2.5	
<i>During the school year, have you yourself, or in the company of other students, participated in beating-up, punching, or inflicting physical pain in some other way on another student?</i>			**
no, never	65.9	73.0	
yes, once	18.6	15.1	
yes, sometimes	12.3	9.9	
yes, often	3.1	2.0	

Statistically significant difference: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

health (35.0% vs. 20.0%). Interestingly, more students in the control group schools reported that the school's code of conduct is strictly adhered to (27.1% vs. 22.0%). It may be that in HPS there is less need for such strict observance of rules since good behaviour is encouraged by the more positive environment of the school.

Of the four indicators used to assess classroom environment, only one showed significant differences. More HPS students noted that they enjoy being together in the classroom (Table 4). The responses 'always' and 'often' were chosen by 40.8% of the HPS students and 33.7% of the control students. Table 5 lists the three other indicators showing no differences. With respect to these indicators just under a half of the students in both groups of schools thought that their classmates are 'always' or 'often' polite and that their classmates 'always' or 'often' participate in school events. Approximately one quarter rated their classmates as ones who can 'always' or 'often' be depended on in difficult situations.

No significant differences were found on indicators regarding relationships with teachers or the class-master (Table 5). In both HPS and control schools approximately half of the students described their relationship with their teachers as 'good' or 'very good' (58.8% vs. 58.6% respectively) and only a small proportion regarded their relationships as 'pretty bad' or 'bad' (3.4% vs. 3.9%

**Table 5.** *Students' perceptions about the school environment: Indicators showing no significant differences*

**Overall school environment**

I am satisfied that I am studying at this school

I would prefer to study at another school

Our school has many interesting extracurricular activities

The students' perspective is always taken into consideration at our school

Teachers treat students with respect at our school

**Classroom environment**

Most of our class members are polite and helpful

In our class, students can depend on one other in difficult situations

Our classmates actively participate in school events

**Relationships with teachers or the class-master**

In general, how would you characterize your relationship with your teachers?

In general how would you characterize your relationship with your class-master?

Have you had serious disagreements with your teachers?

Are there teachers that you are afraid of?

**Relationships with other students: Bullying**

Are there boys and girls in your school who are subject to bullying by other classmates?

During this school year, have you been subjected to bullying from other students in the school or your classroom?

During this school year, have you yourself, or in the company of other students, participated in bullying other students?

respectively). Relationships with class-master teachers were rated as better than with other teachers. Close to three-quarters of the students in both groups of schools considered these to be 'good' or 'very good' (73.8% vs. 72.6%).

However, despite seemingly good relationships with teachers about a third of the students in both HPS and control schools reported having serious disagreements with their teacher 'often' (3.8% vs. 5.1%) or 'sometimes' (23.9% vs. 24.6%). In the same vein, students in both HPS and control schools noted that they are afraid of one teacher (26.5% vs. 29.9%) while an additional third are afraid of more than one teacher (27.8% vs. 27.7%). The main sources of fear of teachers in both groups of schools were being shouted at by the teacher, not understanding what the teacher wants and being unfairly assigned low marks.

In both HPS and control schools there was a high degree of similarity among students' perceptions of the methods teachers use to resolve conflicts. Negative approaches, such as, always or often laughing at or ridiculing the student (86.0% vs. 84.0%), or making the student feel guilty (40.5% vs. 42.1%) were more commonly noted than positive approaches, such as endeavouring to find a compromise (35.4% vs. 37.1%) or calmly discussing the problem and giving the student a fair hearing (34.7% vs. 31.7%).

With respect to relationships with other students the indicators used focused specifically on bullying and violence in the school. There were no significant differences between HPS and control schools on indicators of bullying (Table 5). Widespread bullying was reported by students in both groups of schools. The perception that 'some' students are bullied was noted by 74.5% of the students in both groups of schools, while bullying of 'many' students was noted by 15.9% of HPS students and 14.2% of control students. A high percentage of having experienced bullying was also found when students were questioned about whether they personally had been bullied. The experience of being bullied 'sometimes' was reported by 48.6% and 45.0% of the students and bullied 'often' by 7.7% and 7.6% in HPS and control schools respectively. Furthermore, approximately half of the students in both school groups responded that they have participated in bullying others 'sometimes' (50.1% vs. 50.4%) or 'often' (5.6% vs. 4.9%).

Content analysis of answers to an open-ended question about why some students are bullied or become the targets of physical violence revealed the following themes: Strange and unusual behaviour (28%), badly, poorly, unfashionably dressed (24.6%), aggressors feel superior and wish a confirmation of their superiority (13.9%) Various other answers comprising about 33.5% of



the responses included themes such as: physical appearance (fat or thin, presence of physical defects), dirty (unwashed, teeth not brushed, dirty hair, smells), family circumstances (poor, financially disadvantaged, father or mother drinks), breaks the law or moral code (lies, steals), or is an under- or over-achiever.

Significant differences were found between the two groups of schools on the two indicators about physical violence in the school (Table 4). Surprisingly, while 26.4% of the students in HPS reported that they had 'often' and 'sometimes' experienced physical violence, only 20.1% of the students in the control schools said so. Students in the control group schools also reported a lower level of participation in violence against others (15.4% 'often' and 'sometimes' in HPS vs. 11.9% in the control schools). The significantly higher level of physical violence in HPS is hard to explain, as it is completely counter to HPS objectives. In discussions of the finding with teachers and students it was suggested that students in HPS may have a heightened awareness of actions that represent physical violence and are, therefore, more likely to notice its occurrence. More investigation is needed to clarify this issue.

### 3. Impact of HPS on the development of students' life skills

Health education in HPS was geared to the development of students' knowledge about health, positive attitudes to health, and life skills with which to look after their own and others' health. Teachers were encouraged to engage students in life skills learning about decision-making and problem solving, creative and critical thinking, communication and interpersonal relationship-building, self assurance and empathy, and emotion and stress management. They were also taught to use active and interactive teaching formats such as role-play, small group work, brainstorming, or analysis of real life situations.

*The teachers' perspectives* Despite the emphasis on interactive teaching formats in HPS, these were used 'very often' or 'quite often' by about half of the teachers in both groups of schools. However, significantly more HPS teachers than control school teachers felt that their students could acquire life skills to a 'great extent' with respect to those related to: personal hygiene (53.5% vs. 29.5%,  $p < .001$ ); giving first aid in an accident (25.2% vs. 8.2%,  $p < .001$ ); saying 'no' and resisting pressure from others (26.8% vs. 18.1%,  $p < .05$ ); and avoiding smoking (40.6% vs. 28.2%,  $p < .01$ ), the use of alcohol (46.2% vs. 34.4%,  $p < .05$ ), and, use of narcotics (54.7% vs. 39.9%,  $p < .01$ ).

*The students' perspective* Considering the positive reports by HPS teachers on students' opportunities to gain life skills, it could be expected that students in these schools would more highly rate their life skills competence. This was not the case. Table 6, which list all of the life-skills evaluated shows only two significant differences and both are in favour of control school students giving higher ratings of their life skills.

Students' behaviour with respect to frequency of tobacco, alcohol and drug use were also assessed. Although no significant differences were found between HPS and control school students with respect to competence to avoid smoking, significantly more HPS students reported that they never smoke (64.7% vs. 60.1%.  $p < .01$ ) No differences were found with respect to the frequency of use of alcohol and drugs.

**Table 6.** *Students' rating of their competence in life skills: Responses 'very good' and 'good' (% respondents)*

Survey question	HPS	Control schools	
<i>Please, evaluate your ability to:</i>			
Look after personal hygiene	90.8	94.0	
Give first aid in case of an accident	42.3	39.5	
Tidy, and keep in order, your room and things	73.9	72.8	
Communicate with others and resolve conflicts	60.0	66.1	**
Control your negative emotions (e.g. anger)	49.7	48.5	
Make independent decisions, solve problems	69.9	73.2	
Collaborate with other people, work in a team	80.4	83.6	
Say 'no' and resist pressure from others	70.0	66.2	
Love and respect yourself, have a positive attitude towards yourself	84.3	82.4	
Understand and assist others in difficult life situations	72.6	78.1	*
Look for and ask for help in difficult situations	51.6	49.0	
Avoid smoking	83.0	79.2	
Avoid the use of alcohol	83.7	76.0	
Avoid the use of drugs	92.6	96.0	

Statistically significant difference: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

#### 4. Impact of HPS on collaborative relationships with parents

The development of collaborative relationships with parents is stressed within HPS because it enables the school to be aware of, and react to, students' and parents' wishes. It may also enhance the reinforcement in the family of ideas taught at school. Parents can also provide additional resources.

*The teachers' perspective* Table 7 shows that in comparison to control school teachers, HPS teachers reported a higher level of collaborative relationships with parents. Significantly more of them reported that parents are involved in health promotion activities in the school, more of them rated the collaboration positively, and more of them perceived that parents' wishes are taken into account in health education and extracurricular activities. However, the percentages show that the actual frequency of parental involvement is very low. In interviews, teachers in both groups of schools noted that parents lack time or are passive. School directors in both groups of schools acknowledged that parents support the school with material resources (money, timber, tractors, transport etc.), but they felt that there should be closer collaboration on parenting and child rearing issues.

*The students' perspective* It might be expected that the emphasis on health and collaboration with parents in HPS would be reflected in students' perceptions of their parents' attitudes toward their school life or the frequency of discussion of health issues in the family. However, no significant differences between the two groups of schools were found in students' perspectives. Students reported that parents are 'always' or 'often' interested in school life in general (80.9% vs. 81.7%), marks (68.1% vs. 70.2%), and knowledge and skills (58.7% vs. 64.4%), Considerably fewer of them reported that their parents attend parent teacher meetings (40.5% vs. 42.6%), talk to the class-master teacher or the subject teachers about problems (11.2% vs. 10.2%), assist with homework (10.5% vs. 10.5%), or attend events organized by the school (8.2% vs. 6.4%),

With respect to discussions in the family about health matters, no significant differences were found. Collapsed data of the 'always' and 'often' response categories to a list of questions about the frequency of discussion of various health issues showed that the most frequently discussed issues are order and tidiness at home (63.4% vs. 65.5%), and nutrition (53.6% vs. 54.0%). Less frequent are discussions about harm arising from alcohol and tobacco use (39.5% vs. 39.2%), or drug use (36.3% vs. 36.8%), personal hygiene (38.7% vs. 37.0%), personal relationships (24.8% vs. 26.9%), or dealing with negative

**Table 7.** Teachers' perceptions of collaboration between parents and the school (% respondents)

Survey question	HPS	Control schools	
<i>How often do parents become involved in health promotion activities at your school?</i>			***
very often	3.4	0.0	
quite often	13.8	5.7	
rather seldom	52.2	46.5	
practically are not engaged	12.9	25.7	
difficult to say	17.7	22.1	
<i>On the whole, how would you evaluate the collaboration between the school and parents in the promotion of students' health?</i>			***
collaboration is excellent/good	15.0	7.0	
collaboration is satisfactory	45.0	33.0	
collaboration is poor	24.0	29.0	
collaboration is very poor	2.0	9.0	
difficult to say	14.0	22.0	
<i>To what degree are the needs and wishes of parents taken into consideration when developing health education programs in your school?</i>			***
Parents' wishes are respected to a very high degree.	2.3	2.1	
School administration and teachers take into consideration reasonable wishes.	57.7	42.9	
Little consideration is given to parents' wishes as parents do not express them.	21.8	27.5	
Difficult to judge.	18.2	27.5	
<i>To what degree are the needs and wishes of parents taken into consideration when developing extra-curricular activity programs in your school?</i>			**
Parents' wishes are respected to a very high degree.	6.2	3.7	
School administration and teachers take into consideration reasonable wishes.	62.1	51.4	
Little consideration is given to parents' wishes as parents do not express them.	16.7	26.6	
Difficult to judge.	15.0	18.2	

Statistically significant difference: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

emotions (21.2% vs. 20.8%). Least frequent are discussions about intercourse, pregnancy, abortion, and contraception (13.1% vs. 12.1%), and sexually transmitted diseases including HIV AIDS (9.7% vs. 9.1%).

#### 5. Impact of HPS on collaborative relationships between the school and the community

In addition to collaboration with the family, the HPS project emphasizes collaboration with the community. It is recognized that attempts to promote health only within the school are likely to fail if the surrounding environment does not reaffirm the value of health and support what has been taught at school. The local community can also help the school find out more about health problems that need attention and offer resources for health promotion activities. The community also benefits because schools deal with complex social problems that affect the welfare of the community and educate young people for future economic and social development.

*The teachers' perspectives.* Data about collaboration with other schools and the community were collected in interviews with teachers and school directors. Student perspectives were not sought. Table 8 shows that significantly more HPS teachers rated collaboration between their school and other schools in the region as 'excellent' or 'good' (48.1% vs. 17.2%). Forms of local and regional collaboration included a summer HPS camp and special courses, health days or sports days. International collaboration experienced by some HPS and control schools was not the result of being involved in the HPS project. Rather it depended on the on the location of the school and the interest of the school administration, as well as on fortuitous circumstances. It included receipt of humanitarian aid as well as educational activities on democracy, nutrition, sports, or the environment.

With respect to the municipal government, Table 8 shows that the two groups of schools do not differ significantly. However, 42.9% of the teachers in the HPS, in contrast to 24.0% of the teachers in the control group schools, reported that they receive both moral and financial support. While the differences are not statistically significant the material support for HPS may be significant at a practical level. Examples of municipal support cited in interviews with school directors include financial bonuses for the HPS coordinator, salary support for the school doctor, funding for school renovations, support for cafeteria meals, and costs of intra- or inter-school events. Material

**Table 8.** *Teachers' perceptions of collaboration with other schools and the municipal government (% respondents)*

Survey questions	HPS	Control schools	
<i>How would you evaluate collaboration in health education between your and other schools in your region?</i>			***
excellent	5.6	0.4	
good	42.5	16.8	
satisfactory	25.8	23.9	
poor	9.0	21.2	
very poor	0.9	4.4	
difficult to judge	16.3	33.2	
<i>Does your school receive moral and financial support from the municipality to promote health among teachers and the students?</i>			
moral support only	16.5	20.9	
moral and material support	42.9	24.0	
neither moral nor material support	6.1	10.7	
no information	34.6	44.4	

Statistically significant difference: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $< .001$

support is of vital importance to schools in Latvia in the context of under funding and rapid social change.

## Conclusions

First, and foremost, the HPS project has had a significant impact on the development of an infrastructure for school-based health education and promotion. To a greater extent than control schoolteachers, HPS teachers have acquired qualifications in health education, integrated health into their teaching of other subjects and acquired teaching resources about health. HPS schools have school health teams that develop and co-ordinate specific health promotion activities.

This infrastructure for health education and health promotion is vitally important in Latvia. Historically, health information has not been as widely available as in Western Europe or North America. Thus, the general level of

knowledge about health must be raised in all segments of the population. Furthermore, data from an international survey on the health behaviour of school-aged children (aged 11-16 years), in which Latvia participates, show that since independence in 1991 and its accompanying rapid social and economic changes, key indicators of health behaviour associated with the major causes of mortality in adulthood (e.g. smoking, use of alcohol and drugs, insufficient physical activity, unhealthy dietary patterns) have remained unchanged or have worsened (Currie, Hurrelman, Settertobulte, Smith and Todd, 2000; King, Wold, Tudor-Smith and Harel, 1996; Ranka, Pukse and Kalnins, 1997). In the context of a low average life expectancy of 69.9 years (75.5 years for women and only 64.1 years for men), that is approximately 10 years less than in other Northern European countries, health must become a very high priority for Latvia (United Nations Development Program, 1999). In this context the foundation for health laid by the HPS project represents an important contribution.

Second, HPS has had some positive impacts on students' perceptions about their school environment. A greater proportion of HPS students than control school students are aware that health is one of the school's priorities and that their ideas are respected, and taken into consideration, in the development of health education programs in the classroom and in extracurricular activities. A greater number of students in the HPS consider their school to be a pleasant and enjoyable place where the teachers assess their knowledge and skills fairly. Students say they like their school and enjoy being together with their classmates. Research has repeatedly confirmed a positive association between positive perceptions about the school environment and more positive life style health behaviours with respect to tobacco, alcohol and drug use, physical activity, and self-reported health and quality of life (Currie et al. 2000; King et al., 1996).

Although the students from HPS generally gave positive appraisals of their school environment, the study also revealed that students' perceptions of their relationships with teachers do not differ between the two groups of schools. Approximately one third of the students in both groups of schools noted that they are afraid of more than one teacher and have had serious disagreements with their teachers. Students noted that they are afraid when a teacher shouts or gives low marks unfairly, and when they do not understand what the teacher wants. While disagreements can be expected, their resolution requires skill and restraint on the part of the teacher given that they have a great deal of power.

Through their actions and judgements they can strongly influence the self-esteem and academic achievement of their students, and their success in later life. It is of concern that students named derision or humiliation as the most frequently used method of conflict resolution by their teachers. All of these findings indicate that teachers still require knowledge and skill training for building positive relationships with students.

No significant HPS influence was found with respect to the occurrence of bullying in the school or participation in it. However, contrary to expectations, significantly fewer students in the control group schools noted that acts of violence had occurred in their school or that they had participated in them. In discussions about the interpretation of this finding with teachers, it was suggested that in the HPS students have gained a heightened awareness of themselves and their relationships. Thus, they may be sensitized to perceive aggressive behaviours and label them as violence. This interpretation needs to be explored in further research.

Third, HPS has had virtually no impact on student's life skills although HPS teachers perceived that they had created more opportunities for students to gain life skills, especially in class-master's lessons, through their use of interactive teaching methods (role play, small group work, analyses of life situations). Student ratings of their competence to perform life skills showed virtually no significant differences between the two groups of schools. On two indicators significantly more students in the control schools rated themselves as more competent. At the same time, actual health behaviour was slightly better in the HPS in that significantly fewer students reported that they smoke.

The finding that neither the HPS nor control group schools had a strong impact on health behaviour implies that more focused interventions may be needed to achieve behaviour changes. Research shows that programs that have achieved a measure of success in behaviour change are multi-component and focused on particular risk behaviours. They typically include didactic teaching coupled with opportunities for students to practice skills that enable them to resist peer pressure. Parents are included and are asked to reinforce material taught at school. Changes in the school environment and policies are made so that they support the desired behaviour changes. Similar changes in the broader community are also sought through collaboration with community organizations and businesses. Such multi-component programs require a great deal of effort, sustained funding, and appear to be most successful if health promotion specialists provide assistance in the planning, implementation and



evaluation process (see for example, Perry, Kelder, Murray and Klepp, 1992; Kelder, Perry and Klepp, 1993; Luepker et al., 1996, Perry et al., 1996).

Fourth, the study confirmed that HPS have successfully engaged in some collaboration with parents, other schools and the wider community. More HPS than control schoolteachers reported that parents' needs and wishes were taken into account in the planning of health education activities in the classroom and in extracurricular activities and generally rated collaboration as excellent or good. Furthermore, HPS collaborate more actively with other schools in Latvia. They receive considerably more moral and material support from the municipal government.

The progress that HPS has made in gaining resources through collaborative relationships is commendable. Given that it is unrealistic to expect the Ministry of Education and Science to satisfy all needs, schools themselves have to assume more responsibility for seeking resources through collaborative partnerships. It is not easy, however, to establish and maintain these. Studies show that teachers are unwilling to assume responsibility for the development of family and community support networks because, in their opinion, it takes too much time or they lack the skills to do so (Anderson, Kalnins and Raphael, 1999).

In summary, the findings of the evaluation study show that the HPS in Latvia has had a noticeable effect on HPS teachers with respect to their knowledge levels, their inclusion of students in decision-making in the school, and their relationships with families and the community. There has been a generally positive effect on students' perceptions of their school environment but negligible effects on their life skills including lifestyle health behaviours. In a new theoretical explanatory model of health promoting schools by Markham and Aveyard (2003) it is proposed that changes in school organization and students' positive perceptions of school are the most important goals for promoting student learning and affiliation with society than changes in lifestyle behaviour. If so, then the impacts achieved to date are important ones.

Overall the future looks promising for HPS in Latvia. The network continues to grow in size. In addition to training teachers for HPS work, a great deal of energy has also been invested in the training of student leaders in peer education. Currently there are approximately 80 such young people who can act as assistants to the HPS teacher. Furthermore, in 2003 the Minister of Education, the Minister of Health, and the Minister for Special Assignments for Children and Family Affairs signed an agreement that they will support the HPS network in Latvia and seek to expand HPS to all schools in Latvia. This will

require new strategic planning as the structures that have served so well up to now, will no longer suffice to meet the increased demands and opportunities.

### *Translation Notes*

Class-master and class-master's lessons: Class-master is used in Latvia as the accepted translation of the Latvian concept of 'klases audzinataja'. A class-master is a teacher who takes responsibility for the students' social, psychological, and moral development through special lessons for which time is set aside in the curriculum. Class-master's lessons can be conducted in whatever way the teacher or students wish. A teacher may remain as a class-master for a particular grade for several years.

### *Acknowledgement*

The research on which this paper is based was supported by The Curriculum and Examination Centre of Ministry of Education and Science of the Republic of Latvia and the World Health Organization Liaison Office in Latvia. The project was funded by The World Health Organization through the Swiss Federal Department of Foreign Affairs, Division of Co-operation with Eastern Europe and CIS. State government support for the study was supplied by the Ministry of Education and Science of the Republic of Latvia. The full report of the Health Promoting Schools upon which this paper is based can be accessed in English at: [http://www.un.lv/down/who/skolas\\_e.htm](http://www.un.lv/down/who/skolas_e.htm) (accessed 18 February 2005).

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## Evaluation of a School Based Health Promotion Programme on Sexual Health Education by Female Physicians – A Gender Approach

*Christiane Thomas, Ulrike Ravens-Sieberer, Christine Klapp, and Gisela Gille*

### Introduction

The period of adolescence is a phase of tremendous changes. The adolescent has to face many cognitive, emotional, and social developmental tasks such as the search for an identity, acquisition of lasting positive peer relationships, and the preparation for a professional career (Oerter and Montada, 2002). In addition to these profound social, emotional and psychological changes substantial biological changes occur. Over the last two hundred years the process of sexual maturation has accelerated (Ostersehlt and Danker-Hopfe, 1991). Thus, adolescents mature much earlier and develop an increased interest in sex at an earlier age. However in many cases young people are not completely aware of the consequences that may arise when engaging carelessly in sexual activities. In Germany the rates concerning legal abortions for girls who are under 15 years old went up by 8.4% from the years 2001 to 2002, even though there has been an overall decrease by 3.4% concerning legal abortions for minors. Still the absolute number of abortions in minors is alarming with 7443 in the year 2002. This amounts up to 5.7% of the total number of legal abortions in Germany (Federal Statistical Office Germany, 2003). However, it can be assumed that the estimated number of unknown cases might be considerably higher (Gille, 2002). An abortion is just one unfavourable outcome of unprotected sexual intercourse. There are certainly others as well. Adolescent childbearing proves to be negatively associated with medico-social as well as economic outcomes in many countries (Benson et al., 1986; DiCenso et al., 2002; Klapp, 2003). In Germany during 2001 approximately 7447 children were born by mothers under 18 years. And thirdly, due to inadequate information about contraceptives

sexually transmitted diseases tend to be a major threat for teenagers affecting their health tremendously.

At present, information for young people about sex and pubertal development comes from a variety of different sources, including peers, parents, the media, schools and health care professionals. These sources may not always be accurate, and reports from the media or information from peers might be incomplete and even frightening (McElderry and Omar, 2003). One of the prerequisites of health as declared in the Ottawa Charter for Health Promotion (1986) is education. It is therefore necessary to address this issue and to provide adequate sexual health education for young people. To ensure comprehensive and substantial information about sex and pubertal development schools should be required to provide sex education for all pupils.

There has been extensive research on sex education and its effectiveness, the results of which have been inconsistent (e.g., Benson et al., 1986; Kirby et al., 1994; Gourlay, 1995; Song et al., 2000; DiCenso et al., 2002; Martiniuk et al., 2003). For example, DiCenso and colleagues (2002) concluded from their literature review that prevention strategies to reduce undesirable outcomes such as unintended pregnancies had no impact on sexual health promoting behaviours. In contrast, Song et al. (2000) concluded from their meta-analysis that sex education programmes do positively affect overall sexual knowledge. Despite the spectrum of results unanimity is obtained concerning the fact that sex education is a necessary and indispensable requirement for promoting sexual health in children and adolescents.

In Germany the Federal States are responsible for the determination of the curriculum for sex education in schools. A survey from the Bundeszentrale für gesundheitliche Aufklärung (BZgA: Federal Centre for Health Education) showed that in 1996 only 47% of the students in Eastern Germany and 86% of the students in Western Germany had discussed sex education subjects in school lessons. This deficit was acknowledged by Federal Education Ministries and as a consequence by 2001 sex education had been established in most schools in Germany. It appears that 87% of the students in Eastern Germany and 93% of the students in Western Germany have participated in sex education lessons in school (BZgA, 2001).

Sex education starts as early as in elementary school on a rather basic level covering topics such as pregnancy and birth. Towards the end of elementary school as the pupils reach puberty different topics such as menstruation and developmental stages during puberty gain in importance. In secondary schools sex

education as being part of the curriculum is resumed focussing more on sexual experiences, contraceptives, and sexually transmitted diseases. The question that arises is: If we do have sufficient sex education in German schools, why would it be necessary to provide even more sex education programmes such as the sexual health programme offered by the *Ärztliche Gesellschaft zur Gesundheitsförderung der Frau* (ÄGGF: Medical Society of Health Promotion for Women)? The answer is manifold. The sex education provided in schools as part of the regular curriculum does not seem to be exhaustive because there are still too many reported unintended pregnancies and sexually transmitted infections. Furthermore teachers argue that they find teaching sex education very demanding and even awkward for it is a sensitive topic (Jobanputra et al., 1999). Thus, they feel it to be very helpful to receive support by professionals such as for example the ÄGGF.

The ÄGGF is an association of only female doctors that have among others the goal to promote gender specific age-appropriate sexual health education for girls and young women. They view their sex education programme in schools as a valuable supplement because they teach about sex and pubertal development from a medical perspective. Interactive rather than *ex cathedra* teaching methods help to establish an intimate competent atmosphere yet with enough anonymity for the students to ask questions about sensitive and personal topics. The duration of the sex education programme is 90 minutes (i.e., two school lessons). So far the ÄGGF is engaged in basically all of the former Western Federal States of Germany and only in one of the new Federal States of former Eastern Germany. In 2002 the doctors have given 2,378 interventions with 47,769 participating students from all different levels of education. There is still an increasing demand by schools asking for this particular type of sex education. To meet all these requests the ÄGGF would like to establish their programme as an inherent part of the regular sex education in German Schools. In order to convince policy makers and raise sufficient money sources as well as a means of quality assurance the members of the ÄGGF have decided to evaluate their intervention regarding a potential gain in knowledge and the acceptance by students.

## Methods

This study's primary objective was to evaluate the effectiveness of the gender specific sexual health programme by female physicians in changing emotional knowledge associated with sex and sexuality. The secondary objective was to

evaluate the acceptance of this type of intervention. The hypothesis was that students randomised to the intervention group would show improved knowledge concerning sex and sexuality issues compared to students of the waiting control group. A cluster randomised design was used with 6<sup>th</sup> grade elementary school classes (ages 10-14) and 9<sup>th</sup> grade high school classes (ages 13-19) in three German Federal States (Berlin, Hamburg, and North Rhine-Westphalia) serving as clusters. In 6<sup>th</sup> grade only girls, whereas in 9<sup>th</sup> grade both boys and girls participated in the study. The sample was divided into an intervention group and a waiting control group. The allocation into intervention group and waiting control group was at random. Only the intervention group participated in the 90 minutes sexual health programme. The study had two measurement time-points. One time-point was pre-intervention and the other one two weeks post-intervention. Directly after the sexual health programme, the attending students only were asked to fill out an additional questionnaire examining their acceptance of this type of intervention. The participation in this study was voluntary. No personal data were collected.

### Sample

1,911 students from 6<sup>th</sup> and 9<sup>th</sup> grade from three different Federal States of Germany were recruited for this study. Table 1 gives an overview of the sample at all measurement time-points.

**Table 1.** *Composition of study sample*

		Pre-test (n)	Post-test (n)	Pre-test and Post-test (n)
6 <sup>th</sup> Grade	Intervention Group	494	486	459
	Control Group	349	336	314
9 <sup>th</sup> Grade	Intervention Group	560	552	486
	Control Group	375	377	325
Total	Intervention Group	1054	1038	945
	Control Group	724	713	639

For data analysis only subjects were included that participated in the pre-test as well as in the post-test. As a consequence the resulting sample used for this publication consisted of 1,584 students, i.e. 945 students of the intervention group and 639 of the control group. In the pre-test the students' ages ranged between 10 and 18 years (mean=13.4 years; sd=1.8). In 9<sup>th</sup> grade 45.7 % of the participants were female students, whereas in 6<sup>th</sup> only girls participated. The data collection took part in the school setting using written paper and pencil questionnaires. It was organized by the female doctors from the ÄGGF in both intervention and control group for the pre-test as well as for the post-test. The teachers were not present in the classroom during the testing and the following intervention. This was mainly done to assure anonymity for the students. The approach of the ÄGGF is gender-specific that is the female doctors explicitly address usually only girls with their programme because they believe it is their field of expertise. In spite of this fact for this study, the target population consisted of both female and male students in 9<sup>th</sup> grade.

### **Description of the questionnaires**

Data were collected using a paper-pencil questionnaire. This questionnaire was given prior to the sexual health programme and two weeks after the programme. It was the identical for the waiting control group and the intervention group. The questionnaire included several topics. These were puberty, menstruation and menstruation hygiene, general hygiene, gynaecologist, pregnancy and contraception, infectious diseases and sexually transmitted diseases (STDs), vaccination, and health promotion and care. Due to the different age groups the questionnaire was adapted and slightly longer for the students from 9<sup>th</sup> grade according to their developmental stage. It was assumed that in this age group some of the topics, such as, pregnancy and contraception as well STDs become more relevant. Consequently the questionnaire for students in 9<sup>th</sup> grade consisted of 113 items and the questionnaire for the younger students in 6<sup>th</sup> grade consisted of 90 items. There were three different types of questions, i.e., knowledge questions, questions examining opinions and self-assessments, and epidemiological questions. The answer format was either multiple choice or true or false. One example for the so-called knowledge questions with emotional background was 'Do you know when a girl can become pregnant?' This was a multiple-choice question with the following answer options: 'after her first menstruation', 'from 12 years on', 'from 14 years on', and 'not with the first sexual intercourse'. A question examining opinions and self-assessments



was for example 'I am deeply concerned that I will become fat when taking the birth control pill.' Finally an example for an epidemiological item used in the questionnaire was 'How old were you when you had sexual intercourse for the first time?' Additional information collected for the analyses were the self-reported age, gender, religion, language spoken at home, and school type of the respondents. Further, to rule out any recall effects the students were asked whether they had already previously participated in this particular sexual health programme. In 9<sup>th</sup> grade there were additional epidemiological questions on previous sexual experiences. Students receiving the sexual health programme were asked directly afterwards to fill out another short questionnaire containing 20 items. The purpose of this brief questionnaire was to ask the students to evaluate the intervention.

### **Statistical Analysis**

In order to evaluate the ÄGGF programme the main interest was the comparison of the change in knowledge, which has an emotional background for the intervention group, compared with the control group. Students in both groups were compared with respect to age, gender, and school type as well as baseline levels of knowledge. All statistical analyses were conducted for the total sample of students that participated in both pre-test and post-test as well as for males and females in 9<sup>th</sup> grade since literature (e.g., Fitzgerald et al., 1999) suggests that sex education programmes have different effects on gender. Mean differences between age, gender as well as school-type were tested for statistical significance using ANOVAS. MANOVAS were calculated to obtain the mean-differences adjusted for some of the other aspects. In order to assess the clinical relevance effect sizes were also calculated.

## **Results**

### **Ascertainment bias**

Table 2 shows the baseline socio-demographic characteristics of the students in the intervention and control group. The mean age of the intervention group was 13.41 years and it was 13.34 years in the control group.

Basically the two groups proved to be similar in regard to the most important baseline characteristics such as age, gender, and school-type. Yet there are significant differences between the intervention and control group.

**Table 2.** Comparison of intervention and control group in regard of their socio-demographic characteristics

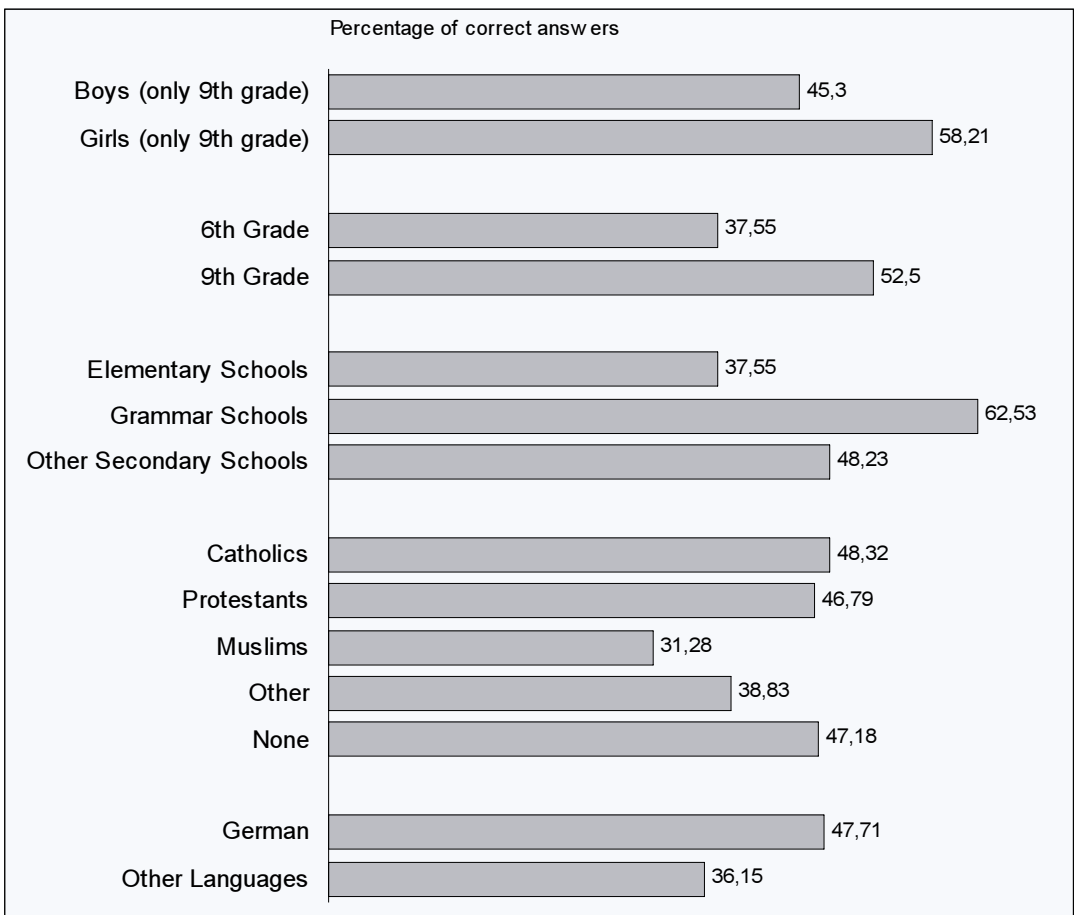
	Intervention (n = 945) (%)	Control (n = 639) (%)	p
<b>Gender</b>			
Female	745 (78.8 %)	480 (75.1 %)	0.083 <sup>a</sup>
Male	200 (21.2 %)	195 (24.9 %)	
<b>Age</b>			
Mean (SD)	13.41 (1.80)	13.34 (1.80)	0.537 <sup>b</sup>
<b>School-type</b>			
Elementary school	459 (48.6 %)	314 (49.1 %)	0.804 <sup>a</sup>
Grammar school	149 (15.8 %)	93 (14.6 %)	
Other secondary school	337 (35.7 %)	232 (36.3 %)	
<b>Religion</b>			
Catholic	316 (33.8 %)	159 (20.5 %)	<0.001 <sup>a</sup>
Protestant	325 (34.8 %)	198 (31.4 %)	
Muslim	64 (6.9 %)	129 (20.5 %)	
Other	29 (3.1 %)	20 (3.2 %)	
None	200 (21.4 %)	124 (19.7 %)	
<b>Language spoken at home</b>			
German	778 (82.3 %)	167 (17.7 %)	<0.001 <sup>a</sup>
Other	462 (72.3 %)	177 (27.7 %)	

<sup>a</sup>  $\chi^2$  – test<sup>b</sup> t-test

These are religion and language spoken at home. In the control group there seem to be more students who do not speak German at home. As a consequence thereof, a larger percentage of Muslim students was present in the control group. This circumstance could be explained by the cluster sampling procedure to collect the data. In a second step of the analysis a total score over all knowledge questions in the pre-test was calculated for each person. In 6<sup>th</sup> grade there were a total of 36 knowledge-based items whereas in 9<sup>th</sup> grade, as mentioned earlier, additional age-specific questions were included. Therefore in 9<sup>th</sup> grade the total number of knowledge based questions in the pre-test added up to 57 items. In order to be able to compare the total knowledge scores

of 6<sup>th</sup> and 9<sup>th</sup> graders the percentage of correctly answered items was calculated. This objective score was used to evaluate whether there might be differences between the socio-demographic groups in the sample regarding their knowledge of certain sexual health subjects. Thus, the mean total percentage was then compared using an ANOVA for each socio-demographic category. The results are depicted in Figure 1.

**Figure 1.** Mean percentages of correct answers in the pre-test for different socio-demographic groups



As can be seen in Figure 1 there were highly significant differences regarding the base level of knowledge of specific sex related topics in different socio-demographic sub-samples. It was found that girls gave more correct answers than boys in 9<sup>th</sup> grade. This fact does not seem to be very surprising, as the questions covered more female sexuality issues more relevant for girls than for boys. Further, knowledge seemed to increase with age and level of education. Another interesting fact concerned different levels of knowledge of students with different religious backgrounds. Basically Christians and nondenominational students answered significantly more items correctly than Muslims and students belonging to other religions. The same effect was found comparing German-speaking students with those who speak a different language at home. There may be several reasons why students with a different language scored lower in the knowledge questions. They could have had difficulties understanding the questions or it may be that these students are also the ones who indicated that they are Muslims. In fact, religion and language were associated as almost 83% of the Muslims also spoke a different language at home. However, there were no practically relevant differences between the intervention and control groups concerning baseline knowledge within socio-demographic sub-groups. Recapitulating these results there are several groups that could be identified, especially younger students, male adolescents, and students with a different socio-cultural background who seem to be disadvantaged in regard to baseline knowledge about sexual specific information.

### **Overall knowledge gain and retention**

In order to find out whether the students of the intervention group have learned and retained information taught during the sexual health promoting programme a post-test was conducted two weeks afterwards in both groups. It was assumed that an increase of knowledge would be present in the intervention group but not in the control group. The main results are depicted in Table 3. The mean increase in percent of correctly answered knowledge questions was calculated for each group in each socio-demographic category using analyses of variance (ANOVA) and multivariate analyses of variances (MANOVA). Further to assess the extent of practical relevance effect sizes (Cohen's *d* and *f*) were calculated.

As can be seen in Table 3 only the intervention group regardless of gender, class, school-type, religion, and language spoken at home has a reliable increase in knowledge compared to the control group. These results are also of high

**Table 3.** Mean increase of knowledge after the post-test

	Inter- vention (n = 945)  Mean (SD)	Control (n = 639)  Mean (SD)	Main effect group  p	Main effect 2 <sup>nd</sup> factor  p	Inter- action  p
Total sample	25.6 (18.2)	1.6 (12.0)	<0.001	--	--
Gender only 9 <sup>th</sup> grade			<0.001	0.014	0.217
Female	20.1 (13.6)	2.0 (9.9)			
Male	16.2 (19.7)	0.7 (12.3)			
Class			<0.001	<0.001	<0.001
6 <sup>th</sup> Grade	33.1 (17.0)	1.9 (12.9)			
9 <sup>th</sup> Grade	18.5 (16.5)	1.3 (11.1)			
School-type			<0.001	<0.001	<0.001
Elementary school	33.1 (17.0)	1.9 (12.9)			
Grammar school	19.9 (13.3)	2.2 (9.6)			
Other secondary school	17.8 (17.6)	1.0 (11.7)			
Religion			<0.001	0.672	0.092
Catholic	25.0 (16.2)	3.4 (12.0)			
Protestant	25.4 (17.2)	3.1 (10.9)			
Muslim	27.0 (18.0)	- 0.5 (12.3)			
Other	28.9 (18.2)	- 0.9 (9.8)			
None	25.6 (22.7)	- 0.3 (13.0)			
Language spoken at home			<0.001	0.946	0.076
German	25.3 (18.1)	2.1 (11.9)			
Other	27.1 (18.9)	0.4 (12.2)			

practical relevance. All Cohen's effect sizes ( $d$ ) range from 0.84 to 1.43. In contrast to the intervention group there are no relevant gains in knowledge present in the control group at all. In 9<sup>th</sup> grade girls seem to profit significantly more than boys. Even though this fact is statistically significant it only possesses a small effect size ( $d = 0.23$ ). Interestingly there are no differences concerning the increase in knowledge between the various religions, students with Muslim and other Non-Christian beliefs have a slightly larger gain than Christians or nondenominational adolescents ( $p = 0.80$ ,  $f = 0.04$ ). This result is in accordance with the findings for the category 'language spoken at home', there are no differences in the amount of knowledge increase in German speaking students and students who speak a different language at home ( $p = 0.24$ ,  $d = -0.10$ ). The largest benefit from this sexual health promotion programme was found for the younger students in 6<sup>th</sup> grade. Their increase of knowledge and retention was on average 33 %. In contrast to this result the group that had the lowest yet still relevant ( $d = 0.84$ ) increase in knowledge identified are male adolescents in 9<sup>th</sup> grade. These results are illustrated in Figure 2.

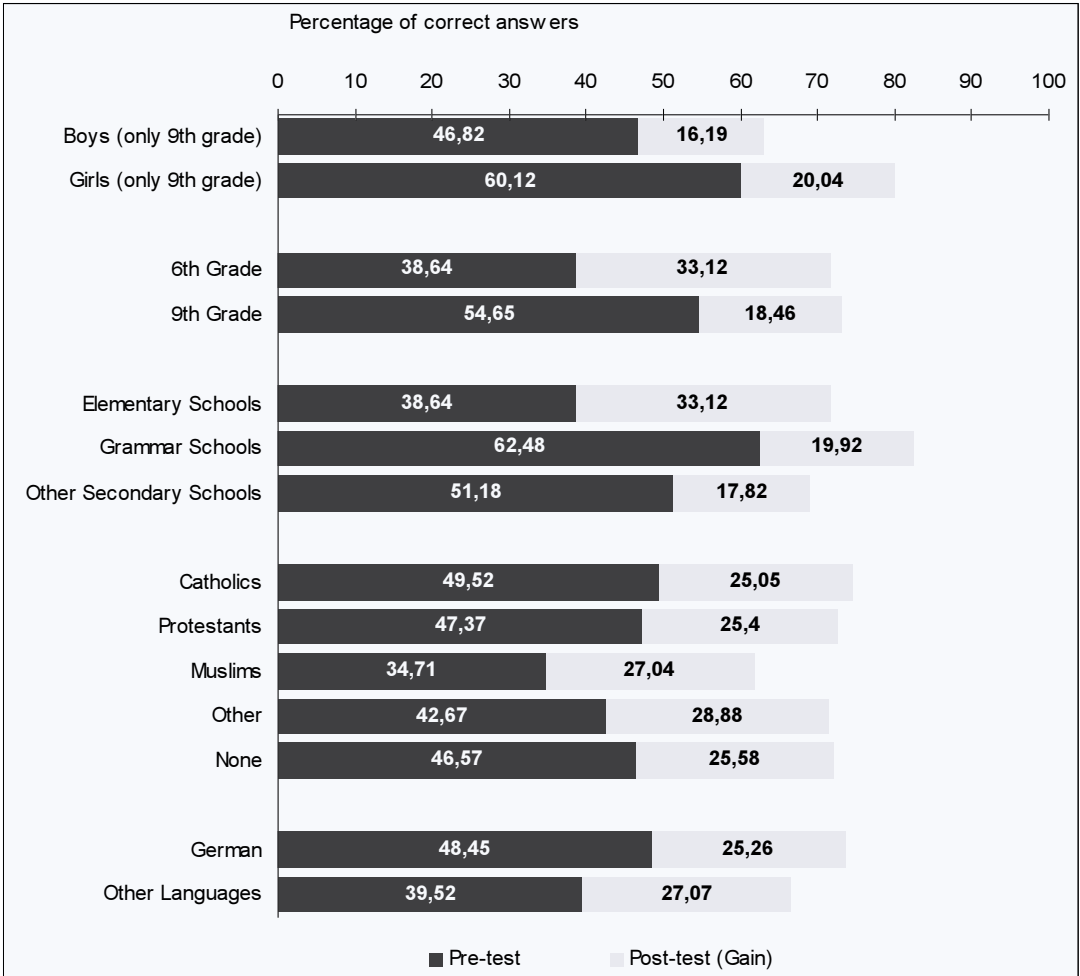
The difference in knowledge present during the pre-test for 6<sup>th</sup> and 9<sup>th</sup> grade students has almost completely vanished. The younger students know as much as older students from other secondary school levels.

### Acceptance

As was mentioned earlier before, the students participating in the sexual health promotion programme were given a short questionnaire regarding their acceptance of this specific type of intervention immediately after the session. In one question students were asked to rate the programme using the German grading system, ranging one to six with one being the best grade and six the worst. Differences between the socio-demographic sub-groups emerged in regard to their evaluation of the intervention programme (see Table 4). First of all, the programme was highly accepted by the vast majority of all participants. 88.8% of the students indicated that they thought that the intervention was good or very good.

The results show that positive ratings of the programme were higher for girls, adolescents speaking different languages at home; younger students from 6<sup>th</sup> grade, Muslims, and students with a higher level of education. These were also the groups with the larger increase in their knowledge. In another question the students were asked to rate the opportunity to speak with a female doctor about sex and sexuality. The answer categories were: very much, quite a lot,

**Figure 2.** Percentage of correct answers in the pre-test and the increase of knowledge in the post-test for the intervention group



somewhat, a little bit, and not at all. The results are basically identical to the general acceptance of this programme. Once again, participants were highly appreciative of the opportunity to speak with experts. The pattern of sub-groups that approved most of hearing from a visiting doctor was the same as for the ratings of general acceptance.

**Table 4.** *Evaluation of the sexual health promoting intervention.*

Intervention Group (n = 945)	Very good (1)	Good (2)	Average (3)	Sufficient (4)	Failed (5 or 6)	$\chi^2$ - test p
Gender (9th grade only)						<0.001
Female	39.6%	48.1%	10.2%	1.4%	0.8%	
Male	21.0%	53.0%	17.0%	5.5%	3.5%	
Class						<0.001
6th Grade	72.4%	23.7%	3.3%	0.4%	0.2%	
9th Grade	32.0%	50.1%	13.0%	3.1%	1.8%	
School-type						<0.001
Elementary school	72.4%	23.7%	3.3%	0.4%	0.2%	
Grammar school	40.9%	52.3%	5.4%	0.1%	1.3%	
Other secondary school	28.0%	49.1%	16.4%	4.5%	2.1%	
Religion						0.029
Catholic	48.7%	37.0%	10.8%	2.2%	1.3%	
Protestant	50.0%	39.8%	9.0%	0.9%	0.3%	
Muslim	70.5%	23.0%	1.6%	3.3%	1.6%	
Other	55.2%	44.8%	0.0%	0.0%	0.0%	
None	51.5%	37.0%	7.0%	2.5%	2.0%	
Language spoken at home						<0.001
German	48.1%	39.3%	9.5%	1.9%	1.1%	
Other	67.7%	28.0%	2.4%	1.2%	1.0%	

## Discussion

The objectives of this project were to evaluate the sexual health promotion programme from the ÄGGF regarding knowledge gain and retention as well as acceptance of the programme. It could be demonstrated that significant changes in knowledge regarding sexual topics occurred among German students who participated in a 90-minute special sexual health programme. Even though there were significant gender, age, and socio-cultural differences at baseline, the intervention exerted positive effects for both genders, both age groups, and all socio-cultural subgroups. There was an overall increase in knowledge of 27.3% in the intervention group. Nevertheless one has to bear in mind the alarming circumstance how little the students knew (i.e., 45.2% correct answers) about sexual topics at baseline (that is before the intervention



took place), although they rated their own knowledge to vary between good and satisfactory depending on the specific topic. Along with the increase in knowledge the programme proved to be highly accepted by a large majority of the students. These findings provide support for the supplementary implementation of this specific type of sexual health promotion programme by external doctors in schools. This claim is nothing new, since members of the European Network of Health Promoting Schools (ENHPS) have already stated in the Egmond Agenda that 'experience in Europe has shown that health promoting school initiatives are most effective when true partnership is practised between schools including pupils and teachers, all stakeholders and interested parties'. The findings of this study suggest that prevention and health promoting programmes should start at an early age, preferably in elementary schools. It could be shown that in 6<sup>th</sup> grade only a mean of 38.6% answers were correct at baseline. However after the intervention these students almost improved their knowledge by 100%, this being the largest increase of all investigated sub-groups. Despite the fact that this type of sexual health promotion programme is supposed to be gender-specific developed with the needs of girls and young women in mind, there was also some learning present in the 9<sup>th</sup> grade male students. This finding as well as the fact that boys also had tremendous gaps in their baseline knowledge calls for specific sexual health promotion programmes for boys and young men, too.

### **Limitations of the Study**

At this point nothing can be said about longer-term outcomes because these data report only the two-week post-intervention impact. How long students will be able to retain the newly acquired information requires further follow-up studies. Moreover, no statement can be made about whether or not unintentional pregnancies or infections can be prevented by this programme. Yet knowledge is one necessary premise for changes in behaviour.

Finally knowledge alone does not necessarily promote healthy sexual behaviours. It is one prerequisite yet attitudes and behavioural intent are other major influencing factors (Martiniuk et al., 2003). Therefore it is suggested that more specific research is needed to investigate the impact of the medical sexual health promotion programme from the ÄGGF on attitudes and behavioural intent.

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## 24

## Health Promoting Schools: Building Social and Organizational Capital to Promote Teachers' Wellbeing and Job Commitment

*Kate Lemerle and Donald Stewart*

### Introduction

One of the most notable international health initiatives in the past decade has been the Health Promoting Schools (HPS) model. Emerging from a shift in thinking towards a 'settings approach' to health promotion adopted some 20 years ago by the World Health Organization (WHO), this contemporary model for enhancing health within an holistic community development framework has brought about new understanding of the ways in which environment shapes population health outcomes.

An extensive literature has grown out of the biomedical literature linking social settings and health, generally referred to as 'social epidemiology' (Kawachi and Berkman, 2001). In parallel, recent theories focusing on 'capital' or intangible resources within human systems have emerged from the economic and political sciences, with evidence demonstrating that the extent to which members of a community have access to 'intangible assets' such as social capital plays a fundamental role in shaping population health outcomes.

Recent merging of previously disparate fields is steering health research away from the traditional pathogenic model of health, one based on identification of risk factors, towards a salutogenic paradigm of health, one that focuses on positive dimensions of our environments that promote and sustain healthy outcomes (Antonovsky, 1987). The Health Promoting Schools model is based on this new conceptual framework.

The origins of the HPS can be traced to the European Network of Health Promoting Schools (ENHPS) established in 1992. Three years on, the World Health Organization's (WHO) Global School Health Initiative was launched

(Nakajima, 1996) with a mandate for developing an approach to health promotion specifically designed for the school setting. The HPS approach recognises the potential of the school as a setting in which the health of children, school personnel, families, and other members of the community can be influenced. It offers schools a set of 'best practice' strategies targeting school curriculum development, fostering a positive school environment, and strengthening partnerships between the school and wider community.

A core tenet of the HPS is its emphasis on the school environment, both physical and social, as crucial for promoting and sustaining health. The environment is viewed as a central asset for effective health promotion, through the development of appropriate management structures, policies and practices that promote wellbeing throughout the entire school community. It recognises that school personnel, particularly teachers, play a fundamental role in influencing not only children's learning outcomes, but also the diffusion of health messages and adoption of lifestyle habits by children (Michaelowa, 2002). Teachers also shape the organizational climate and build social capital within the school, and these in turn create the context in which children develop psychosocial competencies such as resilience, or the capacity to cope with adversity (Rutter and Quinton, 1984).

Schools are recognised by the WHO as multifaceted organizational settings directly influencing population health through the education and socialisation of children and young people. In addition, they provide a work environment, that shapes the health behaviours and outcomes for their staff. Not only do they do this through the usual channels of influence associated with the workplace, such as exposure to environmental conditions detrimental to health (for example, exposure to skin or airborne pathogens), but as in all human service organizations, they expose employees to the potential health risks or benefits associated with the 'culture' or 'climate' of the workplace.

However, despite the HPS commitment to improve health across all levels of the school community, surprisingly few evaluations of the HPS model have considered the impact of this approach on teachers' health and wellbeing, or on changes in the school social or organizational environment. Leadership style, human resource policies and practices, and the subtle inter-relationships between members of staff, have been extensively studied within the field of workplace health promotion. Yet schools have rarely been investigated from the perspective of being a workplace, despite increasing worldwide concern about health issues, particularly job stress, associated with the teaching profession.

This paper reports the results of research conducted in Queensland, Australia, investigating the impact of the HPS approach on various dimensions of the school environment, including measures of social and organizational capital, and associations between these dimensions and teachers' health and wellbeing. It forms the first phase of a longitudinal investigation into children's resilience being conducted in Queensland, Australia. This research is exploring the hypothesis that teachers' health and wellbeing is an 'organizational asset' that impacts the school environment, and by doing so becomes a determinant of children's psychosocial development.

The results of this research suggest that the HPS model provides schools with a set of management principles that build human, organizational and social capital within the school, and that teachers in schools with higher social and organizational capital – health promoting schools – have lower rates of job stress, and greater job commitment. Healthier, more committed teachers provide a more positive learning environment for students, and greater collegiality for all members of staff. Future lines of research aim to show that these 'human resource' outcomes create a school climate that nurtures resilience, or positive mental health, in children.

Apart from adding to international research evaluating the impact of the HPS approach, this is the first study of its kind in Australia linking school management practices consistent with the HPS approach and teachers' health and wellbeing, and raises important issues regarding human resource management within the education sector. We discuss the hypothetical model underpinning our future research directions.

## Literature Review and Conceptual Background

### School Effectiveness and organizational Health: An Asset within the School Setting?

An organization is defined as effective according to the extent to which it attains its purposes or ends (also known as outcomes or outputs) (Anderson et al., 1994). Factors contributing to organizational effectiveness have been well researched and documented throughout the management literature. Typically, it is reflected in measures of internal factors, such as employee perceptions, or external factors such a product output or profit. Schools, however, due to the complexity of their structures and functions, pose considerable challenge in

terms of assessing their effectiveness, especially when indirect outcomes such as health of employees or 'consumers' (children) are concerned.

Within the education sector, organizational effectiveness research has largely addressed the extent to which various school-related factors determine obvious outcomes, most commonly, students' educational performance. In her meta-review of the school effectiveness literature, Anderson (1994) identified 228 variables associated with school effectiveness. However, with growing social pressure for schools to do more than just educate the young, and demands for accountability, the need to broaden our understanding of the inherent complexity and multidimensional nature of the school environment and its relationship to school effectiveness, from an organizational perspective, is becoming ever more apparent to educational researchers (Brown, Claudet and Olivarez, (2002).

A common theme to emerge from this research has been the impact of the school environment, particularly school climate, on numerous outcome measures of school effectiveness. These include students' academic achievement (Hoy and Hannum, 1997); psychosocial development including truancy and school dropout (Baer, 1999; Esposito, 1999); and aspirations (Plucker, 1998).

School climate has also been identified as having a significant impact on teacher outcomes such as their health behaviours (Cullen and Baranowski, 1999), job satisfaction (Xin and MacMillan, 1999), alienation (Thomson and Wendt, 1995), and empowerment (Short and Rinehart, 1993). Nearly thirty years ago, Sergiovanni (1967) confirmed that a robust and positive school climate contributed to positive teacher variables, that is, it built a reservoir of human capital or intangible resources available to the school, which facilitated its effectiveness. Such schools are recognised as having superior 'organizational health' (Murphy, 1996).

Moos (1979) provided an early rationale and description of social climate within schools from an organizational perspective. His model was based on the interrelationship of five sets of classroom characteristics (overall context, physical features, organizational factors, teacher characteristics, and aggregate student characteristics). More recently, Murphy (1996) proposed that the concept of organizational health provides an ecological framework for the study of social climates applicable to the school context. He defined organizational Health as 'the total health of the organization...[and] consists of two primary components: the economic health of the business and the physical/mental health of the workers'.

According to this definition, employee health and wellbeing is a resource to which the organization has access, and which becomes another element building overall performance potential of the organization. Through astute organizational design (management processes which influence boundaries and power within the organizational systems), resource management, organizational co-ordination (including decision-making processes), and organizational culture, various dimensions of employee health and wellbeing are enhanced, resulting in improved effectiveness. Within the school setting, organizational performance is measured in terms of students' psychosocial and educational outcomes, which reflects the performance capacity of the teaching staff (Ostroff, 1992). Organizations manifesting these principles and practices are said to have higher capital, that is, access to greater reserves of human, social and organizational resources.

Our research posits that the core principles defining the HPS are consistent with this theoretical framework, and therefore employees operating within a HPS should exhibit similar work-related health characteristics as employees of other industries or organizations which operate with higher organizational and social capital, that is, the management processes that promote organizational health. Typically, organizations with higher reserves of human, social and organizational capital are more effective and efficient. Yet this has not previously been investigated within schools.

### **Evaluating the Health Promoting School: Model of Best Practice?**

Despite the rhetoric that a core principle of the HPS model is a focus on the health and wellbeing of all members of the school community, evidence of applications of this approach to promote teachers' health is scant. The European Network of Health Promoting Schools (ENHPS, 1993) found that only 21% of schools in England had programs in place addressing the health of school staff. The EVA 2 Project set up in 1998 by the European Network of Health Promoting Schools (ENHPS) to evaluate the HPS approach across 21 networks in Europe, Scandinavia and the United Kingdom, confirmed that the model provides a sustainable set of school management principles, but has not yet demonstrated effectiveness from the perspective of any members of the school community apart from students.

In addition, few Australian studies have been conducted that evaluate measurable changes in health and/or cognitive outcomes, either of students or school staff, in Health Promoting Schools. The Western Australian School Health Project (WASH) is perhaps the earliest example of a comprehensive school health



promotion intervention in this country. A key finding was that sustained organizational changes supporting health promotion at school level can significantly affect the outcomes of school health promotion programs (McBride, 2000), but did not specifically address teachers' health and wellbeing, evaluate organizational practices within the schools, or measure the school climate.

Despite widespread international acceptance of the HPS model, and acceptance that it can readily be integrated within a state, or national, education system, we still have little understanding of whether this approach has a long-term impact on children's developmental outcomes, on organizational processes, or on teachers' health and other dimensions affecting their wellbeing such as job satisfaction and commitment. Job stress, in particular, is rarely examined in relation to models of school organizational practices.

### **Issues Affecting School Effectiveness: Teacher Stress**

Occupational stress and burnout are known to be associated with organizational factors, such as workplace morale, absenteeism, and work performance (Burke and Greenglass, 1995), and to contribute substantially to human resources costs within the education sector. These health consequences have been consistently noted as outcomes arising from the unique demands of the school environment (Griffith, Steptoe and Cropley, 1999).

Direct stressors regularly faced by teachers include serious behavioural problems and abuse from children, exposure to skin and bacterial infections, interruptions at work, multiple demands and time pressure. organizational stressors include lack of rest periods, work overload, mismatch between career expectations and reality, lack of opportunities for professional support or development, and ongoing uncertainty related to job contracts (Kendall, Murphy, O'Neill and Bursnall, 2000). However, apart from schools implementing traditional health education programs, such as stress management training, little research has attempted to identify organizational models of best practice that effectively minimise the health risks associated with this occupation.

The consequences of high-stress occupations such as teaching are typically higher organizational costs such as staff burnout and turnover, and costs arising from workers' compensation claims. Data from Australia indicates that in 2000, there were 41.3 per 1000 workers' compensation claims filed nationally from within the education sector. Exact figures, state by state, are difficult to find due to difficulties in defining 'work-related stress', but there is evidence that rates of claims within the education sector have not reduced in recent

years, and in some states have increased. In addition, the overall costs of work-related stress claims are significantly higher than for other types of claims (WorkCover Western Australia, 2000; Australian Education Union, 2003).

In probably the most comprehensive study undertaken in Queensland, Hart and his team (1999) collected measures of the school organizational climate, staff satisfaction, intentions to quit, absenteeism, subjective work experiences, coping strategies, and personality variables from 5,000 school staff (representing 27.7% of primary school teachers) across 109 Queensland primary schools (representing 11% of state primary schools) from 1996 and 1998. Organizational factors were implicated as the most significant determinants of occupational stress and low morale amongst teachers in their sample. This research confirms that many of the workplace stressors and their associated costs within the education sector could be minimised with the implementation of proven effective management approaches (Kendall, Murphy, O'Neill and Bursnell, 2000). Comparisons of management practices across schools have not been undertaken, and scant research has been directed towards identifying those characteristics of schools that have low rates of teacher stress.

The research reported here was designed to test the hypothesis that organizational strategies consistent with the HPS model provide schools with management structures and processes that enhance social and organizational capital, and that adoption of such practices contributes to lower job stress and higher job commitment amongst the teachers.

## Research Methods

This research was conducted with government primary schools in Queensland, Australia. Phase 1 involved conducting a state-wide audit to identify the extent of implementation of health promotion activities consistent with the HPS approach. Details regarding the development and psychometric analyses of the audit checklist, along with the results of the state-wide audit, are available from the authors.

Phase 2 of the research was conducted with 39 schools selected on the basis of their audit results, school size (enrolment of between 300-700 students), and matched for Index of Relative Socio-Economic Disadvantage (IRSED). One set of 20 schools actively implementing HPS policies and practices was compared with a set of 19 schools not implementing the HPS model.

Data were collected using a 126-item self-report questionnaire with 5 scales (Teachers' School Environment Questionnaire) compiled using selected scales from six published instruments, chosen after an extensive review of the literature on measurement of school climate and organizational factors related to teacher job stress and job commitment. Teachers' perceptions of the school organizational climate were collected using scales from the *School Organizational Health Questionnaire (SOHQ)* (Hart, Wearing, Conn, Carter and Dingle, 2000), and Onyx and Bullen's (1997) *Social Capital Questionnaire (SCQ)*. Five scales from the *Job Content Questionnaire (JCQ)* (Version 1.5) (Karasek, 1996) were used to measure teachers' experiences of the psychological and social structure of the work situation, including issues such as work demands, decision-making opportunities, social interactions, and psychosocial strain. The affective commitment scales of Meyer, Allen and Smith's (1993) *Organizational and Occupational Commitment Scales* were used to measure organizational and occupational commitment, with three additional questions to assess turnover intentions (the extent to which employees consider leaving their current position or occupation) (Jaros, 1997). Six items from the *Non-specific Psychological Distress Scale* (Kessler and Mroczek, 1994) were included to assess generalised anxiety and depression. The questionnaire also included 15 items adapted from the *CDC Behavioral Risk Factor Surveillance System Questionnaire* (2001), which has been used extensively to assess self-rated health (general) and mental and physical wellbeing, along with self-ratings of physical activity levels, smoking, alcohol use, dietary habits, preventative health behaviours (health insurance, physical health check-ups, use of natural supplements), weight, blood pressure and cholesterol. A separate form to collect demographic data was developed.

Minor modifications were made to a number of items after consultation with both Education Queensland and the Queensland Teachers' Union, with approval from the publishers. The questionnaire and proposed data collection methods were piloted with teachers in 3 state primary schools, prior to data collection. Strategies known to optimise response rates to mail-out surveys were integrated into the data collection methods. For example, a personalised cover letter was included in each teacher's package explaining the value of the study and inviting their participation; each package was sealed and labelled with the individual teacher's name; stamped return envelopes were provided; and questionnaires were printed on green paper.

In total, the principals of 86 schools that met participation criteria were contacted via a letter informing them of their school's selection. From these, 39

schools confirmed their participation and provided a list of their teaching staff. Packages consisting of a personalised letter of invitation, an information sheet about the project, a consent form, a demographic data sheet, the TSEQ, and a stamped pre-addressed return envelope were mailed out to 1,280 teachers. Three weeks after the first mail-out a reminder letter was mailed to the 747 teachers who had not returned their completed questionnaires, and a further three weeks later a replacement package (containing a second TSEQ plus demographic data sheet and consent form) was sent to the 571 teachers who had still not responded.

## Results

By the end of the school term, 914 responses had been received (71.4% of total mail-out), including 854 fully completed packages (TSEQ + demographic data sheet) (66.7% of total mail-out). Fifty-seven teachers returned demographic data sheets only, 16 returned only the questionnaire without a demographic data sheet, and 60 teachers returned their consent forms indicating their refusal to participate (active refusals). The response from HPS was 468 (54.8% of useable responses), and from the comparison schools 386 (45.2% of useable responses).

### **Distribution of Scores and Tests for Normality**

All variables with the exception of Student Orientation were acceptably close to being normally distributed. In all cases the decision was made to retain outlying cases in the dataset as inspection of the 5% trimmed means indicated that these cases were not significantly affecting the data.

### **Demographic Variables**

A comparison of the distribution of demographic variables across the two samples indicated that they were reasonably well matched (Table 1). The most notable demographic differences were:

- The higher percentage of married teachers in HPS, and proportionately lower percentage of separated or divorced teachers.
- The higher percentage of teachers with undergraduate and postgraduate degrees in HPS.

**Table 1.** *Percentage (%) of responses for demographic variables.*

		Low HPS	High HPS
Gender (%)	Male	21.0	20.5
	Female	79.0	79.5
Relationship status (%)	Single	13.7	14.5
	Married/df	71.8	74.1
	Divorced/sep	10.9	7.1
	Widowed	1.8	1.3
	Missing	1.8	3.0
Highest level of Education completed (%)	Teaching certificate	6.0	6.4
	Teaching diploma	26.2	22.0
	Undergraduate degree	35.5	40.0
	Postgraduate diploma	17.9	16.7
	Postgraduate degree	10.9	11.3
	Other	0.3	0.2
	Missing	3.4	3.4

When high-HPS and low-HPS were compared on the variables related to teaching experience and tenure, a number of notable differences were found (Table 2):

- HPS had a greater percentage of permanent part-time and relief staff than comparison schools;
- HPS typically had a higher proportion of inexperienced teachers, that is, teachers with less than 6 years experience.
- HPS had a higher proportion of teachers with fewer years at the current school.

### **Health Promoting Schools and Social Capital**

Four variables used to define social capital were investigated in this research – Value of Life, Social Proactivity, Trust and Safety, and Tolerance of Diversity. An independent samples t-test was conducted to compare the mean scores for the two samples. All four variables were significantly higher in HPS than the comparison sample (Table 3).

**Table 2.** *Percentage (%) of responses for teaching variables.*

		Low HPS	High HPS
Current tenure (%)	Permanent ft	73.8	68.8
	Permanent pt	17.4	20.5
	Relief ft	3.9	4.5
	Relief pt	3.1	3.4
	Missing	1.8	2.4
			Low HPS
Teaching years (%)	< 1 year	1.8	2.6
	1 - 3 years	6.0	7.3
	4 - 6 years	6.2	7.5
	7 - 10 years	12.4	10.7
	11 - 13 years	7.8	8.5
	14 - 16 years	15.3	10.9
	17 - 20 years	12.2	12.0
	> 20 years	36.3	38.2
	Missing	2.1	2.4
		Low hps	High hps
Years at Current school (%)	< 1 year	15.3	16.0
	1 - 3 years	22.3	28.4
	4 - 6 years	26.7	23.9
	7 - 10 years	17.4	12.4
	11 - 13 years	8.3	7.7
	> 14 years	8.3	9.0
	Missing	1.8	2.6

### Health Promoting Schools and School Organizational Health

Independent samples t-tests were conducted to investigate differences between the two samples on eleven dimensions of school' organizational health'. Equal variances were assumed for all dimensions with the exception of Student Orientation. Differences between means were statistically significant for all 11 dimensions (Table 4), with HPS consistently having a higher mean score than comparison schools. The most notable differences observed were that HPS had

higher scores on:

- Supportive leadership,
- School morale,
- Appraisal and recognition,
- Goal congruence,
- Co-worker support, and
- Professional growth.

**Table 3.** Comparison of Low and High HPS on Social Capital Variables.

	Low HPS (Mean)	High HPS (Mean)	t	df	Sig (2 tail)
Value of Life	7.17	7.42	-2.559	793	.011
Social Proactivity	24.11	24.97	-2.976	793	.003
Trust and Safety	16.06	16.76	-2.748	791.86	.006
Tolerance of Diversity	7.20	7.51	-2.989	791	.003
N =	356	437			

### Associations between Organizational Health and Social Capital

Multiple regression analyses were conducted to determine the extent to which each of the school organizational health variables and social capital subscales was correlated. All correlations were positive and ranged from weak (.20 between Tolerance for Diversity and Appreciation) to moderately strong (.53 between Value for Life and two organizational health variables, Role Clarity and Appreciation). Trust was weakly correlated with most of the organizational health variables, with its strongest association being with Student Orientation ( $r = .42$ ). It is reasonable to consider that this variable adds a significantly unique dimension to the measurement of school organizational health. Tolerance for Diversity was also only weakly correlated with each of the organizational health variables, suggesting that it also adds a substantially unique dimension to measurement of the school organizational health.

### Health Promoting Schools and Job Stress

Results of independent samples t-tests demonstrated that differences between means from the two samples were statistically significant for Psychosomatic Strain ( $t = 2.15$ ,  $p = .03$ ) and Skill Discretion ( $t = -5.38$ ,  $p < .001$ ). A lower mean

score for Psychosomatic Strain was found for teachers from HPS (Mean HPS = 19.03, Mean non-HPS = 19.98). The mean score for Job Demand was higher in HPS schools (HPS Mean = 22.08 and non-HPS 21.37), however the difference between samples was not statistically significant ( $t = -1.61, p = .11$ ).

**Table 4.** *Difference between High and Low HPS on Dimensions of School Organizational Health.*

	Low HPS (Mean)	High HPS (Mean)	Difference b/w Means	t	df	Sig (2 tail)
School morale	17.00	18.56	1.56	-5.460	795	<0.001
Supportive leadership	17.19	18.85	1.66	5.052	795	<0.001
Decision authority	10.44	11.22	0.78	-4.822	795	<0.001
Macro-level decision authority	19.15	19.86	0.71	-3.169	795	.002
Role clarity	14.29	14.96	0.67	-3.612	795	<0.001
Co-worker support	21.80	23.00	1.20	-4.748	795	<0.001
Appraisal & recognition	17.40	18.84	1.44	-3.921	795	<0.001
Professional growth	16.51	17.71	1.20	-4.531	795	<0.001
Goal congruence	17.28	18.59	1.31	-5.343	795	<0.001
Curriculum co-ordination	13.29	14.23	0.94	-4.204	795	<0.001
Student orientation	12.01	12.48	0.47	-4.079	774	<0.001

Spearman's Rank Order Correlation was conducted to determine the strength of associations between each of the three job stress variables. A moderate but inverse correlation was found between Job Demand and Psychosomatic Strain ( $r = -.37$ ). Psychosomatic Strain and Skill Discretion were inversely related to a small degree ( $r = -.15$ ). Skill Discretion and Job Demand were not correlated ( $r = -.05$ ).

These results raise the possibility that the health effects of job stress may be mediated by increasing skill discretion, that is, by giving employees more control over how they manage the work demands, a result consistent with international research.

### Health Promoting Schools and Job Commitment

Comparisons of mean scores from the two samples showed that teachers in HPS were significantly more committed to their current school (higher organizational



commitment) than those in the comparison sample, and although they were also more committed to the occupation of teaching, the strength of this was lower than for the school itself. Intentions to leave the current school, in combination with intentions to quit the teaching workforce, were slightly higher for teachers from the comparison sample (Table 6).

**Table 5.** *Difference between High and Low HPS on Dimensions of Job Stress.*

	Low HPS (Mean)	High HPS (Mean)	Difference b/w Means	t	df	Sig (2 tail)
Psychosomatic strain	20.08	19.11	0.97	2.195	793	.028
Job demands	21.25	21.99	-0.74	-1.966	795	.050
Skill discretion	18.65	19.68	-1.03	-5.271	796	<0.001

### Health Promoting Schools and Teachers' Self-Rated Health

A Chi-square test was conducted to determine whether teachers in HPS rated their general health, physical health and mental health differently to teachers in the comparison sample. No significant difference was found in self-rated general health between the two samples (chi-square=1.825, df=4, p=0.77) (Table 7). Likewise, no significant difference was observed in self-rated physical health between teachers in each sample (chi-square=4.508, df=4, p=0.34) (Table 8). However, a statistically significant difference was found for self-rated mental health (chi-square=10.552, df=4, p=0.03) (Table 9). A noticeably higher percentage of teachers in HPS reported having no mental health problems, while a higher percentage of teachers in comparison schools reported having daily mental health problems.

**Table 6.** *Differences between high and low HPS and Job Commitment.*

	Low HPS (Mean)	High HPS (Mean)	Difference b/w Means	t	df	Sig (2 tail)
Organizational commitment	20.06	21.57	-1.51	-4.008	794	<0.001
Occupational commitment	24.02	24.86	-0.84	-2.827	794	.005
Turnover intentions	7.27	6.48	0.79	3.618	726	<0.001

**Table 7.** Comparison of Self-Rated General Health (Low/High HPS)

	SELF-RATING LEVEL				
	1	2	3	4	5
	No problems per month	Problems 1-3 days per week	Problems once weekly	Problems several times weekly	Daily problems
Low HPS	.8%	12.0%	40.8%	34.6%	11.7%
High HPS	.2%	10.8%	41.3%	36.0%	11.7%

**Table 8.** Comparison of Self-Rated Physical Health (Low/High HPS)

	SELF-RATING LEVEL				
	1	2	3	4	5
	No problems per month	Problems 1-3 days per week	Problems once weekly	Problems several times weekly	Daily problems
Low HPS	33.1%	47.2%	10.7%	7.9%	1.1%
High HPS	34.3%	50.6%	9.2%	4.6%	1.4%

**Table 9.** Comparison of Self-Rated Mental Health (Low/High HPS)

	SELF-RATING LEVEL				
	1	2	3	4	5
	No problems per month	Problems 1-3 days per week	Problems once weekly	Problems several times weekly	Daily problems
Low HPS	19.6%	43.9%	19.8%	12.8%	3.9%
High HPS	26.0%	43.7%	17.9%	11.3%	1.1%

In HPS, 34.7% of teachers reported often or always feeling unexplained fatigue, compared to 47.1% of teachers in comparison schools. The difference between the two groups was statistically significant (chi square = 14.44,  $df = 4$ ,  $p = .006$ ). More teachers in non-HPS reported frequently feeling nervous. Differences were statistically significant (chi square = 15.16,  $df = 4$ ,  $p = .004$ ). Teachers in HPS were significantly less likely to feel depressed than teachers in non-HPS (chi square = 16.77,  $df = 4$ ,  $p = 0.002$ ). A significantly higher percentage of teachers in HPS reported 'never' feeling as if everything was always an effort (chi square = 15.57,  $df = 4$ ,  $p = 0.004$ ). Feelings of worthlessness were more prevalent in teachers from non-HPS compared to teachers in HPS (6.4%). This difference was statistically significant (chi square = 11.65,  $df = 4$ ,  $p = 0.02$ ).

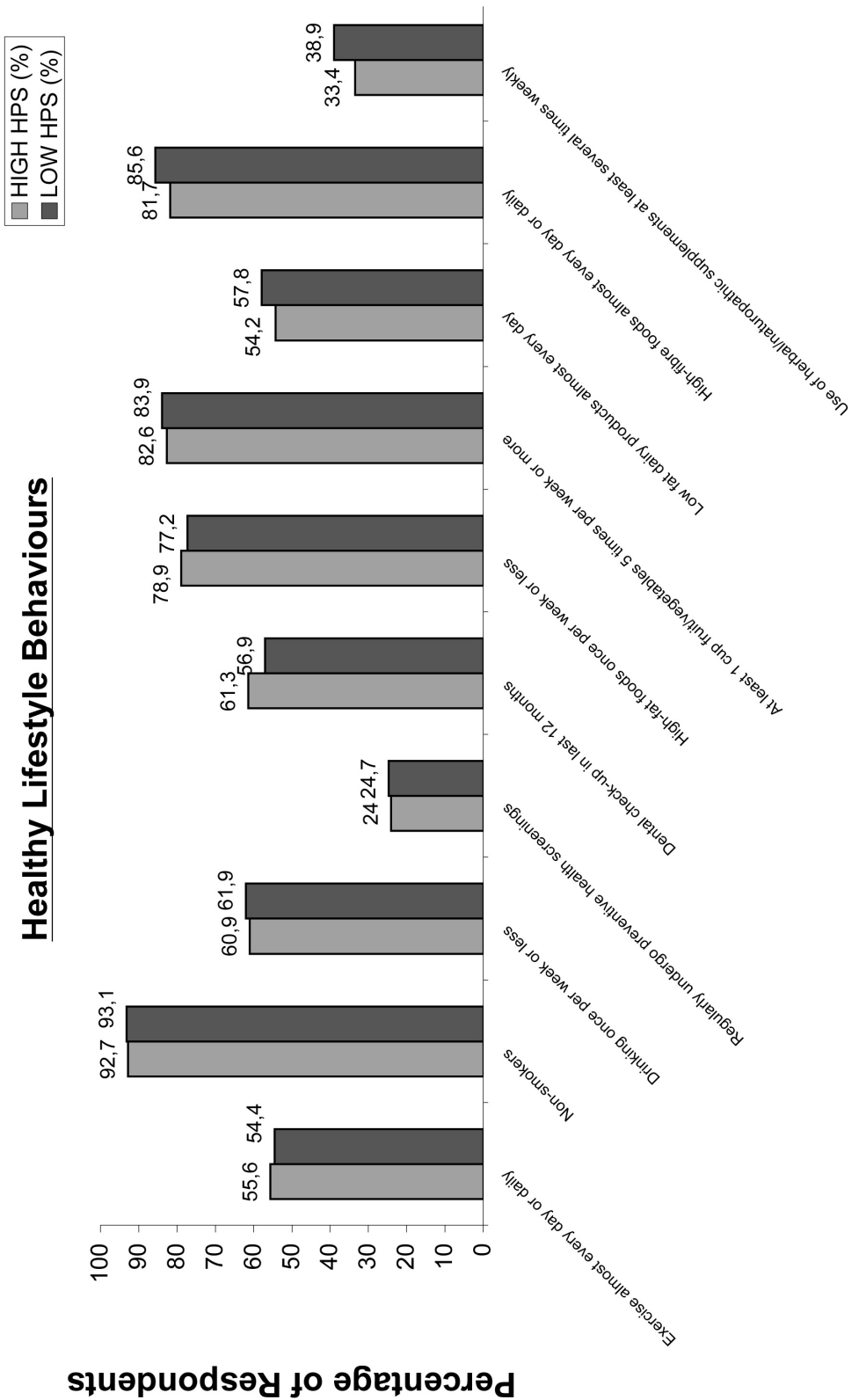
### **Health Promoting Schools and Teachers' Health Risk Behaviours**

Figure 1 shows the comparisons between the two samples on each of the health risk behaviours. No significant differences were found, although teachers in HPS were slightly more likely to have undergone a dental check-up in the past year. Surprisingly, teachers in comparison schools were slightly more likely to regularly eat high fibre and low fat dairy products, and at least one cup of fruit and vegetables almost every day, as well as more frequently use herbal or naturopathic supplements. Self-rated weight indicated that at least half of all teachers (50.6% in HPS and 51.7% in comparison schools) are 'at least a little overweight', and only slightly more than half (55.6% for HPS and 54.4% in comparison schools) are exercising at least most days of the week. Again, a slightly higher proportion of teachers in HPS reported participating in no physical activity (6.2% compared with 5.8% in comparison schools).

## **Discussion**

The purpose of this research was to investigate whether the HPS approach, which has demonstrated significant positive impact on student-related health and educational outcomes, also results in demonstrable changes to organizational processes within primary schools, and to teachers' health and wellbeing. Given that the essence of successful health promotion is not just change as measured by health risk behaviours, but also structural changes within the setting, measuring changes at this level as well as at the personal level is essential for a comprehensive evaluation of a health promotion

Figure 1. Comparison of Teachers' Health Behaviours Between High and Low hps.



initiative such as the HPS approach. In addition, with increasing understanding of the importance of social capital, including quality of social networks, levels of trust, and tolerance for diversity, the measurement of these variables within the context of a setting that espouses its support of such factors is fundamental to determine the potential health outcomes that may be expected in the long term from the HPS.

This research has demonstrated that all 11 dimensions of the school's organizational health were higher in schools that were more actively implementing strategies consistent with the HPS approach. The greatest differences were observed for Supportive leadership, School morale, Appraisal and recognition, Professional growth, and Goal congruence. On all 4 scales measuring Social capital, HPS rated higher than those that were not adopting this approach, with the greatest difference being for the Social Proactivity scale.

Teachers in HPS reported significantly less psychosomatic strain, despite the fact that Job demand was higher in these schools. This unexpected result may have something to do with Skill discretion being higher in HPS. This raises some interesting possibilities for the associations between job demands and health outcomes, with the possibility that job stress may be alleviated by increasing employees' skill discretion or opportunity for having greater control over their workloads. Organizational commitment was substantially higher for teachers in HPS, and Turnover intentions lower, with very little difference observed in relation to Occupational Commitment.

These data suggest that Queensland state schools adopting the HPS approach are perceived by teachers as a more positive work environment, and that despite being a 'higher demand' work setting, teachers in these schools report significantly lower job-related stress, and significantly better self-rated mental health. However, this is not being translated into healthier lifestyles, with no difference in the prevalence of health risk behaviours between the two samples of schools. Teachers are least likely to be regularly undergoing preventive health check-ups or regularly using natural health supplements, whilst only slightly more than half are regularly exercising. In general, teachers appear to be practicing healthy dietary habits, although almost one in five teachers (slightly more in low HPS) is drinking alcohol every day. Whether this was excessive intake was not explored in this research, but could be the focus of more detailed exploratory research in the future.

## Implications of the Research and Future Directions

The implications of these results are highly relevant for several reasons. Our results confirm that the HPS provides more than just a setting that fosters more positive health and educational outcomes for children, which has already been demonstrated by numerous previous studies, but also provides a work environment that reduces the risks associated with stress-related compensation claims, and significantly increases 'human capital' (health and psychological wellbeing) within the school.

Teachers in schools where there was greater co-worker support, appreciation, and value placed on them as individuals, reported lower psychosomatic strain. Commitment to the workplace, as distinct from the occupation of teaching, was higher in such schools. These relationships appeared to be independent of the demands of the job, a finding consistent with recent research published by Demerouti, Bakker, Nachreiner and Schaufeli (2000). Similar results have been reported by Dollard and Winefield (2002), who found higher levels of 'active coping' and sense of efficacy (personal accomplishment), along with lower levels of psychological distress and ill-health, in jobs combining high demands and high control. They suggest that this may be due to 'emotional and physiological toughening that occurs when workers have the opportunity for both challenge and recovery' (p. 18).

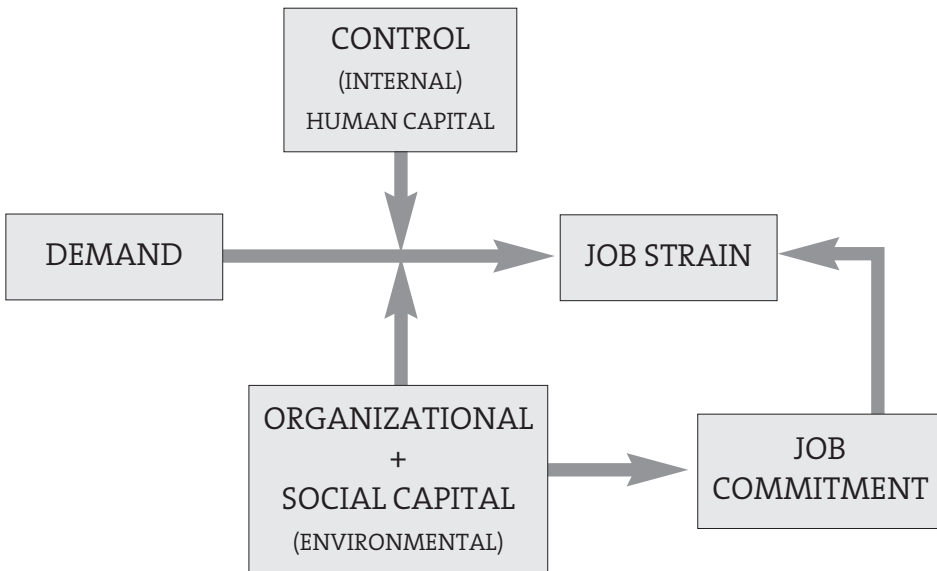
The job stress literature has been dominated for the past decade by two key theoretical models, the Effort-Reward Model and the Demand Control Model. Both models independently predict self-rated health status as well as a range of health outcomes such as cardiovascular disease and poor mental health (Ostry, 2003). The results of this present study replicate Ostry's findings within the context of the school environment, but extend their findings by linking the outcomes to specific dimensions of the school's organizational processes. In schools offering higher skill discretion (opportunities to keep learning new things, developing skills, skilled tasks, task variety, and job creativity), teachers' morale was higher, co-worker support was stronger, teachers felt more appreciated, and their personal and professional goals were more congruous with the workplace.

This research suggests that other 'organizational assets' apart from social support within the work environment of the school setting are important for teachers' health and wellbeing. It extends the Demand-Control- (Support) Model developed by Johnson (1988). The Demand-Control-Support (D-C-S)

model assumes that job strain is a result of the interaction of three job dimensions: job demands, extent of control over the job demands, and social support, which was defined by Karasek and Theorell (1990) as 'overall levels of helpful social interaction available on the job from both co-workers and supervisors'. According to the D-C-S model the highest job stress arises in a work environment where demands are high, control low, and social support low.

Whilst our research is consistent with the D-C-S model, we are proposing that a new model of job strain incorporating capital theory provides a more comprehensive model particularly within human service organizations such as schools and hospitals where productivity, or organizational output, is measured in terms of intangible variables such as learning. Most notably, other variables such as opportunities for professional development, goal congruity, curriculum co-ordination, trust, social proactivity, value and appreciation, and workplace morale, all contribute to building a 'high-capital' work environment that appears to buffer job strain (see Figure 2).

**Figure 2.** *Proposed Model of Job Strain.*



In addition, the variable Job Commitment, which is determined by the same organizational capital factors, also moderates job strain. The feedback loops provided by a management system adopting the 'Capital-Control' model, which is implicit within the HPS framework, acts to curtail job strain, and may in turn strengthen the organization against externally imposed threats, that is, build 'organizational resilience'.

The premise underlying research now being conducted by our team is that 'resilient organizations', such as HPS, build resilient people, and that the HPS will produce children with greater resilience, because of increased hardiness of the teachers and a social context which itself is notably richer in human and social capital. This proposition is founded upon Kobasa's (1979) conceptualization of hardiness as a personality construct that buffers stress in people's lives. She reports that hardiness is characterized by the variables of commitment, challenge, and control. Teachers experience less stress when they are committed, challenged, and feel in control of their work.

Systematically altering the work environment, using principles consistent with the HPS model, to reduce stress, should promote hardiness, and hardy teachers will, by logical extension, provide children with hardy role models within an environmental context that supports the development of this characteristic. Whether teachers in the HPS display greater emotional toughness – resilience – could not be included in the present study, but this theory provides an interesting line of research for future research into teacher burnout prevention.

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## Contributors

### **Carmen Aldinger**

Carmen Aldinger is an Associate Project Director in the division of Health and Human Development Global Programs (HHD) at Education Development Center, Inc. (EDC), in Newton, Massachusetts, USA. She works primarily on international projects related to health promotion through schools. Carmen manages and coordinates ongoing projects and contract details, reports and team meetings for the centre's global work in health promotion, including its work as a World Health Organization (WHO) Collaborating Center to Promote Health Through Schools and Communities. She has written or co-authored major school health papers that synthesize research and provide guidance for a worldwide audience. Publications include *Healthy Nutrition; Family Life, Reproductive Health and Population Education; Alcohol Use Prevention*, and *Skills for Health: Skills-based Health Education including Life Skills* for the WHO Information Series on School Health. She was also a co-researcher and writer for *Thematic Study: School Health and Nutrition* on behalf of UNESCO for the Education for All (EFA) 2000 Assessment; and *Adolescent Substance Use: Risk and Protection* on behalf of the United Nations Office on Drugs and Crime.

### **Margaret M. Barry**

Margaret Barry is Senior Lecturer and currently Head of Department and Director of the Centre for Health Promotion Studies at the Department of Health Promotion, National University of Ireland, Galway. Margaret is a board member of the Clifford Beers International Centre for Mental Health Promotion and elected member of the Global Board of Trustees of the International Union for Health Promotion and Education (IUHPE) for the period 2004-2010. She is co-editor of a special issue on the *Evidence of Mental Health Promotion Effectiveness* for the International Union for Health Promotion and Education (in press) and contributor to the forthcoming World Health Organization report on *Promoting Mental Health: Concepts, Emerging Evidence, Practice*. Research interests include project development in the areas of mental health promotion, evidence-based



practice and programme evaluation, together with involvement in large scale national and cross-border initiatives, international and EU funded projects.

### **Mary Byrne**

Mary Byrne is a researcher at the National University of Ireland, Galway (NUIG). Following a BA in Psychology and Music (Trinity College, Dublin) and an MA in Health Promotion (NUIG), she joined the Centre for Health Promotion Studies at NUIG in 1999. Her work there included the evaluation of a community-based mental health promotion project between two rural communities on either side of the Northern Ireland border, and a review of the international evidence base on the effectiveness of community- and school-based mental health promotion as part of the Global Programme on Health Promotion Effectiveness. For her doctoral research Mary developed and evaluated *Mind Out*, a school-based programme promoting positive mental and emotional health for 15-18 year olds. During this time she was a member of the Advisory Board for the International Alliance for Child and Adolescent Mental Health in Schools. Now based in the Department of General Practice at NUIG, she is project director of the SPHERE study, a randomized controlled trial of an intervention to improve secondary prevention of heart disease in general practice.

### **Stephen M. Clift**

Stephen Clift is Professor of Health Education in the Faculty of Health, Canterbury Christ Church University, UK. He has made contributions to health education and promotion in the fields of HIV/AIDS and sex education for young people, and international travel and tourism. His current interests are focused on the contributions of the arts and music to healthcare and health promotion. Together with Grenville Hancox, Professor of Music at Christ Church University, he has recently established the Sidney De Haan Research Centre for Arts and Health. Stephen's ongoing work includes the development of the *Silver Song Club Project*, which organizes musical events for elderly people and their carers in association with local choral societies, and the evaluation of *Music Start*, an innovative project on the Isle of Wight which aims to promote singing and music making in all families on the island with children aged from birth to five years.

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## **Derek Colquhoun**

Derek Colquhoun is the first academic to hold the position of Chair in Urban Learning in England. He is Director of Research within the Centre for Educational Studies, Institute for Learning at the University of Hull. Before joining the University in 2002, Derek taught and researched in three universities in Australia (Deakin, Ballarat and Victoria) and was co-editor of the first Australian text on Health Promoting Schools. He was on the National Health and Medical Research Council's Health Promoting Schools Working Party, which developed a justification for Health Promoting Schools across the country, as well as being the Victorian representative on the Australian Health Promoting Schools Association for several years. Currently Derek is evaluating two Healthy School Award Schemes in England (which together involve about 600 schools) as well as undertaking a major three year evaluation of a programme which provides access to primary school children to free, healthy school breakfasts, lunches and after school snacks. He is also working on a book on evaluating Health Promoting Schools.

## **Kristina Egumenovska**

Kristina Egumenovska is a psychologist and Gestalt psychotherapist, one of the founders of *Sinteza*, the Macedonian Association of Gestalt Counselors and Gestalt Therapists, and currently President of its Supervising Committee and contact person for Europe. She has worked widely in psychosocial and educative work with marginalized groups: HIV positive people, children from dysfunctional families or without parental care, displaced children, victims of armed conflicts, and youngsters living in crisis regions. Most recently she has worked as a volunteer at the Psychiatric Clinic Ljubljana, Center for Treatment of Drug Addiction. As a member of the Mentor Team for the S-IVAC approach in managing pupils' projects Kristina was actively involved within the Macedonian Network of Health Promoting Schools and is a member of the Macedonian research team for the Health Behaviour in School-Aged Children Study, with her major focus on social inequalities regarding young people's health behaviour, lifestyles and wellbeing.

**Marco Franze**

Marco Franze works in the Centre of Applied Health Sciences, University of Lueneburg, Germany. He is Project-Coordinator for *MindMatters – Mental Health Promotion for Secondary Schools* and has a special teaching post at the University of Lueneburg in the field of mental health. His PhD thesis was entitled *On Personal Constructs within the Framework of Researching Subjective Well-Being*. Marco's research interests include: Mental Health Promotion in Schools; Personality and health (Subjective Well-Being); Evaluation of interventions in the field of health promotion, and Personality and students' achievements (Perfectionism and procrastination as a predictor of writing problems)

**Gisela Gille**

Gisela Gille is Head of the Medical Association for Promotion of Women's Health and currently lecturer at the University of Lüneburg. Her recent investigations have focused on the prevention of teenage pregnancies, and sexually transmitted diseases in young women, especially chlamydia infection.

**Bo J. A. Haglund**

Bo Haglund is Professor in Health Promotion and Head of the Research Group of Health Promotion in the Department of Public Health Sciences, Karolinska Institutet, Stockholm. He is Director of the World Health Organization Collaborating Center on Supportive Environments for Health. Bo is currently involved in research issues on health governance, healthy public policies and evaluation of health promotion initiatives. Interest in the development of Health Promoting Schools began in 1989 with a workshop arranged in collaboration with Department of Health Promotion, Cardiff, and resulted in a book, *Youth Health Promotion: From Theory to Practice in School and Community*. This was the starting point for the involvement in the development of the health promoting school concept application in Sweden. Bo is also a member of the editorial board of Health Promotion International.

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### **Miluše Havlínová**

Miluše Havlínová has worked at the National Institute of Public Health (NIPH) in Prague since 1971 and is currently a Senior research and the Czech National Co-ordinator of Health Promoting Schools. Her research interests include the psychology of health and lifelong healthy development of individuals; conditions at school for the healthy development of students and the design of health promoting model-programmes in schools. Miluše has published widely on health promotion in schools, with a recent focus on health promotion in early years education settings.

### **Maria W. J. Jansen**

Maria Jansen studied Human Nutrition at the former Agricultural University Wageningen. In 1981, she received her MSc degree, after which she started as a teacher in nutrition, patient education and epidemiology at a Higher Certificate school for dieticians and nurses. Since April 1989 she has worked at the Regional Public Health Department Maastricht. First as a health educator focussing on traffic safety for older people, later as a prevention coordinator regarding sexually transmitted diseases and addiction with a special focus on youth. Maria introduced multidisciplinary cooperation and inter-sectoral implementation as a regular working method for prevention and health promotion. In 1996 she became manager of a subdivision of the Department of Public Health. As a member of the directorate she continued in 2000 her career as Senior Advisor and Innovator on health promotion and public health. In this role she initiated the *SchoolBeat* project.

### **Bente Jensen**

Bente Jensen is Associate Professor at the Danish University of Education, the Institute of Educational Sociology. Her main research interests include health promotion among children and young people, young people's concepts and attitudes in relation to health and social factors, social inequality, education and intervention and relations between competence development and learning. Bente has been involved in a number of evaluation and development

projects with schools and pre-school institutions. Currently she is carrying out an international review on social capital, background and health in relation to children. She is currently involved in the project entitled 'The effects of early childhood educational programmes (ECE) on the socio-emotional and school achievement of children disadvantaged by poverty'.

### **Bjarne Bruun Jensen**

Bjarne Bruun Jensen is Professor of Health and Environmental Education at the Danish University of Education. He is the director of the Research Programme for Environmental and Health Education at the university, which involves 25 researchers. His current research interests are focused on the concepts of action competence, action and participation in relation to health promoting schools as well as education for sustainable development. Bjarne is also involved in research and development in the area of schools and their contribution in relation to the challenge of inequality in health among young people. He has published widely in the areas of health education, health promoting schools and environmental education and he is currently on the editorial board on a number of international journals in these fields.

### **Ilze Kalnins**

Ilze Kalnins is Professor Emeritus in the Department of Public Health Sciences, University of Toronto. Following a Ph.D. in developmental psychology she focused on teaching, research, and writing on children's health promotion including their empowerment and involvement in community development, health decision-making and health concepts. She has taught courses in Toronto and at the Academy of Medicine, Riga Stradina University in Latvia on children's health, health promotion program design and research methodology. At the University of Toronto she has served as the Director of community health teaching for undergraduate medical students, and as the Director of the Master of Health Sciences graduate program in Health Promotion. In 1989 Ilze initiated Latvia into the international Health Behaviour in School-Aged Children Study. She has worked as a trainer for the Latvian Health Promoting Schools project since 1992 and has served as a consultant for WHO (Latvia) and the Canadian

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Executive Service Overseas. She has published articles in English and Latvian in academic journals and the popular press.

### **Tiaan G. J. C. Kirsten**

Tiaan Kirsten is a Senior Lecturer and registered Psychologist at the North-West University in Potchefstroom South Africa. He holds a Ph.D. that was aimed at stress management and the promotion of wellness in teachers by the use of Clinically Standardized Meditation. He does research and practice in issues in health/ mental health/ wellness and forensic mental health, especially as it relates to teachers. He is currently the Chairperson of the Division for Educational Psychology within the Psychological Society of South Africa. He has a part-time private practice, and his wife is also a psychologist. He believes that in the new socio-political dispensation in South Africa the profession of psychology should be a democratic, accountable and enabling profession in promoting dignity, equality and freedom between the members of the profession as well as in the greater society.

### **Christine Klapp**

Christine Klapp is assistant head of the Psychosomatic Department in the Clinic of Obstetrics, Charité. She is a member of the Medical Association for Promotion of Women's Health and her recent investigations have focused on the prevention of teenage pregnancies, primary prevention in gynaecology especially the prevention of sexually transmitted diseases, and factors leading to postpartal depression.

### **Michal Kolar**

Michal Kolar is a psychotherapist and team manager at a pedagogical - psychological counselling centre in Prague. His professional interests include bullying and anti-social behaviours, and the theory and methodology of intervention related to bullying in the school environment and he has undertaken research on these issues. Michal is also involved in the development of training focused on bullying prevention for teachers and other professionals, and is

currently working with the Ministry of Education, Youth and Sports, Czech Republic, on the concept of prevention of bullying and other serious antisocial behaviours.

### **Rolf Lander**

Rolf Lander is Professor of Education at the University of Göteborg. His research interests are focused on evaluation, school improvement and school organization, and health and social development of students. Research and research-based evaluation alternates with consultancy work for schools, and state and municipal authorities. Recent research and evaluation studies have addressed two issues: student and teacher effects on self-efficacy and work adjustment in school improvement focussing on social climate and self-regulative work; and different systems of planning and monitoring which schools develop in order to cope with and take advantage of the abolition of national time frames for subject teaching.

### **Kate Lemerle**

Kate Lemerle has recently completed a PhD with the School of Public Health, QUT, Brisbane. Her thesis evaluated the Health Promoting Schools model in relation to teachers' job stress, work commitment, and health risk behaviours, and identified key organizational factors impacting on teachers' health. In association with the *QUT Resilient Children and Communities Project*, Australia's largest investment in identifying school-level strategies to promote children's resilience, she is extending her doctoral research to investigate links between school organizational health and social capital, and children's resilience. In addition, she has been co-ordinating the *BRiTA Project* (Building Resilience in Transcultural Australians), an initiative of Queensland Health and Multicultural Mental Health Australia. Kate is currently extending this project into primary schools in Queensland, combining a structured classroom intervention with a whole-school approach based on the HPS framework. Her research has been presented at a number of international conferences, and is being submitted for publication in international journals.

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**Mariken T. W. Leurs**

Mariken Leurs is a health promotion specialist and coordinator of the schoolBeat-approach to tailored school health promotion at the Maastricht Public Health Institute. Besides developing the approach, she is also evaluating this approach for her PhD-study. Mariken was trained as a health scientist. She is interested in healthy schools, collaborative approaches to health promotion, quality assessment and health-enhancing physical exercise. Earlier work included the coordination of the national campaign of *The Netherlands on the Move!*, development and project management of a daily exercise program on television for seniors, coordination of the EU-funded *Europe on the Move!* network and work on the WHO global atlas on tobacco and health.

**Vizma Mikelsone**

Vizma Mikelsone holds a Masters degree in education with a specialty in health education from the University of Latvia. She has an extensive and in-depth knowledge about schools and health promotion within this setting. In addition to her daily work as a teacher of biology and health education at Krimulda Secondary School, in 2000 she became the National Coordinator of HPS in Latvia. Under her leadership the HPS has now expanded to about 150 schools and has benefited from regular training course for teachers on topics that include health promotion, reproductive health and HIV/ AIDS, teaching of life skills, and methods for incorporating health into other school subjects. Vizma has been called on by the Ministry of Education and Science of Latvia to develop teaching and assessment standards in health education for the primary and secondary school curricula. She is the co-author of several publications for students – *Health Education for Grade 8* and *Health Education in Secondary School*.

**Ingrid M. Mur-Veeman**

Ingrid Mur-Veeman is Associate Professor at the department of Health Organization Policy and Economics (HOPE) of the University of Maastricht, the Netherlands. She studied sociology at the University of Amsterdam. As an academic staff member of the Technical University in Eindhoven she wrote her



thesis about strategic policy and administration in general hospitals (1981). Thereafter she worked as a policy adviser at the provincial government in the province of North-Brabant. In Maastricht she teaches organizational sciences and management development, especially addressing students in health policy and management as well as students in health promotion. In addition, she is involved in post-academic educational courses for health care managers. Ingrid's research activities are focused on inter-organizational collaboration between health care providers for delivering integrated health and social care to multi-problem patients. Central issues are management of change, designing and restructuring organizations and steering processes. In this field she coordinated several evaluation research projects at the request of the national and local authorities. In addition, she is involved in cross-national comparative studies.

### **John Newell**

John Newell is a lecturer in Statistics in the Department of Mathematics, National University of Ireland, Galway. He is a Fulbright Scholar, holds a BSc in Mathematics, an MSc in Statistics and a PhD in Statistics (University of Glasgow, Scotland). John's main area of research involves Applied Statistics including survival analysis, computational inference, functional data analysis and applications in sports science. He has co-authored over 25 peer-reviewed publications. He is the consultant statistician for the Sports Performance Unit, Glasgow Celtic Football Club.

### **Saoirse Nic Gabhainn**

Saoirse Nic Gabhainn has a BA in Psychology and an MA in Health Promotion from University College Galway, Ireland. Following doctoral studies in the University of Nottingham, England she joined the Department of Health Promotion at the National University of Ireland, Galway in 1993 and was assistant academic director with responsibility for research on children and young people between 1995 and 2004. During this period she was involved in a variety of evaluations of school health education and promotion, both within Ireland and internationally, and has been the principal investigator for Ireland on the WHO collaborative study, Health Behaviour in School-aged Children.

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Saoirse is currently a lecturer in the Department of Health Promotion and project leader within the Centre for Health Promotion Studies. She was a member of the research and information panel that contributed to the development of the Irish National Children's Strategy and is a member of the research and development advisory group of the National Children's Office.

### **Lena Nilsson**

Lena Nilsson is Senior Lecturer in educational science at the University of Trollhattan/Uddevalla, Sweden. She conducts research in the field of health promotion on the subject of democracy and participation, with special emphasis on school-alienated groups. Lena Nilsson's primary methodological interest is in participatory research. She tutors students enrolled on programmes for health promotion and teacher education. Lena Nilsson started her career as a teacher, first in compulsory schools and then at the upper secondary level and has been a member of a network for health promoting schools. Lena has supervised a number of health promotion projects as well as having carried out numerous evaluations of different kinds of projects. Previously she has been responsible for the development of public health policy, in one of Sweden's regional authorities. She is currently the chairperson of the Undergraduate Education and Research Council for the Teacher Education Programme at the University of Trollhattan/Uddevalla.

### **Silva Omarova**

Silva Omarova is Assistant Professor in the Sociology Department of the Faculty of European Studies of Riga Stradina University where she teaches Sociology and Psychology to undergraduate and graduate students. Her research interests lie in Sociology and Psychology as it relates to Organizations and Work, with respect to job satisfaction, loyalty, social cohesion and identity formation. Silva is the author of 50 publications, including two monographs on social psychology and two on health promotion. Her involvement with the HPS project in Latvia began in 1994. Since that time she has worked as a trainer for HPS teachers in conflict resolution, mental health promotion, stress management, life skills teaching, and use of interactive teaching methods.

### **Peter Paulus**

Peter Paulus is Professor of Psychology in the Institute of Psychology, University of Lueneburg, Germany. His research interests are focused in the fields of educational psychology, family psychology, and health psychology. His overarching interest is dedicated to research and realization of health promoting education. Peter was research advisor for two national pilot projects funded by the federal government: “*Netzwerk Gesundheitsfördernde Schulen*” (Network of Health Promoting Schools 1993-1997) and “*OPUS – Offenes Partizipationsnetz und Schulgesundheit*” (Open Participation Network and School Health 1997-2000), and is currently Head of Research of an international project “*Anschub.de*” (Alliance for sustainable school health and education 2002-2008). He has also contributed to the development of the European Network of Health Promoting Schools through participation in Network conferences and workshops.

### **Vivian Barnekow Rasmussen**

Vivian Barnekow Rasmussen is currently serving as a technical officer for the Child and adolescent health and development programme in WHO, Regional Office for Europe. She taught in a comprehensive school in Denmark for a number of years, in which period she was also working as education advisor on health promotion programmes dealing with lifestyles, alcohol and drugs. She was working as an adviser to the National Board of health in Denmark supporting the development of a database for health education and promotion resources for use in the education system. After having obtained a master’s degree in health education with focus on nutrition she started working for WHO. Vivian’s main involvement is with the European Network of Health Promoting Schools where she is responsible for the Technical Secretariat. The aim of the technical secretariat is to support countries throughout Europe in the developing capacity and policies for sustainable programmes for health promotion in schools. She is also the WHO focal point for the Health Behaviour in School-aged Children survey, a cross-national study striving to gain new insight into, and increase understanding of, adolescent health behaviours, health and lifestyles in their social context.

### **Jörgen Svedbom**

Jörgen Svedbom is Head of Section for Research and External Relations at the School of Education and Communication, Jönköping University, Sweden. He has worked with environmental and health education issues for Regional and National Boards of Education as well as for the National Board of Public Health, and has provided expert evidence on health education in a number of governmental and ministerial commissions. Jörgen is author of several teaching materials in health and environmental education and has presented papers at several international conferences on health and environmental education. His special research interests are: the connections between information, knowledge, attitudes and behaviour; the interdependence of health and environmental consciousness as well as socioeconomic inequalities and health. His most recent publication is *The Didactics of Health Education*, published by the Finnish National Board of Education. Helsinki 2005.

### **Herman P. Schaalma**

Herman Schaalma is Assistant Professor at the Department of Health Education & Health Promotion, Maastricht University. His main research interests are the improvement of reproductive health among young people, in the Netherlands as well as in developing countries. His scientific specialization is the development of data-based and theory-based health promotion interventions (Intervention Mapping) with a special focus on youth and HIV/STI prevention. Currently, Herman is supervising PhD projects on HIV/STI education for migrant women in the Netherlands, web-based HIV/STI risk communication for young adults, the promotion of blood donation, and coordinated school-based health promotion. He is also one of the principal researchers in the SATZ project school-based sexual health promotion in Tanzania and South Africa.

### **Venka Simovska**

Venka Simovska is Assistant Professor in health education and health promotion at the Danish University of Education. Her research interests evolve around issues relating to health and well being, young people, and teaching/learning

processes in the area of school health education and promotion. In particular, Venka's research focuses on student participation and empowerment in learning. Recent publications include journal articles in *Health Education and Health Education Research* on student participation and health promoting schools, and a book with Bjarne Bruun Jensen on lessons learnt from the *Young Minds Project*. She was awarded her PhD in April 2005.

### **Donald Stewart**

Donald Stewart is currently the Director of the Queensland Centre for Public Health, Principal Researcher for the Centre for Health Research at QUT, and Adjunct Professor at Capital Research Institute of Paediatrics, Beijing, PR China. He is the Project Director/Chief Investigator of the *Resilient Children and Communities Project* which is evaluating approaches that promote resiliency in children of primary school age in school, family and community settings. He is also Director of the project *Development and Evaluation of a School-based Resilience Promotion Program for Children from Culturally Diverse Backgrounds*, funded collaboratively by Brisbane City Council, Transcultural Mental Health Centre, Queensland Health and QUT. Donald has been a WHO consultant on over 10 occasions in Asia and the Pacific, assisting in the development, management and evaluation of health promoting school policies and projects, has been the keynote speaker at national conferences in Australia and New Zealand, and presented papers at many international, national and state conferences. He has recently launched the *Asia-Pacific Resiliency Project*, the first multi-national project in the southern hemisphere to establish collaborative partnerships between Australia and developing nations in order to promote resilience in children and young people.

### **Christiane Thomas**

Christiane Thomas is research scientist in the Epidemiological Research Unit Child and Adolescent Health, Quality of Life at the Robert Koch-Institute, Berlin, the federal public health research institution in Germany. In this position, she is conducting and coordinating epidemiological health surveys on health, health behaviour as well as quality of life in children and adolescents and studies on

the effectiveness of health promotion programs in schools. Christiane's current research interests are subjective health and well-being of children and adolescents, survey instrument development, and evaluation methodology. Prior to this position she served as a student research assistant in the Department of Cognitive Psychology at the University of Potsdam, studied Psychology and is qualified as a child and adolescent cognitive behavioural psychotherapist. She is a member of the Health Behaviour in School-aged Children cross-national research group.

### **Per Tillgren**

Per Tillgren is Associate Professor in Health Promotion and Deputy head of the research group of health promotion at Karolinska Institutet, Stockholm. His starting point for research was his thesis on population-based interventions within the framework of the Stockholm Cancer Prevention Programme. Today his focus is more on healthy public policy, implementation and evaluation of health promotion, especially at local community level. Per is one of the editors of *Youth Health Promotion: From Theory to Practice in School and Community* produced in collaboration with health promotion researchers in Wales. He is currently engaged in the development of Masters of Public Health training programmes in Sweden.

### **Keith Tones**

Keith Tones is currently Emeritus Professor of Health Education at Leeds Metropolitan University and Visiting Professor of Health Promotion at the Nuffield Institute for Health, Leeds University. He has been extensively involved in health education research, development and consultancy in the UK, and has undertaken a variety of international training and consultancy work. This has included work of WHO and PAHO. He recently contributed to the evaluation of Healthy Schools in Hong Kong. Keith Tones has published widely. He is principal author of *Health Promotion: Effectiveness and Efficiency* with co-author Sylvia Tilford, and has contributed 30 chapters to a wide range of texts on health promotion and produced over 60 journal articles. His most recent book, *Promoting Health: Planning and Strategies*, with co-author Jackie Green was

published in 2004. Keith Tones is a member of the editorial boards of a number of journals and Executive Editor of the international Journal, *Health Education Research: Theory and Practice*.

### **Kerttu Tossavainen**

Kerttu Tossavainen is Professor of Nursing Science in the University of Kuopio, Finland. Her special fields and research interests are nurse education and health promotion. Since 1989, she has been involved in the Health Promoting Schools programme, and she has been the leader of the Finnish European Network of Health Promoting Schools (ENHPS) since 1993 in close co-operation with the Finnish Centre for Health Promotion. Before moving to the University of Kuopio in 1988, Kerttu worked as a researcher and a project leader in the National Public Health Institute for over six years, gaining excellent research and project leader's skills and co-operative contacts with national and international researchers. During the past 15 years she has attained further functional research contacts as the youth project leader in Russian Karelia in co-operation with the Finnish North Karelian Public Health Centre. Kerttu has published over 130 scientific articles on health education, health promotion and nursing education.

### **Hannele Turunen**

Hannele Turunen is Senior Lecturer of Nursing Science in the University of Kuopio, Finland and Docent in Health Pedagogies at the Department of Nursing Science, University of Turku, Finland. Her research interests are nurse education and health promotion. She has qualified as a Nurse Teacher and Master in Nursing Science. Her doctoral thesis focused on critical learning incidents in Finnish and British nurse teacher students' teaching practice. She has been a member of the Finnish European Network of Health Promoting Schools (ENHPS) research group since 1997 in co-operation with Kerttu Tossavainen and the Finnish Centre for Health Promotion. She has been invited in several national and international academic and professional meetings and conferences. She has published 90 articles on health promotion and nursing education with her research fellows.

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### **Raili Välimaa**

Raili Välimaa is Senior Lecturer in Health Sciences in the Department of Health Sciences, University of Jyväskylä. Young people's health has been a central part of her work in the field of public health services and then at the university. After finishing her doctoral studies in health promotion Raili has mainly been working as a researcher in the international study Health Behaviour in School-aged Children (HBSC). In addition, by means of qualitative research she has studied young people's social relationships; sexual health, sex education and services; embodiment; and health promotion practices in families and has a particular interest in gender issues in these areas.

### **Harri Vertio**

Harri Vertio is currently Secretary General of the Cancer Society of Finland. He qualified as a medical doctor from the University of Helsinki in 1972 and subsequently undertook postgraduate training in the field of community planning. During this training he undertook a study of the health behaviour of conscripts in Finland. He has worked in a variety of organizations including The Headquarters of the Finnish Defence Forces, The National Board of Health, The Cancer Society of Finland and the Finnish Centre for Health Promotion. Harri has had extensive experience of working with the WHO, particularly as Coordinator of the Health City Project in Finland. He has also served on the editorial boards of the *Finnish Medical Journal* and the *International Journal of Health Promotion*, and has published widely on issues related to health promotion and health policy.

### **Charles T. Viljoen**

Charles Viljoen is a Senior Lecturer in Educational Psychology at the North West University in South Africa. He holds a Ph.D. from the same university. His areas of specialisation include the promotion of health, well being and wellness in educational settings as well as multicultural education. He is a member of various national and international associations and has published in areas of education, health promotion and identity. He has extensive teaching and research experience in countries like the United Kingdom, the Netherlands, the



USA, South Korea and South Africa. The main focus of his current work includes the development of indicators for Health Promoting Schools. He received international recognition for the distinguished work done as a member of the New Century Scholars Programme *Health in a Borderless World* when his name and scientific specialisation were taken up in the 22<sup>nd</sup> Edition (2004) of *Who's Who in the World* as well as in the *International Biographical Centre (IBC)* in Cambridge for Outstanding Academics of the 21<sup>st</sup> Century Awards 2004.

### **Nanne K. de Vries**

Nanne de Vries is Professor of Health Education and Health Promotion at Maastricht University. Trained as a social psychologist, he is interested in determinants of health behaviour, the development of effective health promoting interventions, evaluation methods and the implementation in broader health policies. Nanne has a special interest in non-reasoned behaviour (habits, automatisms, affect) and environmental interventions. Earlier research focused on attitude theory, minority influence and consumer behaviour.

### **Katherine Weare**

Katherine Weare is Professor of Education at the University of Southampton. She has been involved in the Health Promoting School network from its very early days. Her particular interest is emotional and social education, a topic on which she has researched and written extensively. She led a WHO project on *Promoting Mental and Emotional Health in the ENHPS* that involved her (with Gay Gray) in working in almost all the countries of Eastern and Central Europe, from which they developed a staff training manual on mental and emotional well being that is widely used across Europe. Subsequently she led a WHO project developing HPS approaches in Russia. Katherine's recent publications include *Promoting Mental, Emotional and Social Health: A Whole School Approach*, and *Developing the Emotionally Literate School*. She has helped various national and international agencies to develop their education and their mental health services, including working for the EU to develop work to prevent anxiety and depression in young people. She is currently working with the UK government to develop strategies to develop social and emotional learning in schools.

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**Cheryl Vince Whitman**

Cheryl Vince Whitman is Senior Vice President of Education Development Center Inc., an international research and development organization, applying research and education strategies to address challenges in health, education and social justice. She also directs the division of Health and Human Development Programs, dedicated to promoting healthy behaviours and environments where people live learn and work. She is the principal investigator for SAMHSA's National Center for Mental Health Promotion and Youth Violence Prevention, which works with school and community agencies, strengthening their capacity to implement evidence-based policies and strategies. Cheryl holds an education degree from McGill University, a B.A. in psychology from Boston University and an Ed.M. from the Harvard Graduate School of Education.