

Equity, Education and Health: Learning from Practice

Buijs, Goof; Dadaczynski, Kevin; Schulz, Anette; Vilaca, Teresa

Publication date:
2014

Document Version
Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for pulished version (APA):

Buijs, G., Dadaczynski, K., Schulz, A., & Vilaca, T. (Eds.) (2014). Equity, Education and Health: Learning from Practice: Case Studies of Practice presented during the 4th European Conference on Health Promoting Schools; Odense, Denmark, 7 – 9 October 2013. CBO. <https://www.schoolsforhealth.org/sites/default/files/editor/case-studies/innovative-practice-book.pdf>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

EQUITY, EDUCATION AND HEALTH: LEARNING FROM PRACTICE

CASE STUDIES OF PRACTICE
PRESENTED DURING THE 4TH
EUROPEAN CONFERENCE ON
HEALTH PROMOTING SCHOOLS
ODENSE, DENMARK
7– 9 OCTOBER 2013

EDITED BY
GOOF BUIJS
KEVIN DADACZYNSKI
ANETTE SCHULZ
TERESA VILAÇA



THE 4TH EUROPEAN CONFERENCE ON HEALTH PROMOTING SCHOOLS

Equity, Education and Health

Equity, education and health: learning from practice
Case studies of practice presented during the 4th
European Conference on Health Promoting Schools,
held in Odense, Denmark, 7 – 9 October 2013

EDITED BY: Goof Buijs *CBO/SHE network, the Netherlands*
Kevin Dadaczynski *Leuphana University, Germany*
Anette Schulz *University College South, Denmark*
Teresa Vilaça *University of Minho, Portugal*
DESIGN: Hanne Nissen *University College South, Denmark*
PHOTOGRAPHY: Nils Rosenvold
PICTURES: Created by students from health promoting
schools throughout Europe and submitted for the
“Show your Talent” competition as part of the Odense
conference.

PUBLICATION DATE: August 2014
ISBN 978-90-9028428-6

*This publication arises from the CBO_FY2014 operating
grant which has received funding from the European
Union, in the framework of the Health Programme.*

© CBO, 2014. No part of this publication may be
reproduced, either in folio or digital form, without
written permission.

Requests concerning the reproduction of images or text
should be addressed to: CBO – P.O. Box 20064 – 3502 LB
Utrecht – The Netherlands – e-mail: info@cbo.nl

5	FOREWORD
9	CHAPTER 1 SUMMARY ODENSE CONFERENCE
15	CHAPTER 2 THE ODENSE STATEMENT
23	CHAPTER 3 INNOVATIVE PRACTICE STORIES
25	1 Canada The Pan-Canadian Joint Consortium for School Health: Collaboration across health and education, across jurisdictions <i>Katherine Kelly</i>
31	2 Canada Healthy School Planner <i>Katherine Kelly</i>
35	3 Canada Positive Mental Health Toolkit: a resource for the entire school community <i>Katherine Kelly</i>
39	4 Estonia Developing a support system for children with type 1 diabetes in educational settings in Estonia <i>Krystiine Liiv and Tiia Pertel</i>
43	5 Europe Sustainable networking for mainstreaming health and safety in education: ENETOSH <i>Ulrike Bollmann, Susanne Ulk, Ulrike Craes and Claus Dethleff</i>
49	6 Iceland Support for the health promoting school projects in Iceland: a new national curriculum for all school levels <i>Ingibjörg Guðmundsdóttir</i>
55	7 Italy Health promoting schools network in the Lombardy region <i>Liliana Coppola, Danilo Cereda and Bruna Baggio</i>
61	8 Lithuania The health promoting school wave rolls through Lithuania <i>Daiva Zeromskiene, Diana Aleksejevaite, Dalia Sabaliauskiene, and Nijole Paulauskiene</i>



- 67 9 The Netherlands
The Dutch Education Agenda Sport, Exercise and Healthy Living
Jan Jansen, Goof Buijs and Jan Faber
- 71 10 the Netherlands
Movement, learning and wellbeing in and outside the classroom:
***The Class Moves!* in various European countries**
Elise Sijthoff
- 77 11 Poland
Health promotion for school staff as part of a whole school approach to health in Poland
Magdalena Wojnarowska-Soldan and Grazyna Skoczek
- 83 12 Russian Federation
Posture and physical education of students in the Russian Federation
Peter Khramtsov and Kirill Matveev
- 89 13 Russian Federation
Research on single sex education in Russian schools
Olga Vyatleva and Galina Goncharova
- 93 14 Scotland (UK)
Health and wellbeing: the responsibility of all
Suzanne Hargreaves
- 101 15 Singapore
Health Promotion Club: cultivating youth health ambassadors
Lee Yee Cheong-Lim and K Vijaya
- 105 16 Singapore
CHERISH Junior Award: health promoting pre-schools in Singapore
Lee Yee Cheong-Lim and K Vijaya
- 109 17 Wales (UK)
Results based accountability for health promoting schools
Mary Macdonald
- 115 18 Wales (UK)
Assessing schools as health promoting by the National Quality Award
Sue Bowker and Mary Macdonald
- 121 CHAPTER 4 EVIDENCE FOR EFFECTIVE ACTION
ON HEALTH PROMOTING SCHOOLS:
Background paper of SHE factsheet on evidence



FOREWORD

The fourth European Conference on Health Promoting Schools: 'Equity, Education and Health', was held in Odense, Denmark on 7-9 October 2013. The conference was organised by University College South Denmark in collaboration with the Aarhus University, CBO (SHE network), the South Denmark European Office and the WHO Regional Office for Europe. Its focus was on demonstrating the state of the art in developing health promotion in schools, stimulating innovation and creating synergies through common actions at national, regional and local levels.

A health promoting school is one that constantly seeks to develop its capacity for healthy learning, working and living. The whole school environment is seen as a setting for action to promote health of the entire school community and beyond. At least 34 000 schools in the WHO European Region are identified as health promoting schools in the 2012/2013 school year.

The health promoting school approach has been active in Europe for more than 30 years. It emerged in the early 1980s, and the European Network of Health Promoting Schools (ENHPS) was established in 1992, drawing on the five principles of the Ottawa Charter for Health Promotion.

Work on school health promotion in Europe is now supported by the Schools for Health in Europe (SHE) network, which succeeded the ENHPS in 2008. SHE has 43 participating countries, each of which is represented by a national coordinator. The SHE secretariat is located at CBO in the Netherlands, supported by the WHO Regional Office for Europe, the Council of Europe and the European Commission. Five core values and pillars define the common basis of the SHE approach to school health promotion.

SHE core values

On the European level, the following core values are shared and these values underpin the health promoting school approach:

- Equity. Equal access for all to education and health;
- Sustainability. Health, education and development are linked. Activities and programmes are implemented in a systematic way over a prolonged period;
- Inclusion. Diversity is celebrated. Schools are communities of learning, where all feel trusted and respected;
- Empowerment. All members of the school community are actively involved;
- Democracy. Health promoting schools are based on democratic values.

SHE pillars

On the European level, the following pillars are shared that underpin the health promoting school approach:

- Whole school approach to health. Combine health education in the classroom with development of school policies, the school environment, life competencies and involving the whole school community;
- Participation. A sense of ownership by student, staff and parents;
- School quality. Health promoting schools create better teaching and learning processes and outcomes. Healthy pupils learn better, healthy staff work better;
- Evidence. Development of new approaches and practices based on existing and emerging research;
- School and community. Schools are seen as active agents for community development.

We are in a time of economic crisis and change in all countries across the European Region. The conference theme: 'Equity, Education and Health' reflected one of the main concerns in Europe – the increase in health inequalities among children and young people. It is widely recognized that schools, working with families and their local communities, can play an active role in challenging this trend. This will be the future direction for the SHE network, as set out in the SHE strategic plan for 2013-2016.

About this publication

The Scientific Committee for the Odense Conference emphasized the importance of ensuring the balance between theory and practice. At the conference there were contributions highlighting recent research and theoretical insights which can be found in the conference report on the SHE website. To ensure active involvement and participation, the Odense Conference had a parallel youth conference, with young people from four European countries working together during the conference and via internet. The young people's views are included in the Odense statement (see chapter 2).

Also the conference highlighted specific examples discussing the realities of practice concerning school health promotion in different contexts. These contributions are the basis of this publication (see chapter 3). There is a tradition in the Schools for Health in Europe (SHE) network to document examples of practice. We focus on learning from these practice examples, that we prefer to label as 'learning practice' or 'innovative practice'. We encourage our network members to document and share their valuable experiences which all help to build the case of school health promotion in Europe and around the globe.

The 4th chapter of this publication contains the background paper for the SHE factsheet on the evidence on school health promotion. It provides an overview of the evidence of health promotion in schools, with almost 90 scientific references to support the case for the Schools for Health in Europe (SHE) network.

For more information about the SHE network, you can visit the SHE website: www.schools-for-health.eu, follow us on Twitter, Facebook and LinkedIn.

Goof Buijs

Manager SHE network

Senior consultant CBO

This publication is dedicated to our Danish colleague and dear friend Vivian Brigitte Barnekow. Vivian, who has been working for the WHO Regional Office for Europe, is the founding mother of the Schools for Health in Europe network more than 20 years ago. She has been a strong advocate for linking the health and education sector in the European region during her working life





VALGYKLA

SVEIKATOS MOKYKL

DARŽELIS

SOLAS

CHAPTER 1

SUMMARY REPORT OF THE 4TH
EUROPEAN CONFERENCE ON
HEALTH PROMOTING SCHOOLS:
EQUITY, EDUCATION AND
HEALTH

CHAPTER 1

SUMMARY REPORT OF THE 4TH EUROPEAN CONFERENCE ON HEALTH PROMOTING SCHOOLS: EQUITY, EDUCATION AND HEALTH

Odense, Denmark, 7–9 October 2013

The 4th European conference on Health Promoting Schools was co-funded by the European Commission Public Health Programme 2008–2013 and organized by University College South Denmark in collaboration with the Department of Education of Aarhus University, CBO (SHE network), the South Denmark European Office and the WHO Regional Office for Europe. The conference built on the three previous European Health Promoting School conferences held in Greece in 1997, the Netherlands in 2002 and Lithuania in 2009. The focus was on demonstrating the state of the art in developing health promotion in schools, stimulating innovation and creating synergies through common actions at national, regional and local levels.

Over 300 participants from 30 countries in Europe and beyond attended, including school teachers, health educators and promoters, academic researchers, government officials and policymakers. The specific focus on equity, education and health reflected one of the main concerns in Europe which is the increase in health inequalities among children and young people. This was addressed through plenary and parallel sessions that provided international perspectives on elements of school health promotion. **Clive Needle**, director of EuroHealthNet, was the conference facilitator.

The conference was opened by **Cristina Antorini**, Danish Minister for Children and Education, who described the Danish Government's ambition to make the current generation of children in Denmark the best educated in history. This, she explained, required healthy children in the school system.

Three main plenary sessions were then held over the three conference days, focusing on the following themes:

1. Innovative school-based health promotion

Dominic Richardson, policy analyst with the Organisation for Economic Co-operation and Development (OECD), stated that children are at high poverty risk, and the risk is increasing, putting greater strain on health and education sectors. He described OECD research that shows education systems may be discouraged from pursuing health promotion activity if it is financed from education (rather than health) budgets. This, he suggested, effectively represents a failure of health and education integration.

Katherine Weare, emeritus professor at the University of Exeter and Southampton in England, presented on the concept of 'mindfulness' in schools and for young people. Early results of research into school programmes of mindfulness, which she described as being about 'paying attention, on purpose, in the now, with curiosity and kindness (rather than judgement or commentary) to things as they are', indicate positive physical and mental well-being outcomes for children and young people and improved attention and concentration.

Bjørn Holstein, professor at the National Institute of Public Health in Denmark, closed the session with an overview of inequality in health among children and adolescents, claiming that evidence shows that those from lower socioeconomic groups and who experience income inequality have higher rates of mortality, injuries, mental disorders, overweight, psychosomatic health complaints, physical inactivity and poor diet.

2. Equity and school health promotion

The second plenary session was opened by **Oddrun Samdal**, professor in the Department of Health Promotion and Development at the University of Bergen, Norway, who explored the issue of how schools can contribute to equity in health by targeting interventions at disadvantaged groups and administering them in systematic ways to improve health behaviours and academic achievement.

Serob Khachatryan, executive director of the Children of Armenia Fund, described a school-centred approach to ensuring equity in health and education in socially vulnerable rural areas of his country. Initiatives include creating a new model of classroom called the 'creativity lab', in which children learn they can positively change their environments, and encouraging proactivity through entrepreneurship training for students.

The session was closed by an overview of issues around empowerment, health promotion and schools by Independent Public Health Adviser **Glen Leverack**, who encouraged schools to view children as social actors and involve them in decisions and actions important to them through a 'bottom-up' approach.

3. Sustainable change in school-based health promotion

The third plenary saw **Margaret Barry**, Professor at the National University of Ireland, describe the implementation of mental health promoting schools, calling for a science base for implementing health promoting schools with specific implementation guidelines and a focus on process, but also an emphasis on outcomes.

Drawing on lessons from experience across Europe, **Allan Dyson**, Professor at the University of Manchester, England focused on strategies for linking education and health. He defined principles that apply across the European Region and include the importance of political will and leadership, horizontal and vertical integration of policy and practice, user (children and family) involvement and the generation of more evidence.

The final main speaker was **Gerjo Kok**, Professor at Maastricht University, the Netherlands, who described the intervention-mapping approach to planning sustainable theory- and evidence-based school health promotion programmes through a six-step planning protocol. The approach focuses on an ecological model, reflecting environments and systems, and promotes stakeholder involvement.

As with the third European Health Promoting School conference in Vilnius, Lithuania in 2009, the Odense event had a parallel youth conference, with young people from Denmark, Estonia, Lithuania and Macedonia working together in the conference venue and virtually via the internet. Their efforts culminated in an engaging, insightful and inspiring presentation to close the event.

The young people's views and suggestions are incorporated within the **Odense Statement** that emerged from the conference, which reaffirms the network's principles, values, aims and objectives, describes what health promoting schools can offer and defines what they now need to make further progress.

More detail from the conference, including the full conference report, can be found on the web site of the SHE network: www.schoolsforhealth.eu.





CHAPTER 2

THE ODENSE STATEMENT:
OUR ABC FOR EQUITY,
EDUCATION AND HEALTH

CHAPTER 2

THE ODENSE STATEMENT: OUR ABC FOR EQUITY, EDUCATION AND HEALTH

The 4th European conference on health promoting schools held in Odense, Denmark, 7–9 October 2013, makes the following statement. The voices of young people from four countries working with the conference are included.

A. OUR PRINCIPLES, VALUES, AIMS AND OBJECTIVES REMAIN STRONG

1. Health promoting schools contribute to improving the health and well-being of the European population. School offers a most opportune setting from which to develop children and young people's health-related competences and lifestyles;
2. We reaffirm the core values and principles of promoting health and well-being within the context of school environments across Europe. These are as follows;

Schools for Health in Europe (SHE) core values

Equity Equal access for all to education and health

Sustainability Health, education and development are linked, with activities and programmes implemented in a systematic way over a prolonged period

Inclusion Diversity is celebrated; schools are communities of learning in which all feel trusted and respected

Empowerment All members of the school community are actively involved

Democracy Health promoting schools are based on democratic values

SHE pillars

Whole school approach to health Health education in the classroom is combined with development of school policies, the school environment, life competencies and involving the whole school community

Participation A sense of ownership exists among students, staff and parents

School quality Health promoting schools create better teaching and learning processes and outcomes, with healthy pupils learning better and healthy staff working better

Evidence New approaches and practices based on existing and emerging research are developed

School and community Schools are seen as active agents for community development

3. Health promoting schools help countries in the European Region realize the aims and objectives of the WHO policy framework for health and well-being in Europe, Health 2020, and the EU2020 strategy for inclusive and sustainable growth;
4. Health promoting schools are an important part of the “health in all policies” approach encapsulated in the WHO Helsinki Statement 2013;
5. Economic, social and other circumstances have changed significantly in most European countries and communities in the period since the Vilnius Declaration on Health Promoting Schools (2009). We recognize the impacts of those changes and the need to develop and improve health promoting schools’ processes and engagement in contributing to meeting current and future generations’ societal needs;
6. We re-affirm the importance of demonstrating multiple benefits for all involved, particularly for those in education and related child and social sectors;
7. Health promoting schools contribute to schools achieving their main goals – the provision of good education with clear standards and fewer dropouts;
8. We therefore re-commit to extending and strengthening relevant research, tools, networks, processes and skills to enable further development and implementation of health promoting schools between 2014 and 2020.

The young people say ...

“What is health? Health is:

- *A lot more than just exercising and healthy eating*
- *When there is a balance between body and mind*
- *About being positive.”*



B. HEALTH PROMOTING SCHOOLS OFFER BENEFITS

Health promoting schools offer:

1. Concrete and well-evaluated examples of effective links between education and health that support “health in all policies” in the European Region;
2. A context from which to connect with other health and well-being initiatives;
3. Opportunities to make the healthy choice the easy choice for schools, students and staff;
4. Support to education’s contribution to sustainability – the health of the people goes with the health of societies and of the planet;
5. Improvements in teachers’ health and well-being by making the school a health promoting workplace;
6. A positive and broad view of health that includes physical, mental, emotional, social and spiritual well-being;
7. Stimulation to schools’ role in community development;
8. Gains in students’ health, well-being, learning and competence development;
9. A comprehensive approach conducive to increasing students’ knowledge, skills and action competencies around health;
10. Opportunities to involve and work with parents and the community to increase sustainability of programmes and activities;
11. Strengthened links with school health services in promoting school health;
12. An integrated, whole-school approach to relevant health topics, including:
 - bullying and violence reduction
 - mental health promotion
 - sexual health, sexual rights and responsibility
 - healthy eating and physical activity
 - problem solving and conflict resolution
 - health literacy.

The young people say ...

“The ideal health promoting school needs to:

- *Be inspiring and welcoming for the students*
- *Have good conditions regarding fresh air and outdoor activities*
- *Be more aware of the mental health of students.”*

C. TO MAKE FURTHER PROGRESS, WE SEEK ...

Further progress in the health promoting schools movement will to a large extent be determined by our ability to communicate effectively with key stakeholders and the wider public through a range of outlets, including social media. Efforts will therefore be made to present clear messages on the advantages of being a health promoting school and to make alliances with relevant advocacy movements, such as the tobacco control lobby.

In addition, we request the following actions from key players to enable us to develop the benefits of the health promoting school approach.

We ask that schools:

- Focus on all aspects of positive health, including mental health and well-being, and not only physical health;
- Take the lead in school development through a health promoting school approach;
- Focus on change management and leadership in health promoting schools;
- Request school governing bodies and boards to take the lead in health and well-being of students and school staff;
- Put health promoting school principles into practice;
- Focus on communication and pathways between schools, parents, communities and health services.

We ask that decision-makers and policy-makers:

- Use the health promoting school approach in realizing “health in all policies” at European, national, regional and local levels;
- Combine top-down and bottom-up approaches to promoting health and well-being in schools;
- Integrate education and health policies, recognizing that one cannot work without the other;
- Develop visionary leadership with an ambition to achieve the best-educated generation;
- Focus on social inclusion of vulnerable children.

We ask that research and evaluation organizations:

- Pursue a joint research agenda for school health promotion from health and education funding sources, focusing on the concept of health and well-being in schools, empirical research and evaluation, and implementation;

- Build on the growing body of evidence to promote action;
- Integrate health and well-being indicators into education indicators in areas such as literacy, citizenship and participation skills;
- Focus on identifying best mechanisms for improving collaboration between health and education sectors, and with other sectors;
- Reflect stakeholder participation as being essential in designing and mapping health promoting school research.

We ask that implementing authorities at national, regional and local level:

- Recognize the vital role municipalities and local authorities play in successful health promoting school development and implementation;
- Acknowledge health promoting schools' contribution to community development;
- Invest in capacity-building for all staff, including teachers, non-teaching staff and school management;
- Focus on a life-course approach to health and well-being, integrating pre-school, through school, to work.

We ask that the third sector, civil society and the private sector:

- Work to connect schools and communities;
- Apply systems approaches to health promoting schools;
- Recognize their growing importance in delivery but also the dangers of “donor fatigue” and impermanence;
- Invest in social capital;
- Proactively consider innovative public–private partnerships.

The young people say ...

“Action competence in health means that we:

- *Encourage school management to make it a habit for all students to be healthy from the start;*
- *Encourage school leaders to allocate time and influence on health issues;*
- *Go for small changes, instead of trying to make a revolution;*
- *Encourage each other to be healthy.”*



CHAPTER 3

INNOVATIVE PRACTICE STORIES



1. CANADA

The Pan-Canadian Joint Consortium for School Health: Collaboration across health and education, across jurisdictions

Katherine Kelly (kakelly@gov.pe.ca)

Pan-Canadian Joint Consortium for School Health

Keywords: school health, Canadian government collaboration, policy

What did you do?

In an effort to formally commit to collaboration of school, local community, and the larger provinces and territories, the Canadian provincial, territorial, and federal governments partnered in 2005 to form the Pan-Canadian Joint Consortium for School Health (JCSH). In 2010, the same governments made a second five-year commitment to continue dedicating efforts from Education and Health Ministries to resources and initiatives to optimize student achievement and student wellness across the country. In 2013, the JCSH took the commitment from the government ministries one step further and, demonstrating the reality of and the potential for innovative, multi-sectoral partnerships, held a roundtable meeting of senior government officials from each of the 13 provincial, territorial, and federal jurisdictions and from each of the Health and the Education sectors. This first-ever meeting of members from each sector and jurisdiction brought forward the ongoing commitment to student health and learning outcomes and the challenges involved in bringing the Education sector more directly into the work of school health.

Why did you choose to do this?

Cross-sector and cross-jurisdictional collaboration is easier to consider in theory than to implement and maintain in practice. However the health and learning of Canadian children and youth is of vital importance to the Health and Education ministries in this country and the cost of not combining strengths in order to achieve these outcomes is high. This point of view was accepted by Canada's

Health Ministers in the 2004 Health Care Accord to “working across sectors through initiatives such as Healthy Schools”. Out of this commitment the Council of Ministers of Education, Canada and the Conference of Federal/ Provincial/ Territorial Deputy Ministers of Health endorsed the establishment of a Joint Consortium for School Health and a School Health Action Plan that addresses a variety of health, social and learning-related challenges of school-aged children and youth. However, it was almost 10 years since the formation of JCSH and it was important to have health and education ministries together to assess progress and next steps.

Schools are in the business of educating students, but they are also a positive setting for instilling behaviours related to lifelong health and wellbeing. This remains a statement accepted by both the education and the health sectors; however, the education sector is often perceived as the recipient of the health initiatives. The perspective of education in school health is part of JCSH’s strategic directions. As an example, research into connections between school health and student achievement was coordinated in 2013 by JCSH; it reveals that this is an area of value to government departments moving forward with this collaboration.

Who were the participants?

Representatives of the Ministry of Education and the Ministry of Health from 12 of Canada’s 13 provinces and territories make up the members of the Pan-Canadian Joint Consortium for School Health. The federal (Canadian) government is represented by the Public Health Agency of Canada. The 2013 Cross-Sector Management Meeting brought senior level officials from all member jurisdictions. National priorities and local issues were equally referenced and discussed.

What actually happened?

The 2013 Cross-Sector Management Meeting of senior representatives of Education and Health in every representative province and territory was a significant recognition of the commitment to student achievement and student well-being. The ministries also made the decision that school health and a comprehensive school health approach was of such significance that they would send their senior officials to not only explain their perspective but to try to understand the other sector’s: it was similar to trying to learn another language. As a result of this meeting and seven years of JCSH contribution to school health in Canada, there is a commitment to move the focus slightly to incorporate student achievement more fully. School health efforts have been less on education than on health perspectives;

this is particularly the case in Canada, where health is a shared federal, provincial, and territorial responsibility but education is solely the purview of the province/territory. The JCSH is the only means where broad educational issues around student achievement and youth engagement can be debated and resourced along with student and school health initiatives.

What were the results?

In the months since this meeting, the JCSH has undertaken a formal network evaluation of its long term outcomes and prepares to move forward with a proposal for mandate renewal to the member provinces and territories. The mandate renewal would again be for a five-year period (2015-2020) and permit JCSH to continue to work for school-aged student improvements in achievement and well-being.

What difficulties were encountered and how were these overcome?

The diversity of mandates, geography, and cultural and health issues are complex and varied in this large country. In addition, some provinces have significant resources for schools while others, including the northern territories, face serious health and education outcomes challenges, making issues of equity and school-based health particularly onerous. Further, Canada has two official languages, English and French, while one of the territories has Inuktitut as its third official language. This remains an issue in that the website and all documentation is translated into both English and French; some of the resources are being considered for translation into Inuktitut. In addition, there are initiatives being discussed in some resources to consider revising them to reflect a First Nations, Métis, Inuit perspective. One consortium must balance multiple needs and interests in applying leadership roles, knowledge development and dissemination of resources, and building capacity of each sector and each jurisdiction to make consistent and measurable improvements that meet their unique contexts.

One of the outcomes of the 2013 Cross-Sector Management Meeting was to provide monitoring and evaluation of the commitments made by the 13 jurisdictions to the JCSH. In addition, it was discussed how the Consortium works to have each jurisdiction not become the same but to improve equitably. This is only possible with the close networking and contributions of the Education and Health representatives from each of the member provinces and territories. Over the years, they have shared initiatives, asked for assistance on an issue – bullying for example, or physical activity or healthy eating – and have had assistance and

support from their colleagues around the country. As a result, we have learned that while different jurisdictions may reap different benefits from JCSH participation, their progress and improvement is equitable.

Which aspects went particularly well?

Each of the 13 jurisdictions was represented at the major Cross-Sector Management Meeting in 2013. Almost all jurisdictions sent senior directors from both the Education and the Health ministries. All attendees at the meeting participated fully and discussed important school health issues in their jurisdictions and the differences and similarities of student achievement and student wellness issues throughout the country. In addition, strategies were initiated to enhance the role of the education sector in comprehensive school health and more clearly define student achievement to integrate wellness and self-determination into the definition. For example, JCSH has worked with a Canadian research team to complete a study of core indicators and measures that would connect school health and student achievement. This was considered particularly important for the education sector in acknowledging its equal role with the health sector in this collaboration. In addition, the Consortium has added the terms 'student well-being and student achievement' as their overarching areas of focus, thus broadening the original student health and wellness focus.

How do you know how successful it was?

A survey was emailed to each participant following the February 2013 meeting. Among the feedback received by the JCSH was that it was invaluable to hear Health and Education leaders explain to one another their definition and understanding of school health priorities. As well, it was deemed important for senior directors to hear about various school health initiatives across the country and also to find out which jurisdictions had similar challenges or offered models that were successful at impacting school health.

What can we learn?

Collaboration remains a silver-tongued devil - beautiful to contemplate and difficult to justify, particularly in the daily workings of government departments that have faced financial cuts to major initiatives. It is important to remember that the broad 'comprehensive' picture of lifelong wellness and achievement for

children and youth often is seen as 'nice to do' by overworked, yet committed politicians and policymakers faced with acute problems. The balance is tenuous between defending and/or justifying the time and resources needed while still making a strong case for the value of this broad 'promotion-prevention' work.

Links to references and further reading

Health Canada (2004). *First Ministers Meeting on the Future of Health Care 2004: A 10-year plan to strengthen health care*. Retrieved from: <http://www.hc-sc.gc.ca/hcs-sss/delivery-prestation/fptcollab/2004-fmm-rpm/index-eng.php>

Joint Consortium for School Health (2014). *Development of the core indicators and measurements framework for school health and student achievement*. <http://www.jcsh-cces.ca/index.php/resources/latest-website-additions/142-development-of-the-core-indicators-and-measurements-framework-for-school-health-and-student-achievement-in-canada>

Joint Consortium for School Health (2014). *Pan-Canadian Joint Consortium for School Health*. <http://www.jcsh-cces.ca/>



2. CANADA

Healthy School Planner

Katherine Kelly (kakelly@gov.pe.ca)

Pan-Canadian Joint Consortium for School Health

Keywords: healthy school planner, online assessment tool

What did you do?

The Healthy School Planner (HSP) assists schools in assessing their health and in making plans for improvements. An initiative of the Pan-Canadian Joint Consortium for School Health (JCSH), the Planner was developed by the Propel Centre for Population Health Impact at the University of Waterloo with a JCSH Advisory Committee. Established in 2005, the JCSH is a partnership of federal, provincial, and territorial ministries of education and health from across Canada working together to promote the health of children and youth in the school setting. As a monitoring and evaluation tool, the Planner allows a school team to self-assess through a Foundational Module that introduces users to the healthy school planning process, as well as both Express and Detailed modules in four key school health topic areas: tobacco use, physical activity, healthy eating, and positive mental health. Express modules assess the 'core' indicators of a healthy school community related to the topic area selected, while detailed modules allow schools to explore the topic area at a more in-depth level. With the HSP, schools receive results immediately: a report of tailored recommendations based on their results, and a list of action-oriented resources. Schools are welcome to share their results and achievements however they see fit, for example, with staff, students, parents, and the broader community. The HSP's assessment process uses the four pillars of comprehensive school health championed by JCSH: social and physical environment, teaching and learning, healthy school policy, and partnerships and services. The Healthy School Planner is a free, online tool, available in English and French – no paper surveys required, see our website <http://jcsh-cces.ca>.

Why did you choose to do this?

The Healthy School Planner was developed with a Pan-Canadian Advisory Committee to assist educators in assessing the health of their schools and in making plans for improvements. While not mandatory for Canadian schools, self-

assessment tools such as the Healthy School Planner can help schools develop, monitor, and make improvements in school health that are in line with the World Health Organization's efforts to ensure that all students have safe and healthy learning environments (WHO, 2014).

Who were the participants?

Any school in Canada, whether public, private or charter, can use the HSP at no cost. The HSP, which can be accessed online at any time, guides schools through a step-by-step process that includes: a series of questions to determine the school's current health status, a rubric of the school's results, recommendations for taking action, a planning template to help develop goals, an action plan for making improvements, and links to resources to help develop and implement the action plan.

What actually happened?

From 2011 to 2013, Propel Centre for Population Health Impact (Propel) at University of Waterloo in Ontario, Canada and the JCSH collaborated on content and process revisions of the HSP (including a pilot study) to enable the tool to fully meet the needs of its end-users. The revision process involved researchers, policymakers and practitioners (administrators and educators). To begin, Propel researchers and JCSH policymakers completed an improvement-oriented evaluation to help understand stakeholder reactions to the HSP. The evaluation findings confirmed that the HSP is a valuable tool to provincial and territorial stakeholders that could be made more relevant and accessible to different jurisdictions. These findings guided the HSP revisions and have resulted in the current version of the HSP. Revisions have included iterative development with researchers and policymakers, face and content validation across multiple jurisdictions and with different groups of stakeholders (primarily educators and administrators), and a three-jurisdiction pilot study with educators and administrators in the school system. Stakeholders from across Canada had input through face-to-face consultations or provision of web-based feedback.

What were the results?

Since the launch of the new Planner in late 2013, interest in and use of this tool has escalated. A number of provinces and territories are linking the application for

school health grants to completion of the Healthy School Planner Foundational Module. With schools across the country now using the Healthy School Planner, data at the individual school level can now be aggregated to the school district level, allowing for improved planning and policy-making from this perspective.

What difficulties were encountered and how were these overcome?

A systematically planned and evidence informed approach incorporating multiple factors and stakeholder support is an ongoing work-in-progress in order to increase the use of the HSP.

As well, collaborating across the health and education ministries of 12 different provinces and territories, one federal government agency, and a team of university-based researchers remains challenging. Gaining consensus and moving the tool to the dissemination phase has taken additional time but has proven worthwhile. The HSP is evidence-based and highly valued by schools, educators, and other key stakeholders across Canada. Being a free, online, publicly-available assessment and planning tool, use of the HSP and its results to inform school-based change can be challenging as some educators and administrators may begin the registration process but not complete it. The key is keeping people interested and encouraging them to continue to evaluate their results as they see improvements in their school's health.

Which aspects went particularly well?

Several different modules (i.e., healthy eating, physical activity, tobacco reduction, and positive mental health) are available in the Healthy School Planner. School health can be assessed by examining the four pillars of the Comprehensive School Health framework: social and physical environment, teaching and learning, healthy school policy, and partnerships and services. Regardless of the topic identified, when all four pillars of the comprehensive school health framework are addressed, students are supported to realize their full potential as learners and healthy, productive members of society.

How do you know how successful it was?

School health coordinators from 12 provinces and territories have become much more involved in the Planner since the major revisions began. The HSP Advisory Committee has engaged in countless meetings to analyze and discuss every item

on the survey – including the questions, feedback report, recommendations, and resources. The dedication of stakeholders across the country has been consistent for the past two years with all 12 provinces and territories awaiting the opportunity to use the new Planner. Monitoring and evaluation of the HSP is ongoing and promotional plans to market it for the 2013-2014 school year are underway, with the Advisory Committee suggesting innovative uptake strategies.

What can we learn?

Comprehensive School Health works to: promote health and well-being for all members of the school community; enhance learning outcomes; uphold social justice and equity; provide a safe and supportive learning environment; encourage student participation and empowerment; link health and education issues; collaborate with parents and the local community; integrate health into the school's ongoing activities, curriculum, and assessment standards; set realistic goals built on data and sound scientific evidence; and seek continuous improvement through ongoing monitoring and evaluation. The HSP, as an assessment and monitoring tool of the JCSH, focuses on environments that influence health and guides planning and action with specific recommendations for school-level policy and environmental changes. The HSP offers potential as a research and evaluation tool since it has been validated, and incorporates indicators that are being promoted for use in research and surveillance across Canada.

Links to references and further reading

Joint Consortium for School Health (2014). *Pan-Canadian Joint Consortium for School Health*. <http://www.jcsh-cces.ca/>

WHO (2014). *School and youth health. Global school health initiative*. Accessed 26 June 2014: http://www.who.int/school_youth_health/gshi/en/. Accessed June 26, 2014

3. CANADA

Positive Mental Health Toolkit: a resource for the entire school community

Katherine Kelly (kakelly@gov.pe.ca)

Pan-Canadian Joint Consortium for School Health

Keywords: positive mental health, toolkit, comprehensive school health

What did you do?

Recognizing that for many students school is a source of social connection, safety, and belonging, the Pan-Canadian Joint Consortium for School Health (JCSH) develops resources on Positive Mental Health from a Mental Resilience Quick Scan, to positive psychology themes in school health, to a literature review and better practices document: *Schools as a Setting for Promoting Positive Mental Health: Better Practices and Perspectives*, to the Positive Mental Health Toolkit. The Toolkit, launched in 2011, is the signature resource of the JCSH's positive mental health storehouse, incorporating the research and practice evidence of the earlier documents, particularly the literature review and better practices study. The Positive Mental Health Toolkit has been disseminated to schools, educators, health professionals, community groups, and students and parents. The JCSH, a partnership of Health and Education Ministries in 12 of Canada's 13 provinces and territories, worked with a research team from University of New Brunswick and an advisory committee of education and health specialists throughout Canada to create the Positive Mental Health Toolkit. It is an interactive, free, online tool that is accessible to anyone – from an expert to an interested student, parent, or community member.

Why did you choose to do this?

Schools play a critical role in the mental health development of every student. The JCSH, as a singular partnership of Ministries of Education and Health throughout Canada, is committed to fostering and supporting a holistic learning and wellness

environment in all schools. The Consortium members recognize that positive mental health is an overarching and foundational component in student achievement and student wellness throughout school and throughout life.

Who were the participants?

The JCSH worked with researchers from the University of New Brunswick, Canada to develop a resource that anyone can use: teachers, school administrators, health professionals, guidance counsellors, students, parents, community members. The advisory committee was composed of researchers, school health coordinators from provinces and territories throughout Canada, and members of the JCSH Secretariat. Key stakeholders comprised experts from research, policy, and practice across the country.

What actually happened?

The JCSH had partnered with the University of New Brunswick on a number of resources focused on positive mental health in the school setting. Following an extensive review of the literature and key stakeholder interviews, the research team developed a framework of indicators of positive mental health in the school setting based on the four pillars of comprehensive school health: teaching and learning, social and physical environment, partnerships and services, and healthy school policy. The Toolkit is an evidence-based resource, built from the work in the partner document: *School as a Setting for Promoting Positive Mental Health: Better Practices and Perspectives*. The Toolkit offers five key areas: 1. An introduction and overview of positive mental health and schools as a critical setting; 2. Components of positive mental health and mental fitness and their relationship to a comprehensive school health approach; 3. How to put a positive mental health approach in action in schools using the stages of change; 4. Resources, including a planning tool, worksheets, and checklists; and 5. Appendices, including a brochure and presentation, as well as flow charts for developing parent and student engagement. It uses a strengths-based approach, recognizing that all students and schools have strengths and gifts that can be supported and nurtured. Since its release, the Toolkit has been piloted across Canada in schools, provided to guidance counsellors in conferences and workshops, and introduced to educators and health professionals in presentations made around the country.

What were the results?

Since its release in 2011, the Positive Mental Health Toolkit remains a highly-appreciated and much-used tool across Canada. Its availability in English and French and e-book features permit its use in many contexts, including schools in the far north and remote areas with poor internet connections. The Toolkit is also the source for the newly-developed Positive Mental Health module in the JCSH's Healthy School Planner, another free online resource.

What difficulties were encountered and how were these overcome?

Positive Mental Health touches on numerous aspects of school health, incorporating student self-determination – competence, autonomy and connectedness – but also broadening to social elements, including relationships, student achievement and school climate. Development of an online, easily accessible, and user friendly toolkit that offers a comprehensive and holistic strengths-based approach to mental fitness is a challenging assignment. The Consortium was committed to supplementing its working group of policymakers with a wide range of researchers and practitioners across the country. Scheduling meetings and reaching consensus were at times difficult and required much commitment from all members. Each group and stakeholder brought individual and professional opinions about positive mental health, needs of students and schools, and activities, theories and supports that must be included. The resulting Toolkit required hundreds of hours of meetings and networking to ensure key elements were included. There were also difficulties encountered in realizing our commitment to an online, easy to access e-Book, because the size of the country meant that remote and northern communities had little access to Internet. In order to have the Toolkit accessible to all, many options were used: an offline version that was sent out to those who requested this; changes to the design to permit printing the Toolkit on non-colour printers. It was important for all involved that we continue to listen to all comments and feedback and take steps to improve access.

Which aspects went particularly well?

The collaboration has paid off in a free online resource available to anyone who speaks either English or French. The researchers and the JCSH have worked very well together over a period of years on a number of Positive Mental Health projects and trust has helped in bringing the two groups through the anxieties and stresses that accompany major projects. In addition, the concept for the Toolkit had grown

out of the earlier iterations of the better practices literature review. As a result, the Ministry of Education and Health in the provinces and territories were very supportive and committed to this resource, providing funding in some cases and pilot testing contacts in others.

How do you know how successful it was?

In the past 18 months, members of the JCSH including the Executive Director and school health coordinators have presented on the Toolkit to numerous educators and health professionals across the country. Consortium representatives from Health and Education Ministries in the 12 member provinces and territories have disseminated the resource widely to schools, school boards, and health regions. There is universal praise of the resource as a foundational element in a school community. One of the responses (view of educator) is this: 'the Positive Mental Health Toolkit provides many correlates of positive mental health that are in line with many of the outcomes that the education system is striving to reach'.

What can we learn?

A focus on positive mental health as an overarching theme enhances the opportunities for a school and a school community to respond in an integrated way to student achievement and wellness through application of initiatives in comprehensive school health: social and physical environment, teaching and learning, healthy school policy, and partnerships and services. It is possible for a collaboration of representatives from distinct sectors (Education and Health) and diverse geographical regions (provinces and territories across Canada) to work with researchers and achieve a goal of an evidence-based, practical, user-friendly resource. This end product, the result of the hard work and collaboration, is one that celebrates the strengths of all students and schools and "brings to the surface factors or issues that have gone unnoticed or left to 'fall by the wayside'" (view of educator).

Links to references and further reading

Joint Consortium for School Health (2014). *Pan-Canadian Joint Consortium for School Health*: www.jcsh-cces.ca

Joint Consortium for School Health (2011). *Pan-Canadian Joint Consortium for School Health positive mental health toolkit*: www.jcshpositivementalhealthtoolkit.com

4. ESTONIA

Developing a support system for children with type 1 diabetes in educational settings in Estonia

Krystiine Liiv (krystiine.liiv@tai.ee)

Liana Varava (Liana.Varava@tai.ee)

Tiia Pertel (Tiia.Pertel@tai.ee)

National Institute for Health Development

Keywords: diabetes, guidelines, educational setting, equal opportunities

What did you do?

Estonia does not yet have a support system or guidelines to support children with diabetes in educational settings. The primary objective of the project was to guide schools in their understanding of diabetes and its management and to enhance opportunities for children with diabetes to participate fully in all school functions. Within the framework of the pilot project, a concept was developed for support services for children with type 1 diabetes and guidelines were prepared for the personnel in the educational settings (all employees, support persons, caterers). The service was piloted in pre-school institutions and schools.

When a child is diagnosed with diabetes or a child who has diabetes enrolls in an educational setting, a diabetes health care team (consisting of a child endocrinologist and a diabetes nurse) and the family determine the child's needs for assistance in managing the diabetes during the school day. Next, the parent gets in contact with the educational institution and informs them of the possibilities to involve support services. Upon the consent of the educational institution, the nurse providing the service, contacts the director to inform that a suitable support person is found.

According to the service model, the diabetes nurse will visit the educational setting three times in total. During the first visit a meeting will take place with the child support person, other teachers and the school food service manager. All school personnel who have responsibility for students with diabetes throughout the school day receive training that provides a basic understanding of diabetes, how to recognize and respond to the signs and symptoms of low and high blood glucose.

The support persons receive an in-depth training about diabetes and routine and emergency care for a student with diabetes. A month later the diabetes nurse will visit the school a second time to provide counseling and supervision to the support person. If needed, a meeting with classmates will be scheduled. During the third visit the diabetes nurse will meet the child, parent, and support person to evaluate the child's diabetes management in the school.

In the course of the training and counseling programme, the personnel in the educational setting acquire the knowledge and skills needed to be able to follow the child's diabetes management plan and support the diabetic child in coping well.

Why did you choose to do this?

The incidence of diabetes in children is increasing, with an average of 60-80 children newly diagnosed with diabetes each year in Estonia. The schools lack the knowledge and experience to manage diabetes. According to a study conducted by the Estonian Child and Youth Diabetes Association in 2010, out of all diabetic children 26 % stayed at home because they were refused acceptance to a pre-school, and for half of the children, parents had to visit the pre-school several times a day. 22 % of the children required support in schools, but support by a school was provided to only half of them.

Who were the participants?

Support services for children with type 1 diabetes in educational settings are provided by diabetes nurses who have received special training. All of the personnel in the educational setting who come into contact with the child, the support persons for the child, the caterers and, if necessary, the children in the same group or class participate in the training and counseling programme.

What actually happened?

In the first stage a working group was formed with members representing different stakeholders: endocrinologists, diabetes nurses, educational institutions and parents. Based on international experience and Estonian practice in the management of diabetes, the service concept and guidelines were drafted for school personnel, and training was held for nurses who will provide counselling. Four diabetes nurses participated in piloting the service. They provided services from September to November 2012 in 13 educational institutions. 14 support persons completed the training and counselling programme.

The diabetes nurses trained and provided counselling to a total of 124 persons. 14 children were provided with support in a school or pre-school.

What were the results?

Evaluation of the service indicated that suitable conditions for diabetes care (provision of places for unrestricted blood glucose monitoring, insulin and oral medication administration, availability of nutritional content of the menu) had been created in all of the educational settings and the individual diabetes management plan for the child was followed. The support persons felt that the amount of training and counseling was sufficient to provide support for children during the school day. Overall, parents were satisfied with the support provided by the support person and the educational setting. They reported that their children have equal opportunities in school.

What difficulties were encountered and how were these overcome?

One of the greatest challenge is influencing attitudes in educational settings. The management of some schools expressed interest in supporting children with diabetes on their own initiative. But there are also institutions in which the initial position is that personnel cannot be required to serve as support persons. The nurses together with the diabetes healthcare team and the local government play an important role in convincing these schools. In some cases a meeting with the management of schools providing more information about diabetes and discussing the school's possibilities was essential to overcome the barriers. The nurses require additional training on how to overcome such opposition.

Continual provision of services would require the presence of nurses with the necessary qualifications. The number of nurses who can provide counselling should be increased in order to ensure access to the services throughout the country. To address this, the training programme for nurses will be developed and school nurses will be involved. It could be argued that school nurses fulfill the role of support person in the school. In our case this is not a good solution, because the support person needs to be near the child; the school nurse is responsible for all children in school. We did not have enough diabetes nurses; therefore, we needed to find another solution. School nurses need special training and mentoring for providing this service, but diabetes nurses already had basic knowledge and skills. The strength of involving school nurses is that they know the school environment and system better and they have a more flexible time-frame for this work.

Another challenge revealed in the pilot project was the cooperation with caterers. While the law requires that the nutritional content of a menu offered in an educational setting must be provided and accessible, this requirement is not always fulfilled in practice.

Which aspects went particularly well?

Estonia did not yet have a system to support children with type 1 diabetes in educational settings. The initiative to develop this service came from the Estonian Child and Youth Diabetes Association. Through a number of different activities (e.g. providing information to educational institutions) the association together with child diabetes care teams reached the conclusion that schools need a more individual approach. This bottom-up initiative has ensured that all stakeholders have actively contributed to finding solutions to potential problems. The pilot project showed that this service model could be effectively implemented under the present conditions in Estonia.

How do you know how successful it was?

An evaluation plan was developed together with a description of the service. A process and outcome evaluation was conducted as well as an impact measurement after six months. After provision of the service the diabetes nurses completed a questionnaire in which they assessed different aspects of a child's ability to cope based on their visits to educational settings and interviews conducted with parents. An internet based questionnaire was sent to all support persons to gather feedback on the training and counseling programme and the guidelines. Questionnaires for the physicians of the children and for their parents have been developed to evaluate the long-term impact of the project.

What can we learn?

As the number of students diagnosed with diabetes increases each year, school personnel, parents and children face new challenges. Collaboration and coordination are essential to ensure a safe learning environment and equal access to educational opportunities for children with diabetes.

Our experience draws attention to the difficult and varied role nurses play in diabetes management in educational settings, including advocating for children with diabetes and training personnel.

5. EUROPE

Sustainable networking for mainstreaming health and safety in education: ENETOSH

Ulrike Bollmann (ulrike.bollmann@dguv.de)

Institute for Work and Health of the German Social Accident Insurance (DGUV), Germany

Susanne Ulk (ulk@live.dk)

Consultant Education and Training in OSH, Denmark

Ulrike Craes (ulrike.craes@bgw-online.de)

BGW Academy Dresden, Germany

Claus Dethleff (headlog@t-online.de)

Headlog multimedia, Germany

Keywords: education, training, health, safety, networking, culture of prevention

What did you do?

The European Network Education and Training in Occupational Safety and Health (ENETOSH) was founded in Bilbao, Spain, in 2005. The main purpose of this networking initiative was to make occupational health and safety an integral part of live long learning. The European Commission provided the start-up funding from the Da Vinci programme which helped ENETOSH to get up and running. The project started with 13 partners from 10 countries. Currently, 67 members, from 28 countries are involved in ENETOSH. In 17 of these countries, special ENETOSH ambassadors promote the network. In addition to European exchange, it is becoming more and more important for ENETOSH to have international cooperation. This can be seen in the context of EU expansion where ENETOSH promotes the integration of health and safety into the education system of candidate countries and new member states. It is also important in terms of cooperation with international umbrella organisations, such as WHO, ILO, ISSA and traditional international partners, such as the USA and Canada. Since 2005, the ENETOSH has collected 706 examples of good practice of mainstreaming health and safety into education from 42 countries via the ENETOSH Internet platform: www.enetosh.net. A standard of competence that provides quality assurance for instructors and trainers of health and safety in

Europe has been developed. The ENETOSH Standard of Competence is recognized by 14 institutions from 10 European countries. It is available in 11 languages. In 2010, a study was carried out to assess the validity of the standard and to develop it further. The network is coordinated by the Institute for Work and Health of the German Social Accident Insurance (DGUV).

Why did you choose to do this?

The development of a culture of prevention has to start early on. The foundation for such a culture has to be established in the family home, in pre-school and in primary school. The 'implicit assumptions' for how we handle ourselves and deal with others are formed in this early stage of life. The European Community Strategy on Health and Safety 2007-2012, stated that it is important to develop a risk prevention culture in training programmes at all levels of education and in all fields, including vocational training and universities.

Who were the participants?

ENETOSH's target group are lecturers and trainers from the policy area of work and health, educational staff in general and vocational education, and policymakers. An evaluation of the ENETOSH project was based on a model that distinguishes between three target groups: network members, disseminators (multipliers) and end users from the different policy areas. This 'funnel-model' for the distribution of knowledge ensured that disseminators and end-users from outside the core-network were involved in the work of ENETOSH from the very beginning.

What actually happened?

For more than 20 years we have been working in Europe on 'Mainstreaming Occupational Safety and Health (OSH) into Education'. The leading approach for this is known as the 'holistic' approach. This is a kind of management approach which encompasses the whole educational establishment: learning content, the learning and work environments, school management, advanced teacher training, the students, the parents and the entire community. But it is important to note that there is a paradigm shift behind this holistic approach. It is no longer just about education promoting health and safety but rather health and safety as a means of promoting quality in education. When taken from this perspective, health and safety have the opportunity to become part of the core educational establishment or to put it more simply: 'If you feel better, you learn better' (Peter Paulus).

What were the results?

In 2015, ENETOSH will celebrate its 10th anniversary. ENETOSH will then be able to look back on a process of intensive networking within the network and with the outside world. Apart from creating a huge platform for systematic knowledge-sharing on education and training issues in occupational safety and health, ENETOSH contributed significantly to the increasing importance of education and training within the field of occupational safety and health. Milestones of the work of ENETOSH were the Leonardo Award: Innovation in Practice 2009, the ENETOSH SEE kick off in Croatia 2012, the joint workshop on mainstreaming OSH into education in Turin in 2012 and the 2014 ENETOSH symposium creating a safe and healthy learning and working environment at the XX World Congress for Safety and Health.

What difficulties were encountered and how were these overcome?

In the first European Community Strategy on Health and Safety at Work 2002 – 2006, mainstreaming health and safety into education was seen just as ‘part and parcel of the school curriculum’. In such a view, health and safety seems to be an additional burden, especially for teachers, and a mere ‘add on’ in general. It is still difficult to get the message across that developing a culture of prevention within a school or university contributes to the quality of an educational institute. As such, health and safety is seen as a tool that ‘serves’ the school or university and not the other way round. The whole school approach which has been strongly supported by ENETOSH, can now be considered as the ‘gold standard’ for mainstreaming health and safety into education. The previous lack of cooperation between the policy areas of work, public health and education is being slowly overcome by common initiatives at national and European level. An example of this was the ENETOSH event ‘OSH and education – approaches to a successful cooperation’ in Düsseldorf in 2009 which connected specialists for occupational health and safety with educational specialists.

Which aspects went particularly well?

Nowadays, education is recognised as a policy area in its own right with equal weighting to work and public health that can be used strategically to develop a common culture of prevention. ENETOSH has been one of the main promoters of this development. The driving force for this development can be observed in ‘networking among networks’, e.g. between ENETOSH and for example the National Association of Organizations in Occupational Safety and Health of the Russian

Federation (NAOOSH). This network covers OSH institutes carrying out education and training in the whole Russia (Memorandum of Understanding in 2012).

How do you know how successful it was?

The ENETOSH project was evaluated by the Institute for Evaluation and Quality Development at Leuphana University in Lüneburg. The evaluation covered both collaboration between members as well as external perception of ENETOSH. On a scale of 1 (= very dissatisfied) to 5 (= very satisfied), the project partners' average satisfaction was 4.6. The answers to the question of what were the project's biggest achievements pointed to four areas: examples of good practice, the website, the standard, and the establishment of the network. 78 % of the disseminators and end-users felt the project should be continued and 75 % were interested in being involved. The current ENETOSH web statistics confirm this interest. After the launch of the ENETOSH web platform in 2006, it was immediately well accepted. In 2008, the click rates had increased to a peak level and, during the following years, the number of clicks stabilized at a constant level (approx. 26 000 unique visitors per year). Taking a look at the figures from 2013 and the current year 2014, the numbers are strongly increasing again. From January to April 2014, an average of 30 % more unique visitors visited the platform than in the 'peak year' 2008.

What can we learn?

At the strategic level, an integrative approach is needed to mainstream health and safety into education. The policy areas work, education and public health must be dealt with together. This means there have to be common programmes for mainstreaming health and safety into education at the national level. An example of this is the work done by the WSH Council in Singapore on their Pre Employment Training (PET) programme which is part of their National OSH Strategy 2018. In this programme, the government, industry and educational institutions work closely together to help sow the seeds of a strong safety & health culture, by instilling the value of safety and health in students. Another good example for cooperation is the cooperation between different schools and universities, carried out by the Branch Working Environment Council for the Social and Health Care Sector in Denmark. It is called 'the Ambassadors project' and includes members from more than half of the Danish Social and Health Care Schools. The issue is networking between teachers from different schools in order to learn and benefit from each other. One of the outcomes so far is more than hundred good practice examples

on the project website on how to teach occupational safety and health and how to implement it into general education. The examples are directly related to the curriculum and have not only improved the knowledge on occupational health and safety but at the same time increased the quality of teaching OSH.

Links to references and further reading

Bollmann, U. & Windemuth, E. (2011). *Standards in education and training for safety and health at work. European perspectives, promising developments and examples of good practice*. Berlin: German Social Accident Insurance. http://enetosh.net/files/186/iag_standard_en.pdf

European Agency for Safety and Health at Work (EU-OSHA) (2004). *Mainstreaming occupational safety and health into education. Good practice in school and vocational education*. Luxembourg: Office for Official Publications of the European Communities.

European Agency for Safety and Health at Work (EU-OSHA) (2010). *Mainstreaming occupational safety and health into university education*. Luxembourg: Publications Office of the European Union.

European Agency for Safety and Health at Work (EU-OSHA) (2011). *Training teachers to deliver risk education – Examples of mainstreaming OSH into teacher training programmes*. Luxembourg: Publications Office of the European Union.

European Agency for Safety and Health at Work (EU-OSHA) (2013). *Occupational safety and health and education: a whole-school approach*. Luxembourg: Publications Office of the European Union.

European Network Education and Training in Occupational Safety and Health. www.enetosh.net

OSHWiki. http://oshwiki.eu/wiki/Main_Page

EU-OSHA Young people. https://osha.europa.eu/en/priority_groups/young_people



6. ICELAND

Support for the health promoting school projects in Iceland: a new national curriculum for all school levels

Ingibjörg Guðmundsdóttir (ingibjorg@landlaeknir.is)

Directorate of Health

Keywords: health, wellbeing, new curriculum, health promoting school projects

What did you do?

The health promoting school projects in Iceland have been implemented for both secondary schools and primary schools, and are currently under development at the pre-school level. These projects are long-term in nature and apply the whole school approach, which involves students, parents, and the surrounding community, as well as teachers and all school staff. The main themes for the projects are nutrition, physical activity, mental health and life skills. The projects also take on board issues such as dental health, safety and sexual health. Schools are provided with a handbook with guidelines, checklists and toolkit and receive guidance and support from the Directorate of Health.

Handbooks for all three school levels with recommendations and suggested menus have been published and distributed in the school canteens. A handbook for primary schools teachers has also been published to promote increased physical activity both in the classroom as well as outside of it. Material that addresses healthy relationships and violence in relationships has been tested and will be published soon. Materials that offer preventative measures regarding tobacco, alcohol and illegal drugs are also available. Conferences and seminars are held every year for participating health promoting schools and other schools that wish to become health promoting schools.

In 2011, health and wellbeing became one of six underpinning topics in the Icelandic government's edition of a new curriculum for all school levels. These focus areas are intended to permeate all school activities and education. The Ministry of Education, Science and Culture promotes the health promoting school projects in

their publications as a suggested means towards success in the achievement of health and wellbeing.

Why did you choose to do this?

The health promoting school projects include the whole school approach and make it possible to address different topics such as nutrition, physical activity, mental health and life skills. It is well known that interventions in school settings are effective in behavioural change. It is important that the national government supports the health promoting school projects. The connection with the new curriculum, i.e., focusing on health and wellbeing, plays an important role in the health promoting school projects.

Who were the participants?

All 31 secondary schools (students from 16 to 20 years) and about 60 primary schools (students from 6 to 16 years) - which is approximately 35% of all primary schools in Iceland participate in the projects. The number of primary schools in the project increases by about ten schools per year. The pre-school level has been under development and it will soon be possible for pre-schools to participate.

What actually happened?

Schools show more interest in the health promoting projects and the projects are more visible. The new curriculum, with a focus on health and wellbeing, has been promoted by the government and the health promoting projects have benefitted from that. Local municipalities operate the primary and lower secondary schools, and they are becoming more aware of health promotion and wellbeing. The number of health promoting municipalities are increasing, and one of their priorities is to motivate schools to implement the health promoting school projects.

What were the results?

The first results of a long-term study that the University of Iceland is conducting on the impact of the secondary schools project will be published in Autumn 2014. Participation was over 90% in a status survey that the Directorate of Health submitted to the coordinators of health promoting primary schools. An evaluation for primary schools is currently under development and therefore no results have

been shown yet. Participation in the school projects is high, and is increasing yearly in primary schools as has been mentioned before. Participation is very good among all school staff in conferences and seminars that are held every year by the Directorate of Health. Establishing good support and cooperation with the Ministry of Education, Science and Culture has been successful as well as the further introduction of the projects.

What difficulties were encountered and how were these overcome?

Difficulties occurred in developing a sound evaluation system for primary schools, but eventually an appropriate solution was found. Currently, a website allows primary schools to fill out relevant checklists and make decisions regarding their next steps. The schools develop their health policy by making and evaluating a project plan. Also, the Directorate of Health has made an overview of how schools are doing in their project. The national financial crisis in Iceland in 2008 has had a negative influence on the progress. Schools have had more financial difficulties and have been less willing to participate, but that appears to be changing for the better and the new curriculum helps with that.

Which aspects went particularly well?

The health promoting school projects are well promoted by the Directorate of Health nationwide with support from the Ministry of Education, Science and Culture. Teachers and other school staff seem to have a positive attitude towards the projects which helped schools to decide to participate in the projects. Many of the schools were already doing relevant activities, and therefore, these activities could be easily incorporated into the project.

How do you know how successful it was?

Secondary schools are competing to do their best concerning the health promoting themes and in their project evaluations; through checklists, they can aim for a bronze, silver or gold recognition. Most schools aim for gold in every theme, which is quite ambitious. Furthermore, the University of Iceland is also conducting a long-term study on the impact of the project. An evaluation for primary schools is currently underway. Although the final results are not yet known, the expected outcome shows a great promise for the future of health promoting schools in Iceland.

What can we learn?

It is important that the national government supports the health promoting school projects, although while being important, it is not enough to work just top-down. The work also has to be done bottom-up, if projects such as these want to fulfill their true potential.

Links to references and further reading

Ministry of Education, Science and Culture (2014). *The Icelandic national guide for compulsory schools – with Subjects Areas*. Reykjavík: Mennta- og menningarmálaráðuneyti.

<http://eng.menntamalaraduneyti.is/publications/>

Guðmundsdóttir, I. & Kristjánsson, S. (Eds.) (2013). *Heilsueflandi grunnskóli*.

Reykjavík: Embætti landlæknis. http://www.landlaeknir.is/servlet/file/store93/item20698/Heilsueflandi%20grunnskoli_0208.pdf (Handbook with guidelines, checklists and toolkits for primary schools – in Icelandic)





7. ITALY

Health promoting schools network in the Lombardy region

Liliana Coppola (liliana_coppola@regione.lombardia.it)

Danilo Cereda (danilo_cereda@regione.lombardia.it)

Directorate General for Health, Lombardy Region, Italy

Bruna Baggio (bruna.baggio@istruzione.it)

Regional Education Authorities, Lombardy Region

Keywords: school health promotion, advocacy, capacity building, intersectoral collaboration, effectiveness

What did you do?

Lombardy (Italy) is one of the most industrialized regions in Europe with a population of 11 million people and a high socio-economic level. 17 % of young people leave school early drop out (i.e., population aged 18-24 with at most, lower secondary education and have no further education or training). The schooling rate is 76 % (i.e., population aged 20-24 that has attained at least upper secondary school qualification) and the university students represent 60 % of the population aged 20-24. In this region there are 1 420 000 students (from 3 to 19 years old), 8 000 schools and 92 000 teachers.

During the school year 2009-2010 the regional health authority and the regional education authority decided to work together on the empowerment of schools to build a model of systemic, integrated and evidence-based interventions. A planning process involving over 150 school coordinators and local health unit professionals has been delivered. Several methods were used: focus groups, nominal group technique (problem identification/solving), brainstorming and world cafes. The main document that was developed: 'Model of Lombardy Health promoting schools', has been discussed with other regional actors (Directorate General for Family and Social Solidarity, Agriculture, Sports and Youth, Education) in order to support an inter-sectorial approach.

In 2011 the regional Education Authority and the Directorate General for Health signed an agreement, called 'Model of Lombardy health promoting schools', that provides the foundation and the support of a regional health promoting school

network. In May 2012 the Directorate General for Health gave financial support to the Regional Education Authorities to start up the network structure (website, events, training, software, etc.).

In June 2012 the network agreement was signed with 68 schools. The agreement aims to strengthen the capacity of schools to initiate health related activities and processes in their schools.

During the school year 2012-2013 the network introduced a new organisational model concerning collaboration and education activities between schools and the local health unit. Also the network developed administrative tools and web-based software. The network elaborated best practice guidelines for schools , called the 'Iseo chart'.

Why did you choose to do this?

Chronic diseases, such as cancer and cardiovascular diseases, are the causes of most illnesses and deaths in western countries. Prevention is one of the most important resources to lessen the impact of chronic diseases on the population.

Schools are regularly requested to deal with health issues that are relevant for our society. Supporting healthy lifestyles from early childhood onward, calls for diverse actors including institutions and schools. At the same time, in our experience, schools increasingly consider health and wellbeing of their students as a necessary component for good education.

During the last 30 years in Lombardy, the education and health sectors worked together on health education and promotion. The relationship between schools and the health sector has changed over the years. Initially (70's - 80's) health promotion was only for 'experts' (e.i. doctors or nurses) who stepped into the classroom. During the 90's methods of teacher training and peer education were developed and promoted. During the last decade the 'life skills' methodology has been used more often as well as changing the school environment. This can more effectively enhance the improvement of healthy behaviour.

In our region there were many activities, but a collective strategy was lacking. The Lombardy health promoting school network provides an opportunity to provide a collective strategy to all schools in Lombardy on health promotion. Education and Health authorities work together to develop a sustainable model of a health promoting school where teachers become leaders in health themes and health professionals collaborate with their skills and supporting the process of integration of health promotion principles in school curricula.

The Vilnius resolution from 2009 has been considered as the common strategy

that was lacking in Lombardy. Following the Vilnius resolution (2009), the regional health authorities and school boards acknowledged that schools have to be the leaders in health promotion for students.

Our aim is that in the schools, each community member (students, teachers, non-teaching staff) should have the opportunity to live healthy, particularly in the following areas: nutrition, physical activity, smoking, good social relationship and life-skills. The network is a capacity building activity that also supports community development and empowerment. Therefore, schools joining the network agree to concretely implement – and document – at least two best practices.

Who were the participants?

The network is organised in 12 provincial working groups. Each provincial group includes all schools in the territory that have joined the network and each local health unit (one for each provincial group).

The provincial groups are coordinated by a regional group that includes a representative from each province, from the Regional School Office, from the Directorate General for Health of Lombardy as well as a representative of the university (Faculty of Psychology).

Building a network of schools is aimed to facilitate the participation of other sectors of the society. The network has a goal of doing advocacy for health promotion at school not only for students, teachers and families, but also for other sectors in society (e.g., sport, agriculture, work).

What actually happened?

Since the start of the network, the following actions and activities have taken place. In 2011 the regional Education Authorities and the Directorate General for Health signed the agreement called 'Model of Lombardy health promoting schools'.

In 2012 meetings were organised for teachers and health professionals about health promoting schools; more than 100 participants were in attendance. Also the network was founded with 68 schools participating and 12 provincial workgroups. During school year 2012-2013, provincial workgroups started to develop a model for a 'health profile' (this is a web-based device that should help schools to describe their own health status). In The same school year the regional health profile and its software was developed, as well as the definition of criteria that schools must meet to join the network.

In 2013 the Iseo work meeting was held. Representatives of the network and the regional coordinators worked together for three days to analyse the network and to define the manual of best practices that every school should implement and a common strategy of the Lombardy network, called the Iseo chart. Training was provided for the life skills programme, school safety (school building, employees, students) and on the health profile. In 2014 the first Lombardy network conference was held in Milan.

Every 3-4 months each provincial group organises meetings to inform the network and to discuss best practices that are being implemented.

What were the results?

Currently we have the first results about participation in the network. During the last three years, the network has steadily grown; in 2012, 400 schools (82 school boards, 82 000 students) started the network. In 2013 there were about 1 000 schools that are members of the network (192 school boards, 192 000 students). The web-based health profile software is a motivating factor in participation, because it allows schools to measure the change in health promotion outputs and outcomes. Before the health profile was put into place, we didn't have a surveillance system about best practices in schools.

Important components of the evaluation of the network are to record the school's experiences with health promotion; to record their good practices as described in the Iseo chart and the completion of the school's health profile. The health profile should help us to monitor the change in health promotion activities in Lombardy. We will evaluate:

- The number of best practices used in the schools;
- The number of schools that can properly evaluate their own health needs (health profile);
- The number of best practices supported by local health units;
- The number of collaborations with voluntary associations or special needs associations.

What difficulties were encountered and how were these overcome?

The main difficulty was to address the cultural beliefs and norms that health promotion is an activity to be performed 'only' by health professionals. In order to address this cultural norm, the network has chosen to empower schools' capacity building through the integration of four components: organisation, relationship,

education and community collaboration. Health professionals need to understand that they will lose the role of leader in health promotion at school: this is difficult for all people that have worked with schools for many years.

At the same time, teachers have difficulties in understanding their new role in health promotion; health promotion should be part of the curriculum and not delegated to an external actor. Furthermore, compiling the health profile is not an easy task; teachers need to reflect and look for data.

Another difficulty is that there are not specific people dedicated to the management of the network. This is a weak point but we could only locate resources for one or two years.

Which aspects went particularly well?

The two strong aspects in the network are the health profile and the guideline; there are around 90 participants. The network developed web-based software for the school's health profile which supports schools to perform an analysis, to develop an action plan and to monitor their interventions (demo http://sps.requis.it/home_school.asp). With the web-based software, schools can describe their own health profile according to self-evaluation covering four areas, these are: developing individual life-skills, developing the social environment, empowerment of the school organisation and empowerment of community collaboration.

Each school can benchmark its results with other schools results and with the network averages. In the coming years, it will be possible to understand which aspects of the regional experience could be improved. The health profile should help us to measure the effectiveness of our network.

How do you know how successful it was?

In November 2012, the network organised a working meeting in Iseo (Garda Lake) for school coordinators and teachers to reinforce the sense of belonging to the network and the role of local leaders, to compare local organisations and to improve skills for the development of 'best practice' in health promotion. The result of the working meeting was a guideline (Iseo chart) for best practices at school about healthy nutrition, physical activity and smoking prevention.

This document contains the good practices existing in Lombardy to facilitate and promote health: active lifestyle with the Pedibus initiative (walking school bus, more than 25 000 primary schools students in 2013); healthy diet and an healthy snacks, bread with low salt content; smoke free environments; 'life skills education'.

What can we learn?

There have been many health promotion interventions in schools, but schools did not take responsibility for the health and wellbeing of students and school staff. From our experience, we understand that effective change in both the education and health sector requires specific conditions and considerations. These are:

- It takes time. Integration is a slow process, both actors, teachers and health professionals, have many duties. To actively implement health promotion, it needs to be supported continuously until it becomes part of the school's daily routine;
- There is often the temptation to do something the easy way even if it is less effective; for example, an intervention where a doctor speaks in a classroom about fruits and vegetables is easier to organise than an intervention where students have a piece of fruit as a daily snack;
- Teachers and health professionals have different points of view and methods for education. Our duty is to share the idea that health and education are linked; a healthy child is a good student and vice versa.

For the school year 2014-2015, the network's aims are to support the schools in the network in defining their 'health profile', to collect best practices carried out by the schools network, and to support schools in defining 'improvement action-plans' based on best practices. Also we want to extend the network by sharing evidence-based interventions and best practices from schools that are not a part of the network.

Links to references and further reading

Lombardy health promoting schools network (2014). <http://www.scuolapromuovesalute.it> (in Italian, working on an English translation)

8. LITHUANIA

The health promoting school wave rolls through Lithuania

Daiva Zeromskiene (daiva.zeromskiene@smlpc.lt)

Diana Aleksejevaite (diana.aleksejevaite@smlpc.lt)

Dalia Sabaliauskiene (dalia.sabaliauskiene@smlpc.lt)

Nijole Paulauskiene (nijole.paulauskiene@smlpc.lt)

Center for Health Education and Disease Prevention

Keywords: health promotion, school, public health bureau

What did you do?

2013 was an important year for the Lithuanian health promoting school community. Lithuania celebrated its 20th anniversary in the European health promoting schools network. It was also symbolic, because 2013 was declared as the 'year of health promotion' by the government of Lithuania. One of the most significant events designated to commemorate this occasion, was the national event called: 'The health promoting school wave rolls through Lithuania'.

The idea Sharing good practices is the best way of sharing ideas and understanding what kind of health promotion activities work best. We have a strong network of health promoting schools in Lithuania, and these schools do a lot of different activities related to health and wellbeing and have achieved positive results as can be seen below. We wanted to make these activities and results visible, and let citizens and communities know what these schools are doing. Also we wanted to give schools the opportunity to share experiences between each other.

Objectives The main aims of this event were: to promote the health promoting school approach as a good example of or instrument to organising health promoting activities in the school; to share and present the wide experience of Lithuanian and European health promoting schools to local communities and municipalities; to honour the most active individuals in the health promoting school movement; to further spread the health promoting school programme across the country.

Why did you choose to do this?

Despite the fact that the national health promoting school movement has continued for more than 20 years, we realized that the activities of these schools were only poorly noticed by the general public. Moreover, institutions working on the improvement of health of children and young people are often not aware of the fact that health promoting schools have a lot of experience in this field. These schools are able to help and even advise on how to create a positive environment for the physical and mental health of children and young people.

Therefore we proposed the wave of ideas on health promoting schools through Lithuania to the Minister of Health and Minister of Education and Science. The ministries agreed with our idea by signing the regulations and providing political support. The Center for Health Education as the initiator of the idea became the main organizer together with the Lithuanian Centre of Non-formal Youth Education. Municipal public health bureaus were appointed to mediate between municipalities and schools.

The format for the event aimed to include several participants from each municipality and to enable all individuals to celebrate the positive results of the Lithuanian health promoting schools network.

Who were the participants?

The participants in this event were health promoting school communities, local municipalities, public health bureaus, stakeholders and the general public. Over 30000 people, including children, students, teachers, public health specialists, social workers, parents and other school community members of health promoting school, and local politicians participated in the event.

What actually happened?

The start of 'The health promoting school wave rolls through Lithuania' was announced during the national conference 'Healthy child, healthy life, healthy future' held on 28 March 2013 in Kėdainiai.

The invitation to participate in the 'wave' was accepted by 45 municipalities (out of a total of 60).



The local organisers were able to freely choose and announce the time, place and format of their events. All events were held during the month of April, in different municipalities. More than 400 schools participated in this project (not all schools were a member of the national health promoting schools network). Most local events started with a parade, individuals carrying posters, balloons and imitation flowers. Teachers were dressed up as various fairy tale characters. Participants gathered in the central square of their municipalities or designated locations for these public events, such as main streets or sports stadiums. The participants wore matching shirts, caps and carried posters with the 'Sveika mokykla' (health promoting school) logo. The health promoting school in Lithuania wave spread throughout the country and reached the most distant regions.

There was a visual health promoting school introduction to the local community including school community parades, performances, songs, line dances, contests, tours, promotions, exhibitions with the aim of attracting as many participants and viewers as possible. The events were organised in municipal centres and towns in public places authorized for these types of events. The approach was unique because of its high number of participants and the diversity of events. The movement was received very positively by the participating kindergartens, primary schools, gymnasiums, vocational training centres and universities in the entire country. The most active teachers and students received certificates of appreciation, diplomas and gifts.

What were the results?

Health bureaus were all actively involved in the event. They played a role as initiators and intermediaries between schools and municipalities. According to the information of the public health bureaus the event strengthened cooperation between municipalities administration, bureaus and schools.

Kazlų Rūdos Special School promoted the health 'wave' in their own school and in four other schools that were not a part of the health promoting schools network. This shows that one single health promoting school can do a lot. The Molėtai Secondary School encouraged eight other communities to take an interest in a healthy way of life. Five municipalities only have one health promoting school. These schools managed to organise the event for their entire municipality, uniting all local schools of their region.

Some of the results were: the effectiveness of the 20 year old health promoting school approach was demonstrated; health promoting schools have become more visible, good experiences were shared; there was an extensive participation of local

people and their respective municipalities; there was a positive atmosphere across all the events that took place. Despite the large number of participants, there were no incidents. Adults were just as active involved and friendly as the children and young people.

What difficulties were encountered and how were these overcome?

The organization was successful apart from some bureaucratic issues that influenced the development of the event regulations document. Since two ministries were involved, this took more time than was expected.

The biggest issue was the bad weather, which made it necessary to make some adaptations in the programme.

Which aspects went particularly well?

A large number of municipalities joined the event and participants were very active. Also, it was a good example of cooperation between various stakeholders. Military, outpatient clinic staff, mayors and representatives of local authorities and other professionals attended and assisted in the organisation of these events.

How do you know how successful it was?

The Center for Health Education and Disease Prevention developed a reporting template and collected data and comments from each municipality. The feedback was positive. The evaluation results were included on the organisers' websites www.smlpc.lt and www.lmnsc.lt. Summaries and press releases of the event as well as video footage were also developed.

What can we learn?

The event was open for all community members. These kind of events can create more exposure and better visibility. It helps raising awareness of the existence and usefulness of the health promoting school approach. Each new idea is attractive and acceptable, if we are able to cooperate with partners from different sectors. Cooperation was the main driver for success.

Links to references and further reading

www.smlpc.lt (in Lithuanian)





9. THE NETHERLANDS

The Dutch Education Agenda Sport, Exercise and Healthy Living

Jan Jansen (j.jansen@cbo.nl), Goof Buijs (g.buijs@cbo.nl)

CBO, the Netherlands

Jan Faber (j.faber@mbodiensten.nl)

MBO Raad

Keywords: health promoting schools, intersectoral cooperation, healthy living, sports, exercise

What did you do?

In the Netherlands, since 2012, the Education Agenda Sports, Exercise and Healthy Living ('Onderwijsagenda SBGL' in Dutch) encourages schools to create a healthy learning environment and structurally include health goals in their school policy. There is a focus on primary schools, secondary schools, special education and secondary vocational schools. In 2013 a new policy impulse was given to determine the need of schools for support and guidance and to create a structure for tailored supportive activities to help schools to become health promoting schools. Aims of these activities are to stimulate the use of evidence-based interventions within the schoolsetting and facilitate and stimulate the development of a structural school health policy.

Why did you choose to do this?

The Dutch health promoting school approach is based on the international whole school approach including signaling students with health problems, teaching and learning about health in the classroom, the physical and social school environment and policies/regulations in school. This approach has demonstrated its effectiveness over the last 20 years and has been introduced in the Netherlands in 2005. The health promoting school concept supports the EU 2020 policy for smart, inclusive and sustainable growth. Promoting sports and physical activity in schools is a good entry point to a whole school approach with regard to healthy lifestyles. An effective school health programme can be one of the most cost effective investments a country can make to simultaneously improve the level

of education, decrease the number of drop outs and contribute to a healthier population. A healthy and stimulating school environment supports quality of teaching. It promotes the health and wellbeing of students and school staff, leads to higher job satisfaction and less sick leave. The ambition of the Dutch Education Agenda is that by the end of 2016, 25% of all primary schools, 25 % of all secondary schools and 25 % of all VET colleges have a healthy school policy. Also, by the end of 2016 a total of 850 healthy school certificates should have been allocated.

There is a need to create more coherence among the very diverse national policy initiatives and programmes from the different national stakeholders that all operate in the area of sports, physical activity and promoting healthy lifestyles in and around schools in the Netherlands.

Who were the participants?

The Dutch Education Agenda is carried out as a joint initiative by the Primary Education Council (PO-Raad), the Dutch Council for Secondary Education (VO-Raad) and the Netherlands Association of VET Colleges (MBO Raad), working closely together with national and regional partners. Funding comes from the Ministry of Education (OCW) and the Ministry of Health (VWS). It is an ongoing national initiative supporting already existing programmes from the education perspective.

What actually happened?

The Dutch Education Agenda was presented in 2012 as a four-year programme for the period 2012-2016 as a joint initiative by the three national educational councils. This unique initiative is supported by both the Ministry of Health and the Ministry of Education. For the first time in the 30 year Dutch health promoting school history, the support of the education sector has been so clearly stated. In the Education Agenda, the needs of the school are put central: the agenda is for, by and with the schools. A national team helps to coordinate health promoting school activities, support existing structures and support the development of a national curriculum framework on healthy lifestyles. The team is supported by a small group of national experts on physical education, public-private partnerships, local sport coaches, school sports and health promoting schools. There are also four regionally operating health promoting school coaches who support schools directly and lobby with school boards and town councils to get health promoting schools higher on the local education agendas.

New policy measures, such as the National Prevention programme, the extra adolescent contact for school health services and the Healthy Schoolyard, all benefit from cooperation with the Dutch Education Agenda.

What were the results?

In 2013, a total of 128 schools (mainly primary schools) received a national recognized health promoting school 'vignette'. 1 233 primary schools (17 % of all Dutch primary schools) requested support for school health promotion activities, getting individual consultancy or for taking steps towards a healthy school policy. 250 secondary schools (23 % of all Dutch secondary schools) did a similar request for support and 50 secondary vocational schools (80 % of all Dutch VET schools) asked for support. There was a small financial incentive available for each school, made available with additional funding from the Ministry of Health. The total number of schools that responded was more than expected.

Also the development of the national curriculum framework was initiated and funded by the Ministry of Education. The curriculum framework is expected to be available by the end of 2014 and can serve as a source of inspiration for schools on teaching health in the classroom.

What difficulties were encountered and how were these overcome?

During the preparation of the Dutch Education Agenda it became clear that there were more than 15 different national initiatives and programmes, that all shared promoting sports, physical activity and a healthy lifestyle for children and young people in the school setting. Since the main goal for the agenda was to create synergy, it was decided to present the Education Agenda as a back office initiative. So communication is limited to policy makers on a national, regional and local level. So far, this seems to work very well.

Another complication is the Dutch education system, that is based on the autonomy of a school and the freedom of education. So the focus of health promoting school policies target on the school's individual needs and wishes, instead of introducing national policies. This situation matches the bottom-up approach of health promoting schools very well. Another issue was to strive for a solid scientific base for demonstrating the effectiveness of the health promoting school approach in the Netherlands. Since no research money was included in the educational agenda, a lobby was initiated for developing a long-term health promoting school research agenda.

Which aspects went particularly well?

The support of the national educational councils who for the first time cooperate in the area of sports, physical activity and promoting healthy lifestyles, makes it

easier for schools to engage as health promoting schools. Also the lobbying for the health promoting school case on national level has been improved. Several new national policy measures make a clear reference to health promoting schools. The collaboration between the health and education sector is also stimulated and being improved. The agenda bridges the gap and creates a better mutual understanding and shared interests when it concerns both the health and learning of students in the Netherlands. The curriculum framework on Sports, physical education and promoting a healthy lifestyle, carried out by the Dutch expertise centre for curriculum development SLO, brings together the different stakeholders to agree on the minimum requirements in teaching health in the classroom for students aged 4 – 18 years old.

How do you know how successful it was?

One of the targets of the Education Agenda is that in 2016, 25 % of the schools have a written Healthy Schools policy on a board-level and at least 850 'Healthy School' vignettes have been granted. So far, the target seems to be in reach. However, it is too early to make conclusions as to whether the Education Agenda will accomplish its ambition by 2016.

What can we learn?

The road to a widely shared commitment to the health promoting school approach within a school and by the national, regional and local stakeholders takes a lot of time and investment in advocacy at all levels. There is a big need for support in schools when it comes to health promotion activities, according to the large amount of requests coming from the schools. The actual implementation of health policies is the most interesting and intriguing part of the work, as well as the 'does it really work' question. Also for politicians, the 'sense of urgency' needs to be clearly stated in order for them to positively support health promoting school development.

Links to references and further reading

RIVM (2014). Onderwijsagenda Sport, Bewegen en een Gezonde Leefstijl. Bilthoven: RIVM <http://www.gezondeschool.nl/gezonde-school-en-over-ons/initiatieven-gezonde-leefstijl/onderwijsagenda/> (in Dutch)

Reijgersberg, N., Lucassen, J., Pulles, I. (2013). Monitor Onderwijsagenda Sport, Bewegen en Gezonde Leefstijl. Utrecht: Mulier Instituut.

10. THE NETHERLANDS

Movement, learning and wellbeing in and outside the classroom: *The Class Moves!* in various European countries

Elise Sijthoff (elise@beweeg.nl)

Fysio Educatief, the Netherlands

Keywords: physical activity in classrooms, self-efficacy, practice-based learning.

What did you do?

With a team of colleagues, I developed attractive user-friendly manuals and calendars within a programme called *The Class Moves!*, to encourage: (1) increased physical activity; (2) related cognitive improvement; and (3) overall wellbeing among children in classrooms. My central interest was to enhance children's self-efficacy through movement and relaxation especially in classroom situations.

The Class Moves! is oriented towards all age groups within primary school. Through short bursts of physical activity at various points in the school day, children learn to integrate good posture with movement and relaxation within an everyday work setting which also helps them in later life. After such a release of tension, children are able to return to work at their desks with renewed concentration. *The Class Moves!* consists of seven calendars with manuals (Sijthoff & Kooyman, 2002), which cover all grades in primary school. The theme changes every month; for example, 'expressing emotions' is highlighted in September and 'stability' in February. Each grade in primary school also has an annual theme, ranging from 'fairy stories' for the early years to 'exciting moments' for the final grade. The physical activities vary from balancing exercises to combining silence with vocal expression. All activities are oriented towards motor skills and social-emotional development of children at particular ages and build on their desire to discover and express their physical and emotional capacities. The school day offers opportunities to experience the joy of movement in multiple ways, and children are encouraged to develop a positive sense of their own bodies.

The programme has now evolved with the addition of a digital version and one for special needs schools.

Why did you choose to do this?

My experience as a trained physiotherapist taught me that health issues can be addressed pro-actively, through exercise and relaxation rather than reactively through medication and surgery. It became clear that ‘prevention is better than cure,’ and therefore one should start as early as possible. As a result, such an approach to health is best initiated with young children.

I also support children’s rights, notably the right to freedom of movement and of expression – even in classrooms – in a manner that facilitates learning and does not disrupt it. Children should be encouraged to understand how their bodies move best and to alternate tension and relaxation.

Who were the participants?

It proved easier, from a common-sense standpoint, and more economic to work in classrooms rather than with individual children. For an early start in life, *The Class Moves!* initially focused on children aged four to twelve years. Teachers were central figures as well, and school principals and administrators needed to be convinced about *The Class Moves!*. Since schools are embedded in local contexts, also educational officials and health professionals were mobilized. Policy makers who allocate budgets, required convincing as well. Parental involvement was very important. Later, new categories of participants became involved, e.g., neighbourhood coaches as can be seen below.

What actually happened?

The programme was remarkably successful with some major challenges that my team continues to address. *The Class Moves!* was widely adopted in the Netherlands, Belgium, Germany, Scotland and Wales through the first decade of the new millennium. Additional materials were also developed; for example, a family activities calendar distributed in schools that attempted to give children a say in the use of their time and thus to increase their self-efficacy as well as their physical and social activities. The programme was able to extend further across the lives of children, through the addition of new modules. Little ‘movement books’ could be taken home by children so that brief beneficial bursts of physical activity could be woven into the routine there as well, yet this time with parents. A ‘movement map’ handled by the neighbourhood coach allowed children and their significant adults to explore opportunities for physical activity in their school and home environments. These forms of self-efficacy offered children insights into taking control of their lives, and to consider how this process makes a difference and might be extended to other aspects of daily life.



What were the results?

An evaluation of *The Class Moves!* in one Dutch city was carried out in the early years of the programme, and the majority of students in the middle primary grades reported that the periods of physical activity enhanced their educational abilities (Dienst Recreatie Rotterdam, 1998). Such reports were echoed in evaluations held in other cities and other European countries in later years as well. All schools in Scotland and Wales were encouraged by their national government to use the programme; teachers reported that *The Class Moves!* improved teacher-student relationships, classroom atmosphere and behaviour (Lowden et al., 2001).

What difficulties were encountered and how were these overcome?

In our efforts to help children through physical activity, to stimulate cognitive development and overall wellbeing, we encountered creative tensions between working at the level of groups of children and attending to the specific needs of individual children in the classroom. This difficulty was addressed by trying to work at both levels, and to integrate the different strategies required to make the classroom a vibrant place with enjoyable physical activity and at the same time support specific children through individual attention. *The Class Moves!* was intended to enable teachers to recognize and respond to the varying needs of different students, and for students to do the same for each other.

Another difficulty was that in order to reach children, we had to engage with many different categories of adults – teachers, parents, school principals and administrators, educational officials and health professionals, and policy makers in local and national government. As a result, we learned to operate at both the micro and macro levels, and to approach each of these different kinds of adults in appropriate ways.

Which aspects went particularly well?

The children by and large enjoyed the structured physical activity in class, and this in turn improved both their cognitive performance and the overall atmosphere in the classroom. This was not surprising, because scientific research has demonstrated that exercise stimulates cognition, and that play and physical education should therefore be well integrated into the curriculum (Jensen, 2008). Many teachers were enthusiastic and continued to use *The Class Moves!* and related materials for many years; again, not surprisingly, because the programme was developed in close collaboration with teachers who tried out the materials in class and later reported back. School administrators too were supportive of the programme, as were local educational and health officials. Successes can be reported with the national government as well, as in Scotland and Wales. Recent research data of the Health Behaviour among School Age Children survey (HBSC) in Scotland suggests that almost 60 % of head teachers in the Scottish schools covered in 2010 reported continued use of *The Class Moves!* long after official promotion of the programme came to an end (Currie et al., 2010).

How do you know how successful it was?

Various studies have confirmed the success of the programme in different countries (Lowden et al., 2001; Vlaams Instituut voor Gezondheidspromotie, 2002); at the same time, some studies highlight that there are limits to which the findings can be generalized, e.g., because of a restricted study period that reduced statistical significance (Dobbelstein & Eurelings, 1998; Stawinoga et al., 2002). Anecdotal evidence abounds among teachers and local officials, and even a trainee sports coach who remembers how – as a student in primary school – *The Class Moves!* helped him deal with what was seen as his tendency to hyperactivity. Some of this anecdotal evidence is on record at Fysio Educatief, our office.

What can we learn?

The following lessons can be learned from our work:

- It is best to work from both ends - from bottom up as well as top down - with individuals and also with groups, focusing on physical wellbeing at the same time as cognitive development, from practical knowledge plus theoretical support rather than emphasizing one at the expense of the other;

- New initiatives are best attempted step by step, building on what people do and what they wish for, and following different trajectories depending on the particular situation;
- Materials in programmes such as *The Class Moves!* are best tested in real life classrooms, in close collaboration with teachers, rather than imposed on teachers after the decision to use these materials are taken without consulting them.

Links to references and further reading

Antonovsky, A. (1987). *Unravelling the mystery of health: how people manage stress and stay well*. San Francisco: Jossey-Bass.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147.

Buijs, G. & Bowker, S. (2010). Working with schools. In E. Waters, B.A. Swinburn, J.C. Seidell & R. Uauy (Eds.), *Preventing childhood obesity: evidence, policy and practice* (pp 263-268). Hoboken NJ: Wiley-Blackwell.

Currie, C., Levin, K. A., Kirby, J. L. M., Currie, D. B., van der Sluijs, W., & Inchley, J. C. (2011). *Health Behaviour in School-aged Children: World Health Organization collaborative cross-national study (HBSC): findings from the 2010 HBSC survey in Scotland*. Edinburgh: Child and Adolescent Health Research Unit (CAHRU).

Dienst Recreatie Rotterdam (1998). Onderzoekverslag 'De klas beweegt' in Beverwaard: een weergave van de resultaten van het eerst jaar werken met deze lesmethode [translation: Research report on 'The Class Moves!' in Beverwaard: a review of the results from the first year of working with this classroom method]. Rotterdam: Municipal Service for Sports and Recreation.

Dobbelstein, P. & Eurelings, E. (1998). Jong geleerd is oud gedaan: een beschrijvend onderzoek van de methode 'De klas beweegt' [translation: What is learned young will be practised when old: a descriptive study of 'The Class Moves!' method. Limburg: Limburg Hogeschool [Technical College].

Fysio Educatief (2004). Project beschrijving 'De klas beweegt!' [translation: Project description 'The Class Moves!']. Amsterdam: Fysio Educatief.

Jensen, E. (2008). *Teaching with the brain in mind*. Alexandria, VA: Association for Supervision and Curriculum Development.

Lowden, K., Powney, J., Davidson, J. & James, C. (2001). 'The Class Moves!' Pilot study in Scotland and Wales, an evaluation. Edinburgh: Scottish Council for Research in Education.

- de Meij, J. S. B, van der Wal, M. F., van Mechelen, W., & Chinapaw, M. J. M. (2012). A mixed methods process evaluation of the implementation of JUMP-in, a multilevel school-based evaluation aimed at physical activity promotion. *Health Promotion Practice*. Accessed 26 April 2012 at <http://hpp.sagepub.com/content/early/2012/11/27/1524839912465750>
- Sijthoff, E. & Kooyman, L. (2002). *The Class Moves! Posture, movement and relaxation in the classroom, manual for calendars*. Amsterdam: Fysio Educatief.
- Sijthoff, E. (2012). Bonding through movement. In Smit, F. (Ed.), *Brug naar de toekomst: partnerschap ouders, school en buurt* [translation: Bridge to the future: partnership between parents, school and neighbourhood]. Nijmegen: Radboud University.
- Sijthoff, E., Meijers, M., Kranenburg, D., Smit, F., & George, S. (2013). 'Moving moments' for schools, parents and children: critical lessons from a case of resource innovation in the Netherlands. Paper presented at the European Research Network about Parents in Education, 9th international conference on "Families, schools and communities: learn from the past, review the present, prepare for a future with equity", 4-6 September, Lisbon, Portugal.
- Sijthoff, E. (2014). Exercising rights and active citizenship: Children, physical activity and learning – in the classroom and beyond. In Thomas, M. (Ed.), *A child's world: Contemporary issues in education* (pp. 39-58). Aberystwyth, CAA.
- Stawinoga, M., Feldhoff, K. H. & Luttgens, U. (2002). Klasse in bewegung! Ein erfolgversprechender baustein zur bewegungsforderung im kindesalter [translation: The Class Moves! A promising step towards promoting child mobility]. *Das Gesundheitswesen*, 64, 486-491.
- van Stralen, M., de Meij, J. S., te Velde, J. S., van der Wal, M. F., van Mechelen, W., Knol, D. L. & Chinapaw, M. J. M. (2012). Mediators of the Effect of the JUMP-in intervention on physical activity and sedentary behaviour in Dutch primary school children from disadvantaged neighbourhoods. *International Journal of Behavioural Nutrition and Physical Activity*, 9(131). Accessed 17 December 2013 at DOI:10.1186/1479-5868-9-131.
- Vlaams Instituut voor Gezondheidspromotie (2000). *Evaluatie De Klas Beweegt! pilotproject Vlaanderen* (November 1999 - Juni 2000) [translation: Evaluation of The Class Moves! Pilot project in Flanders (November 1999 – June 2000)]. Brussels: Flemish Institute for Health Promotion.

11. POLAND

Health promotion for school staff as part of a whole school approach to health in Poland

Magdalena Woynarowska-Soldan (m.woynarowska@op.pl)

*The Public Health Division, Faculty of Health Science,
Medical University of Warsaw, Poland*

Grazyna Skoczek (grazyna.skoczek@ore.edu.pl)

Centre for Education Development, Warsaw, Poland

Keywords: teachers, non-teaching staff, health, health promoting school

What did you do?

The three-year project (2012-2015) on health promotion for teachers and non-teaching staff is being implemented within the framework of the health promoting school programme in Poland. This programme started in 1992 when the project was established in 15 schools with the support of WHO Regional Office for Europe. The health promoting school approach was widely disseminated and the number of schools which implemented it increased. Since 2006 the regional networks of health promoting schools exist in all 16 regions in Poland. By the end of 2013 about 2 600 schools and kindergartens belonged to these networks (Woynarowska & Sokolowska, 2009; Woynarowska, 2013).

Promotion the health of school staff is a main component of the whole school approach to health. The aims of the presented project are:

- 1) to develop positive changes in the school physical and social environment, enhancing the physical and psychosocial health of school staff;
- 2) to encourage staff members to take care of their health through positive changes in their lifestyle.

The project consists of five stages:

- 1 Preparation;
- 2 Diagnosis of the initial situation;
- 3 Planning activities and their evaluation;
- 4 Implementation of the plan and
- 5 Process as well as outcome evaluation.

It was decided that project schools will develop activity plans for each school year. By the end of the school year they will prepare the report on the process and outcome evaluation. The final evaluation of the project is planned for the end of 2015. This story presents the experiences from the first one-and-a-half year of the project.

Why did you choose to do this?

For more than 20 years the health promoting school programme focused mainly on the health of students. Despite the fact that school staff are an integral part of the school community, the health and wellbeing of teachers and non-teaching staff were hardly ever considered in practice. Encouragement of school staff to pursue a healthy lifestyle and improve the quality of their work environment will contribute to improving their occupational wellbeing and health status. It is also expected that with increasing involvement in health promotion, the school staff will act as role models for students. The project attempts to link two concepts based on the setting approach: the health promoting school and workplace health promotion (Breucker & Sochert, 2006), because a school is a workplace with specific psychosocial stressors.

Who were the participants?

Teachers (N=780) and non-teaching staff members (N=276) from 22 primary and lower secondary schools, belonging to six regional health promoting school networks, participate in the project. In each school the coordinator and a project team consisting of representatives from both teaching and non-teaching staff were appointed. The number of team members ranges from four to ten, with teachers forming the majority.

The project schools are supported by two coordinators on the national level; one represents the health sector (the Medical University of Warsaw), the other represents the education sector (the Centre for Education Development). Their tasks are as follows: developing the project concept and tools for diagnosis of the initial situation; preparing of educational materials; training and consulting school coordinators and head teachers in planning and evaluation of their activities; organizing meetings in and visits to the project schools.

What actually happened?

During the first half of the project the following activities were undertaken:

- Information about the project was sent to the regional health promoting school coordinators for dissemination;
- The project schools were selected. The basic criteria for school involvement in the project were: belonging to the regional network of health promoting schools for at least 5 years, a recommendation by the regional coordinator, the head teacher and at least 60% of school staff members volunteering to be involved in the project;
- The agreements between the head teachers and the national coordinators were signed;
- Tools for the diagnosis of the initial situation were prepared by the national coordinator. There were anonymous questionnaires for teachers and non-teaching staff for the assessment of occupational wellbeing, positive health behaviour and subjective health. The psychometric analysis of these tools was done earlier and described elsewhere (Woynarowska-Soldan & Weziak-Białowolska, 2012; Woynarowska-Soldan & Weziak-Białowolska, 2012a);
- Meetings with school coordinators and head teachers were organised. The concept of workplace health promotion, the methods of diagnosis of the initial situation and action plan were presented; workshops on motivating staff members to participate in the project were held;
- The diagnosis of the initial situation was made. Schools analysed their data in order to identify the problems which should be solved and develop the action plan and evaluation according to the principles used in the health promoting schools in Poland (Woynarowska, 2013). An analysis of the plans was conducted with the aim to provide feedback to each school;
- The national coordinator visited schools and met with school staff;
- Schools implemented their plan and evaluated the process and outcomes of the first project year.

What were the results?

School staff recognised the need to promote their own health. The results of the comprehensive diagnosis showed many problems to be solved. Activities addressing problems with high priority were implemented accordingly. There were four types of activities: changes of staff members' health behaviour (mainly: physical activity, nutrition and coping with stress); decreasing the noise level at school; arranging lounges for staff, improvement of the relation between staff

members (mainly teachers). The skills related to planning and evaluating activities were improved. School project teams recognized the benefits of the project to the individuals and to the whole community.

What difficulties were encountered and how were these overcome?

In our project there were difficulties connected with:

1. Tasks, people's beliefs and behaviours:
 - Lack of motivation and engagement of many members of school staff. In some schools a relatively small proportion of staff (especially non-teaching staff) participated in the activity;
 - Lack of both time and the skill of time management;
 - Feeling of work overload.
2. Planning and implementing the project:
 - Low competence of school coordinators and head teachers in action planning and evaluation;
 - Activities focused more on teachers' health than non-teaching staff health;
 - Lack of financial resources for changes in the school infrastructure and equipment as well as training carried out by specialists;
 - Organization of group meetings and activities after work hours and at weekends.

During the meetings the participants of the project (national coordinators, school coordinators and head teachers) recognized and discussed that the implementation of health promotion will be a long-term process by changing staff members' thinking and convincing them they are acting to improve their own health. A series of workshops were organised. Materials on planning and evaluation were prepared. Each school received individual consultation on how to improve their planning and evaluation in the second period of the project. It is expected that this will help schools to act more effectively.

Which aspects went particularly well?

The project made it possible to establish a group of people from different schools, who are ready for cooperation, exchanging experiences and learning. The meetings were fruitful, the atmosphere was very friendly. Most school coordinators and head teachers have a positive attitude toward the project and get personal satisfaction

from their participation. Some of them reported that they have implemented positive changes in their lifestyle. Physical activity groups, workshops (e.g., on healthy eating, coping with stress, self-examination skills), social events and lounges for teachers and service workers were organised at school. All schools, apart from one, are continuing the project.

How do you know how successful it was?

The changes mentioned above were reported by school coordinators and head teachers during the meetings and in their written report on the process and outcome evaluation by the end of the first project year.

The evaluation report consisted of two parts:

- 1 description of aims, criteria for success, method of assessment of the achievements (success), what was achieved, what was not successful and why?;
- 2 answers to the following questions:
 - What have they learnt during this year of the project?
 - What are the benefits of implementing the project?
 - What difficulties were encountered?
 - What can they change in planning the process and what can they do to increase the effectiveness of their activities?

What can we learn?

Based on the experience and results of the first project period we learned that health promotion of school staff is a long-term process and is not easily implemented. It is necessary to:

- Work on improving the understanding of the health promoting school approach, and its specific approaches by school staff members;
- Break the stereotype that the promotion of students' health is more important than the health of school staff;
- Improve the skills of planning, setting realistic aims and of using the strategy of "small steps";
- Continually motivate members of school staff to participate in the project, showing them that they benefit as individuals, workers and members of the school community;
- Invest in the personal development of staff members, as well as in the greater engagement of school management;

- Engage non-teaching staff; this is the group with a lower socio-economic status, who require a specific approach in promoting health and in health education (specifically nutrition, smoking and alcohol drinking, self-examination).

Links to references and further reading

Breucker, G. & Sochert, R. (2006). Healthy employees in healthy enterprises – the European Network for Workplace Health Promotion. In E. Korzeniowska & K. Puchalski (Eds.), *Work health promotion in enlarging Europe* (pp. 9-22). Lodz: Nofer Institute of Occupational Medicine.

Woynarowska, B. (2013). Preparing and planning for the health promoting schools development in Poland. In O. Samdal & L. Rowling (Eds.), *The implementation of health promoting schools. Exploring the theories of what, why and how* (pp. 126-133). London and New York: Routledge.

Woynarowska, B. & Sokolowska, M. (2009). Poland: The health-promoting school national certificate. In Ch.V. Whitman & C.E. Aldinger (Eds.), *Case studies in global school health promotion. From research to practice* (pp. 213-224). New York: Springer.

Woynarowska-Soldan, M. & Weziak-Białowolska, D. (2012). Factors enhancing teachers' occupational well-being scale: psychometric analysis. *Medycyna Pracy*, 63(1), 73-83.

Woynarowska-Soldan, M. & Weziak-Białowolska, D. (2012a). Psychometric analysis of positive health behaviours scale for adults. *Problemy Higieny i Epidemiologii*, 93(2), 369-376.

12. RUSSIAN FEDERATION

Posture and physical education of students in the Russian Federation

Peter Khramtsov (elenailch@mail.ru; pikhramtsov@gmail.com)

Kirill Matveev (elenailch@mail.ru; mk@rossinn.ru)

*Research Institute of Hygiene and Health Protection of Children and Adolescents,
Moscow, Russia*

Keywords: posture, diagnosis, correction of disorders, schoolchildren, technology

What did you do?

The Flexi-scan device was developed to record biomechanical indicators of the body posture corresponding with different phases of the functional test, from standing to deep crouching. This is how it works, a child stands on a platform, lifts his/her hands from his/her body to a 45 degrees angle and slowly crouches as deeply as possible without lifting his/her heels from the platform. The condition of the muscles, ligaments and joints of the lower limbs determines the position of the pelvis and spine when bending. The device consists of a 3D-scanner and computer software. A computer program analyses the camera findings, determines ankle-joints, knee and hips joints, three points of the spine, the joints of the upper extremities and builds a three-dimensional model with 20 reference points. Analysis of the findings of functional testing allows for the evaluation of a functional muscle balance. In identifying deviations in the different of joint angles and position of the central reference points from the normative values, recommendations for correction of the functional state of the muscles and ligaments can be formulated.

Why did you choose to do this?

Posture is one of the integral elements of students' health. Posture formation is influenced by many external and internal factors. The high prevalence and great medical and social significance of posture problems define the priority of research studies on the establishment and development of new diagnostic and health technologies that are integrated into the educational process, in physical

education for students. Physical means of prevention and rehabilitation are natural and the most appropriate to age development processes.

Who were the participants?

Students in grades 2, 7 and 10 (aged 8, 13 and 16 years).

What actually happened?

We carried out the research of the participating students during the functional test. We determined the state of the muscles in the feet, shin and thigh of both extremities based on the degree of their deviation from the vertical axis and formed a group of children and adolescents who could improve their bodily posture during physical education lessons. The corrective exercises were used for relaxation and strengthening of different muscle groups differently according to their state determined with Flexi-scan. The improvement exercises were included into each physical education lesson. These lessons are part of the school curriculum. They are offered three times per week. Students performed the exercises to improve their bodily posture during the introductory part of each sub-class depending on the type of improvement for four to eight weeks.

What were the results?

Our survey found that an imbalance of muscle tonus (tension) is connected with the weakening of the muscles of the leg and foot in 75 % of students in grade 2; 62 % in grade 7 and 76 % in grade 10. Twenty five percent, 38 % and 24 % of students respectively had an increased muscle tonus of the muscles of the ankle joint.

Strengthening the muscles of the front of the thigh (FT) of the right and left foot respectively is recommended for 54 % and 40 %, 45 % and 33 %, 71 % and 14 % of students in grades 2, 7 and 10. A clear regularity was also observed in the examined children of different ages - weakened muscles of the FT of the right foot were revealed more often than of the left leg. Moreover, this difference was especially pronounced in the tenth grade students. The largest frequency of occurrence of weakened muscles of the FT of the right foot compared with students of junior and middle classes was determined among these students. In order to explain these facts, it is necessary to carry out a comparative analysis of the findings with the prevalence of posture disorders and spinal deformities in these children.

A similar study will be done in the future with the use of computer-optical topography providing an objective examination of posture and spinal in the screening test. The bilateral strengthening of the muscles of the FT was demonstrated in the survey findings; 6% of students in grade 2, 21% in grade 7, and 14% in grade 10.

We found a high frequency of the occurrence of - encapsulated muscles of the backsides of both lower extremities. Stretching these muscles is recommended for almost all surveyed children and adolescents in grades 2, 7 and 10.

What difficulties were encountered and how were these overcome?

Using Flexi-scan during class hours proved to be difficult due to the necessity of surveying all students of a school at the beginning of a school year, in a short period of time. An optimal organisational model was created, according to which examination of children was conducted during the physical education lessons. The survey time for each student only lasted one minute; therefore, children of a whole class were examined during one lesson (45 minutes). A survey was conducted by a physical education teacher, who was not engaged in teaching. Thus, during a week all students of a school were surveyed and groups of students with different physical disorders were formed. In accordance with these disorders recommendations for each group were determined. These recommendations were used at physical education lessons during four to eight weeks.

Which aspects went particularly well?

The Flexi-scan device is mobile and therefore easy to install. Also there is no need to have an assessment specialist to make extensive use of the device. The computer programme automatically generates the individual recommendations aimed for restoring the balance of the muscular balance according to the assessment of the state of the musculoskeletal system. The first positive changes in the muscles were already observed after 12 regular lessons.

How do you know how successful it was?

Indicators of efficiency of the device are the increase of the amplitude of joint angles and reducing deviations from the vertical axis of the spine and the axes of the lower extremities during the functional test (crouching and standing up).

What can we learn?

The findings allow to consider this method as a promising way for the objective assessment of the individual posture and correction of its inclinations directly during physical education lessons. The introduction of this method in the Russian Federation is aimed at improving students' health functional reserves by means of physical education in educational institutions.

Promising directions of the methodical approach is the evaluation of health effectiveness of different health-education programs and technologies of physical education, development and substantiation of individual programs promoting a healthy lifestyle among children and adolescents.

Links to references and further reading

Kendall, F.P., McCreary, E.K., Provance, P.G., Rodgers, M.M. & Romani, W. A. (2005). *Muscles: Testing and Function, with Posture and Pain*. Philadelphia: Lippincott Williams & Wilkins

Khramtsov, P.I., Matveev, K.V., & Moiseenko, L.U. (2013). Innovative technologies forming student's health by means of physical education. Proceeding of the XVII Congress of pediatricians of Russia "Actual problems in Pediatrics". M: Pediatr, 713.

Khramtsov, P.I., Matveev K.V (2013). Integration of technology of biomechanical analysis of posture into physical education of children in educational institutions. Proceeding of the XVII Congress of the European Union for School and University Health and Medicine EUSUHM-2013 June, 2013, London.

Khramtsov P.I., Matveev K.V. (2013). New methodological approach to the evaluation and correction of the musculoskeletal system in students on physical education. Proceedings of the International Conference "Physical Education of students: actual Problems and Prospects", Minsk, 2013, 33-8.

Buckup, K. (2005). *Clinical Tests for the Musculoskeletal System: Examination – Signs – Phenomena*. Stuttgart-New York: Thieme Verlag.





13. RUSSIAN FEDERATION

Research on single sex education in Russian schools

Olga Vyatleva (olgavyat@mail.ru)

Galina Goncharova (elenailch@mail.ru)

*Research Institute of Hygiene and Health Protection of Children and Adolescents,
Moscow, Russia*

Keywords: single sex education, masculinity, cognitive functions, adolescents

What did you do?

It is known that differences in brain development in boys and girls (Cosgrove et.al., 2007; Zaidi, 2010) determine gender differences in verbalisation activities (better in girls) and visual-spatial skills (better in boys) (Burman et. al., 2008; Hyde, 2005) and therefore, influence academic achievements. Single sex education, owing to adequate educational rates and methods, can improve the educational results (Magon & Gender, 2009), but it may distort gender-related characteristics (e.g., masculinity-femininity) of students.

To assess the impact of single sex education of boys and girls on their gender-related characteristics, cognitive functioning and verbal and visual-spatial skills, we examined 38 students after eight years of study in single sex and co-educational schools. By means of psychological tests, we evaluated the speed and quality of cognitive performance of students. We used the Amthauer Intelligens-Struktur test (Amthauer, 1953) for verbal assessment and the Eysenck test (Eysenck & Evans, 1998) for figural-spatial assessment. Gender-related characteristics were evaluated by the gender masculinity index (MI) based on the use of the Bem test (Bem & Bem, 1981). Physiological effort of cognitive activity was determined by means of heart rate variability (HRV) parameters, recorded in rest conditions, and during verbal and spatial tests.

Why did you choose to do this?

Magon and Gender (2009) identify main features of gender training which are

effective in boys and girls. These features relate to the classroom space, teaching methods and teacher's communication style. As separate training can distort the formation of gender roles, we attempted to assess the positive and negative aspects of the practice of separate education, in which teaching methods and the teaching staff in classes for boys and girls were not significantly different.

Who were the participants?

We examined 38 students of 14-16 years old after eight years of education in single sex and co-educational Moscow schools. These schools specialize in studying foreign languages and have the same level of learning. Co-educational and single sex groups consisted each of 19 students with similar split of genders (9 boys and 10 girls). All participants were right-handed. In the single sex school the classroom environment, teaching staff and teaching methods were not significantly different in classes for boys and girls.

What actually happened?

Our study revealed that after eight years of education, boys and girls from co-educational school had more differences, than their peers from single-sex school. In the co-educational school, boys compared to girls were more masculine, performed visual- spatial and verbal tests more accurately, but lagged behind girls in speed of verbal performance. In the single-sex school, there were no differences in masculinity, speed and accuracy of verbal and spatial performance among boys and girls. But boys had more prominent sympathetic activation during verbal activity according to our HRV parameters.

In comparison to boys from the co-educational school, boys from the single-sex school carried out verbal tests faster, but made more errors in spatial test. Girls from the single-sex school compared to girls from the co-educational school had more masculine features and a lower stress level during spatial activity by the HRV parameters.

What were the results?

The results of this study led us to conclude that eight years of single sex education correlates significantly with changes concerning the investigated parameters; these changes are more pronounced in boys. Single sex education led to improvement of verbal activity in boys, but they get behind in spatial performance. In girls, the

single sex option leads to a lower physiological value of figural-spatial activity and enhances masculine features. Girls and boys from a single sex school have more similarities in masculine/feminine features, verbal and figure-spatial performance than students from a co-educational school.

What difficulties were encountered and how were these overcome?

To analyze the causes, which induce the differences among boys and girls from the single sex school in comparison to those from the co-educational school, we tried to define the essence of differences in conditions and methods of teaching in these two groups of adolescents in single sex school. It was found that students of different sexes were trained in similar classrooms and by the same teachers. According to teachers, they used slightly different methods when teaching boys versus girls, but they could not determine exactly the essence of these differences. Based on the data, we can conclude that the effect of the current method of separated training is a result of placement of students in groupings by sex, which makes it possible to teach them based on their development rates.

Which aspects went particularly well?

The study demonstrated that grouping children into educational training by gender contributes to a more efficient development of qualities that are less specific to each gender. In our current case, the single sex school with advanced teaching of foreign languages has been focused on the development of verbal abilities, and we discovered its effectiveness for boys. They, unlike boys from co-educational schools, perform as well as girls in this kind of activity. Smaller sympathetic activation of girls from single sex schools in the spatial task indicates a greater subjective ease of visual-spatial activity for them. This supports a positive impact of segregated education on girls too.

How do you know how successful it was?

Our study revealed strengths and weaknesses of current variants of separate education of boys and girls. The results of this study confirmed the assumption of greater effectiveness of teaching children in uniform sex classes for those activities that are less appropriate for a given sex (verbal functions for boys and visual-spatial functions for girls). But we found a significant disadvantage of this method - the distortion of gender-related characteristics, most pronounced in girls.

What can we learn?

The study showed that the education of children in uniform sex classes without differences in teaching staff, methods and school environment leads to better results in those activities that are less successful for each sex (verbal in boys and visual-spatial in girls). However, the verbal activity after such learning is difficult for boys. Also they do not perform as well as the boys of co-educational schools by their visual-spatial performance.

Girls from single sex schools show the same quality of spatial performance with lower physiological effort than girls from the co-educational group – an indicator of a strong positive result of this method of same sex education. However, the increase of masculinity may complicate their ability to create and sustain a family, so it needs educational attention.

Links to references and further reading

Amthauer, R. (1953). *Intelligenz und Beruf*. Zeitschrift für experimental und angewandte Psychologie. Bd 1.

Bem, S. L. & Bem (1981). *Sex-Role Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Burman, D.D., Bitan, T. & Booth, J.R. (2008). Sex differences in neural processing of language among children. *Neuropsychologia*, 46(5), 1349-1362.

Cosgrove, K.P., Mazure, C.M. & Staley, J.K. (2007). Evolving Knowledge of Sex Differences in Brain Structure, Function, and Chemistry. *Biological Psychiatry*, 62(8), 847-855.

Eysenck, H.J. & Evans, D. (1998). *Know your child's IQ*. Penguin Books.

Hyde, J. S. (2005). The gender similarities hypothesis. *American Psychologist*, 60(6), 581-592.

Magon A. J. (2009). *Gender, the Brain and Education: Do Boys and Girls Learn Differently?* University of Victoria.

Zaidi, Z.F. (2010). Gender Differences in Human Brain: A Review. *The Open Anatomy Journal*, 2, 37-55.

14. SCOTLAND (UK)

Health and wellbeing: the responsibility of all

Suzanne Hargreaves (Suzanne.Hargreaves@educationscotland.gov.uk)
Education Scotland

Keywords: health and wellbeing, Curriculum for Excellence, Scotland

What did you do?

The 'Curriculum for Excellence' aims to achieve a transformation in education in Scotland by providing a coherent, more flexible and enriched curriculum from 3 to 18 years of age. It is firmly focused on the needs of the child and young person, and designed to enable them to develop the four capacities: successful learner, confident individual, effective contributor and responsible citizen. This forward looking curriculum provides Scotland's children and young people with the knowledge, skills and attributes necessary for life in the 21st century.

The curriculum includes the totality of experiences which are planned for children and young people throughout their education, wherever they are being educated. The development process has involved unparalleled engagement with teachers, practitioners, partners and learners. It is not about a 'big bang' change. It is about teachers and other professionals bringing about change and improvement, reinvigorating life in the classroom and continuing to maintain the reputation of the Scottish education system for giving our children the best start in life.

It has built upon the existing good practice across all sectors of Scottish education and takes account of research and international comparisons. It recognizes the professionalism of teachers and the importance in exercising the freedom and responsibility associated with broader guidance.

Curriculum for Excellence will offer better educational outcomes for all young people and, provide more choices and more chances for those young people who need them. This means: a focus on literacy, numeracy and health and wellbeing at every stage.

Learning in, through and about health and wellbeing promote confidence, independent thinking and positive attitudes and dispositions. Because of this, it is the responsibility of every practitioner who works with children and young people to contribute to learning and development in this area.

Why did you choose to do this?

The world has changed considerably in recent times, and it is essential that education not only keeps up with change but anticipates the future as far as possible. If Scotland's children and young people are to gain the knowledge, skills and attributes needed for life in the 21st century, we need a forward-looking, coherent curriculum that will inspire them to achieve at the highest levels.

The Scottish Government commissioned a report from the Organisation for Economic Co-operation and Development (OECD), entitled 'Quality and Equity of Schooling in Scotland (2007). The OECD praised Scotland for 'the breadth of vision and commitment to both high standards and social inclusiveness'. However, the report also identified some major challenges for Scottish education. There are still continuing issues of inequality. Children from poorer communities are more likely than others to underachieve. Therefore, Curriculum for Excellence aims to:

- Raise attainment and achievement;
- Close the gap;
- Prepare children and young people for their futures.

Who were the participants?

Everyone involved in the education of children and young people. Practitioners are the key to the successful implementation of Curriculum for Excellence. The quality of learning and teaching in every setting and the inspiration, challenge and enjoyment which can come from the practitioners enthusiasm and commitment will be critical to achieving our aspirations for learners.

What actually happened?

Below is the timeline of the changes which took place in the Scottish Education System from 2002-2014:

2002 – National Debate on Education. A consultation to determine what was working well and what needed to change in Scottish education.

2003 - Curriculum Review Group established by Scottish ministers to identify the key principles to be applied in the curriculum redesign for ages 3-18.

2004 - A Curriculum for Excellence was published in November providing explicit aims for education in Scotland.

2005 - Research was commissioned and practitioners drawn from different sectors of education from all over Scotland to review existing guidelines and research findings, and begin the process of developing simpler, prioritized curriculum guidelines.

2006 - Progress and Proposals published and Building the Curriculum series begun. These documents provided guidance on how different aspects of the curriculum contribute to the aims of Curriculum for Excellence.

2007 to 2008 - Draft experiences and outcomes were published. Teachers and other practitioners were encouraged to reflect on draft experiences and outcomes and feed their comments back through an extensive engagement process.

2008 – Analysis of feedback and responses was undertaken by the University of Glasgow and actions were identified to respond to issues raised. There was then a process of refinement, further development, consultation and quality assurance.

2009 - Publication of the new curriculum guidelines.

2009 – Schools planning for new curriculum.

August 2010 – All schools implementing the new curriculum.

May 2014 – New National exams in Senior Phase.

What were the results?

All schools in Scotland have now implemented Curriculum for Excellence, with health and wellbeing - as a responsibility of all - as key aspect of the curriculum. Health and Wellbeing is one of eight curriculum areas and has a number of entitlements for children and young people.

Learning in health and wellbeing ensures that children and young people develop the knowledge and understanding, skills, capabilities and attributes which they need for mental, emotional, social and physical wellbeing now, and in the future. Each establishment, working with partners, should take a holistic approach to promoting health and wellbeing, one that takes account of the stage of growth, development and maturity of each individual, and the social and community context.

From this, eleven over-arching statements provide expectations for learners below:

I can expect my learning environment to support me to:

- Develop my self-awareness, self-worth and respect for others;
- Meet challenges, manage change and build relationships;
- Experience personal achievement and build my resilience and confidence;
- Understand and develop my physical, mental and spiritual wellbeing and social skills;
- Understand how what I eat, how active I am and how decisions I make about my behaviour and relationships affect my physical and mental wellbeing;
- Participate in a wide range of activities which promote a healthy lifestyle;
- Understand that adults in my school community have a responsibility to look after me, listen to my concerns and involve others where necessary;
- Learn about where to find help and resources to inform choices;
- Assess and manage risk and understand the impact of risk-taking behaviour;
- Reflect on my strengths and skills to help me make informed choices when planning my next steps;
- Acknowledge diversity and understand that it is everyone's responsibility to challenge discrimination.

It is everyone's responsibility to ensure that children and young people develop their mental, emotional, social and physical wellbeing.

What difficulties were encountered and how were these overcome?

This curriculum model has moved from a prescriptive, centralized model to a framework that offers greater professional freedom and responsibility at local level. In Scotland, there are 32 local authorities that have a devolved responsibility for implementing a national curriculum framework. Each school determines how the curriculum experiences and outcomes are delivered at local level. This requires a very skilled, creative workforce to facilitate learning based on children and young people's needs. Teachers know their learners very well. However, there is still a need for greater consistency and equity across Scotland in educational experience for our young people.

A national and local programme of support has been in place since 2008. Therefore, Education Scotland (formerly Learning and Teaching Scotland) as the National Agency for Learning and Improvement has established the following national objectives:

1. Build a world-class curriculum for all learners in Scotland;
2. Promote high-quality professional learning and leadership amongst education practitioners;
3. Build the capacity of education providers to improve continuously their performance;
4. Provide independent evaluation of education provision;
5. Influence national policy through evidence-based advice;
6. Improve our organizational capacity and invest in our people.

Education Scotland has both Her Majesty's Inspectors (who also provide independent evaluations of education provision) and Development Officers who provide support to practitioners in high quality professional learning and leadership. Education Scotland works in partnership with other national agencies providing strategic guidance on all aspects of education as well as supporting practitioners to find solutions at local level.

Which aspects went particularly well?

Health and wellbeing, and those aspects which are the responsibility of all, was accepted as a new curriculum area. The curriculum is being implemented by three partner organisations: Education Scotland, the Scottish Qualifications Authority (SQA) and the Scottish Government. The curriculum phase of the Curriculum for Excellence Programme has now been implemented. The Programme will continue until 2016 when the implementation of the new qualifications, which are being developed by SQA, is completed.

A greater understanding of the entitlements under Health and wellbeing: responsibility of all, has shaped and changed practice in Scottish Education. The learner is at the centre of everything we do. The Children and Young People's (Scotland) Act 2014 has provided legislation around Children's Rights and ensured the Getting it Right for Every Child (GIRFEC) Policy is at the heart of Scottish Education.

How do you know how successful it was?

The Curriculum for Excellence has been accepted at all levels in Scotland. Broad acceptance of the values underpins the curriculum and the area of responsibility of Health and Wellbeing of all and it is embedded in Scottish Education. There is a small-scale research project underway in 2014 using questionnaires and sampling

to see where schools are with health and well-being. There was also a Curriculum Impact Report on Health and Well-being undertaken by the school Inspectorate in 2013 (Education Scotland, 2013).

The Act has quickened the pace of change. Practice is developing and progressing across Scotland through exemplification, networking and through the opportunities for professional learning.

What can we learn?

The implementation of a national programme based on consultation, research and recognition of the needs of children and young people in 21st century, requires all the key players to be at the table.

The opportunities and challenges in implementing a national programme is that not all practitioners are at the same starting point and, there are many demands to fulfil the entitlements from other areas of the curriculum, particularly numeracy and literacy. Therefore, practitioners are encouraged to take a holistic view of the curriculum and establish authentic connections across the learning process.

There needs to be a clear rationale for embedding health and wellbeing (as opposed to promoting) in the curriculum.

Using good examples of how schools are doing this and sharing practice can be a useful mechanism to change hearts and minds. Practitioners not only need to see the value and how it works, but they need to be able to contextualize it for their own school/learners.

Because of the nature of development and learning in health and wellbeing, including the potential for behavioural and cultural change, there needs to be an appreciation of long term ambitions. Many of the Health and wellbeing experiences and outcomes that are the responsibility of all, span over 12 years as part of the broad general education. They should be regularly revisited through a wide range of relevant and realistic learning experiences to ensure that every child and young person is progressing in his or her development and learning. There is no quick fix. Ideally, practitioners from across all sectors – Early Learning Child Centres, Primary Schools and Secondary Schools should have a shared vision and rationale for Health and wellbeing curriculum area, aged 3-18 in their associated schools groups at each local level. In that way, each child and young person can be consistently supported on their progressive learning journey

Links to references and further reading

Education Scotland. Health and wellbeing. <http://www.educationscotland.gov.uk/learningteachingandassessment/curriculumareas/healthandwellbeing/index.asp>

Education Scotland. Health and wellbeing: Assessing progress and achievement professional learning resource. <http://www.educationscotland.gov.uk/learningteachingandassessment/assessment/progressandachievement/professionallearningresource/curriculum/healthandwellbeing/hwbfood.asp>

Education Scotland (2013). Health and wellbeing: the responsibility of all 3-18. Livingston: Education Scotland. http://www.educationscotland.gov.uk/Images/HealthandWellbeing3to18_tcm4-814360.pdf

Education Scotland (2013). Health and wellbeing: the responsibility of all 3-18. Curriculum Impact Report. Summary of Key Strengths and Aspects for Development. http://www.educationscotland.gov.uk/Images/HealthandWellbeingSummary_tcm4-814619.pdf

Education Scotland. Health and wellbeing: the responsibility of all 3-18. Curriculum Impact Report. Summary of Key Strengths and Aspects for Development. http://www.educationscotland.gov.uk/Images/HealthandWellbeingSummary_tcm4-814619.pdf

Education Scotland. Role and status of Education Scotland. <http://www.educationscotland.gov.uk/about/remitandframework/role.asp>

Education Scotland. The curriculum in Scotland. <http://www.educationscotland.gov.uk/thecurriculum/>

Education Scotland. The curriculum in Scotland. <http://www.educationscotland.gov.uk/thecurriculum/>

Education Scotland. The curriculum in Scotland. <http://www.educationscotland.gov.uk/thecurriculum/>



15. SINGAPORE

Health Promotion Club: cultivating youth health ambassadors

Lee Yee Cheong-Lim (cheong-lim_lee_yee@hpb.gov.sg)

Kelly Leow (kelly_leow@hpb.gov.sg)

K Vijaya (k_vijaya@hpb.gov.sg)

Health Promotion Board Singapore

Keywords: peer-led advocacy, health education, student activity club

What did you do?

This project is an extension of current youth-led health advocacy efforts. Health Promotion Board (HPB) Singapore first efforts in youth health advocacy started in 2005 with the Youth Advolution for Health (YAH) programme targeting youth aged 17 to 25 years old. The YAH programme was led by a group of YAH Executive Committee members to promote youth advocacy. They organised seminars, street outreach as well as campus health activities reaching out to their peers. In addition, the committee members also administered a grant to help youth embark on peer-led health projects. Driven by the success of YAH, this peer-led strategy is extended to secondary schools targeting students aged 13 to 16 years old. It leverages the existing Co-Curricula Activity (CCA) structure in schools that supplements the academic curriculum. Students can choose a wide range of activities that complement their interest and these range from sports-related clubs, uniformed and non-uniformed groups.

In September 2012, the health promotion board piloted the first Health Promotion Club in Canberra Secondary School. Students took part in the Student Health Ambassador Workshop which lasts for 7 hours (1-day training) to increase awareness and cultivate basic knowledge about relevant youth health issues as well as to learn how to embark on simple health promoting activities in their schools. The school also organises other activities for these student health ambassadors. For example, they baked healthy cookies during the national Friendship Day and led the school in a workout routine. They also took part in various community health events to promote a healthy lifestyle.

Why did you choose to do this?

Peer advocacy is a widely adopted approach to promoting health among young people. Research shows that peer influence can start as early as the preschool years. Peer health education has a positive impact both on the educators as well as the recipients. This includes a better understanding of healthy eating, mental wellbeing, physical activity and tobacco- and alcohol control. This enables them to make better, informed choices, and to stimulate their peers to lead a healthier lifestyle.

Who were the participants?

The Student Health Ambassador Workshop is open to student leaders as well as students from health-related clubs in schools. This workshop is also made available to students who are currently active in school clubs such as the Uniformed Groups. An example of such a club is the St. John Ambulance Brigade, in which students get the opportunity to follow the workshop and receive a health proficiency badge.

What actually happened?

The Health Promotion Board consulted the Ministry of Education to share their preliminary plans for a health promotion club based in schools in 2012. Canberra Secondary School came on board to be the first school to pilot the programme. The school called the group 'Health Nexus'. This club was officially launched on 24 September 2012 by the Parliamentary Secretary of the Ministry of Health. In 2013, the Board continued its efforts to encourage other schools to join the programme. This programme was also extended to the first Uniformed Group, St John Ambulance Brigade, and the first group of cadets underwent the programme in March 2014.

What were the results?

To date, a total of 780 students have undergone the Student Health Ambassador Workshops, and a total of 23 projects were completed. Examples of such projects are to encourage physical activity in the school, to carry out mental health related activities that were conducted as pre-and-post exam activity and also poster/publications that encourage others to stop smoking. Encouraging feedback was also received from the students; most of them indicated that they are now more aware of the importance of a healthy lifestyle.

Below are some of the students' comments:

"I learned that there are no fixed ways in which we can spread the health awareness. It is actually all up to us, how we want to spread the awareness to get people to lead a healthy lifestyle and have a healthy diet. I think the most important thing is that as health ambassadors, we should lead by example. We ourselves should have a healthy diet and lead a healthy lifestyle, so through our everyday life, others can see the change in the way we live and eat and learn from us"

"I personally feel that the health ambassador programme benefited us greatly; we got to learn more about our roles and how to effectively promote healthy living in a more interesting way as a student health ambassador. Also, we learned more about mental health, healthy living and tobacco control which will benefit us greatly in the future incoming events. The most interesting part of this programme was when the programmers taught us on how to read the ingredient list and what to take note of when we want to have a healthier choice. We also had many hands on activities which were engaging and in a nutshell, we enjoyed ourselves thoroughly."

What difficulties were encountered and how were these overcome?

It is challenging to introduce a health promotion club in schools, because health is not necessary appealing to youth. Introducing a new club in school also means that additional resources are required (e.g. staff, funding, meeting room, etc.). Since most schools already have existing health-related groups, e.g., green club, sports champions, service learning clubs, they may not see the need to have another similar club.

To overcome these challenges, we provided funding support for students embarking on health projects via the YAH Grant. Instead of going against the tide, we welcome schools with existing health-related clubs to take on our training workshop so that more students can benefit from the programme. In addition, we are working with Uniform Groups to further extend the reach.

Which aspects went particularly well?

The partnership collaboration was a very encouraging working relationship. It demonstrates the alignment of shared health agenda between St. John Ambulance Brigade and Health Promotion Board. The working relationship demonstrates the complementing efforts of both organisations in promoting peer advocacy in health promotion.

How do you know how successful it was?

Since the launch of the Club in September 2012, the members of the club have implemented several health promotion activities in and outside the school. Although the club was just piloted in 2013, more than five schools have already indicated interest to initiate such clubs in their schools. Many more schools are also receptive to the concept of training students as health ambassadors which is the first step towards building a Health Promotion Club.

We have seen a growing demand and positive feedback for the Student Health Ambassador Programme since it started in 2012. Nonetheless, there are still many areas that we would need to improve on. Future plans include creating sharing platforms for schools and how to continue engaging the students when they leave school.

What can we learn?

A structured Health Promotion Club in a school can enhance the impact of youth health advocacy. The formation of such a club also requires strong partnership and support from schools.

Empowering existing clubs instead of creating new ones seems to be a more feasible option, and to be able to engage this group of health ambassadors effectively, the clubs should remain fun, interesting and enjoyable for students to participate.

16. SINGAPORE

CHERISH Junior Award: health promoting pre-schools in Singapore

Lee Yee Cheong-Lim (cheong-lim_lee_yee@hpb.gov.sg)

K Vijaya (vijaya_k@hpb.gov.sg)

Health Promotion Board Singapore

Keywords: holistic approach, health promotion framework, pre-schools, award

What did you do?

The CHERISH (CHampioning Efforts Resulting in Improved School Health) Junior Award in Singapore is modelled after the Health Promoting School concept of the World Health Organization. The Award framework incorporates the six components of WHO Western Pacific Regional Office's Health Promoting School Framework: healthy school policy, physical environment, social environment, community links, action competence for healthy living and healthcare and promotion services. A pilot project was first carried out in 2009 with 15 pre-schools attaining the Award status in 2010. Next, the Award was made available to all pre-schools for a two years Award cycle. Participating pre-schools were given consultation and resources to support their implementation of this holistic health promoting school framework. A range of health programmes were also available for pre-schools to take on as part of the whole school approach. These pre-schools have access to a staff member in Health Promotion Board for any further assistance necessary for the Award. In addition to programmes for students, there are also programmes for the wellbeing of teachers and parents. Funding in the form of Grant on a co-funding basis is given to pre-schools who want to organise specific programmes. All participating schools needed to submit a report on their health promotion efforts. This was followed up with a validation visit and interview to determine their Award status. In 2012, a total of 94 pre-schools participated and all of them achieved the Award status.

Why did you choose to do this?

Encouraging young people to develop healthy habits can prevent many chronic lifestyle diseases in later years. The earlier health habits are introduced, the more

likely they are to persist; therefore, there is a need to start introducing health promotion concepts and activities to pre-school children. The CHERISH Junior Award was piloted in 2009 in 15 pre-schools (nine child care centres and six kindergartens) to encourage a holistic and comprehensive whole school approach towards health promotion. A pilot project was carried out to fine tune the Award structure.

Who were the participants?

The participants of the Award are all pre-schools in Singapore. Currently there are about 1 500 pre-schools (1 000 child care centres and 500 kindergartens) in Singapore. All pre-schools are private schools. Students in these pre-schools are aged from 2 years old to 6 years old in child care centres and 3 years old to 6 years old in kindergartens. All educators and non-teaching staff, parents (care givers) and community members around the pre-schools are also participants of the Awards.

What actually happened?

At the CHERISH Award Ceremony 2010, the names of the first fifteen CHERISH Junior Award pre-schools were published to share and invite all pre-schools to embark on the journey to build a health promoting pre-school. CHERISH Junior criteria brochures were sent to all pre-schools. The brochure included a guide to Award participation as well as the six whole school criteria in a checklist format. Forms of interest were submitted by pre-schools who intended to participate. Capacity building briefing sessions were conducted for these pre-schools. These sessions were attended by principals and teachers. During the two-year Award cycle, pre-schools could apply for the grant to organise relevant health promotion programmes in support of the Award. At the beginning of 2012, all participating pre-schools submitted their completed reports for evaluation. Health Promotion Board staff conducted the evaluation in two phases: report development and validation. A validation interview was performed during a school visit. These school visits were essential for documentation verification as well as confirmation of school efforts.

What were the results?

Through the process of the consultations, the pre-schools developed a more enhanced health promoting system within their schools and their community.

These pre-schools provide healthier food options to their children and staff within school hours as well as at special events and on school trips. They also ensure that the children have plenty of exercise during school hours. They have also worked to include lesson plans and activities on all health topics (i.e. nutrition, physical activity, hygiene, intolerance prevention, mental wellness and safety) within the curriculum such that the children have exposure to knowledge on good health habits before they graduate pre-school.

What difficulties were encountered and how were these overcome?

Pre-schools in Singapore are private schools; therefore there are limited resources from the government to support these schools. They are also smaller in scale with student populations ranging from about 30 to 300 and teacher populations ranging from less than 5 to 30 per school. Hence, health promotion may not be the top priority of these schools. Childcare centres provide day care through a fixed curriculum whereas kindergartens usually spend 3-4 hours focusing on education. Therefore, it is difficult to standardize a framework for these diverse settings. This is primarily through the healthy eating and physical activity guidelines. Due to the limited resources and support, these schools may not be able to focus on health promotion. To overcome this issue, it is crucial to ensure participation and implementation of the Award is hassle free and easy to follow. Generally, many pre-schools in Singapore have a basic foundation of health promotion efforts. Collaborating on the current pre-school efforts and building on them has motivated the pre-schools to participate in the Award. As pre-schools are private schools, there is a tendency for them to close when they couldn't meet the bottom line; at the same time, new pre-schools are constantly opening. To keep track, Health Promotion Board worked with relevant Ministries for latest update on pre-schools list so that all pre-schools will be included in the Award.

Which aspects went particularly well?

A couple of positive factors have contributed to the rapid increase in participation rate. Firstly, besides building up on awareness, capacity building support is crucial for acceptance of the Award. Next, with the limited resources in the pre-schools, a checklist is used for the reporting format. In addition, during consultation sessions with them, explanations and clarifications are provided so that pre-schools are able to complete the checklist. It is also not necessary for schools to submit supporting documents, such as photo's, brochures for parents, lesson plans with their reports. The simplified process has encouraged the participation in the Award.

How do you know how successful it was?

The six fold increase in participation rate from 15 to 95 pre-schools is an indication of their acceptance of the Award. All participating pre-schools are also able to meet the minimal standard of the Award. This provides evidence that these pre-schools are health promoting pre-schools, meeting all six Award criteria. Following the 2010 Award cycle, in the current 2012/2013 cycle, about 200 pre-schools have indicated interest to participate in the Award.

What can we learn?

The following points can be learned from this project:

- It is important to build up healthy habits from an early age;
- Health promoting school concepts need to be customized for different school levels for easy implementation;
- A checklist and simple reporting format is suitable for pre-schools to follow;
- It is important to work with larger pre-schools as these may be more supportive of health promotion since they have more resources;
- Regular follow up and monitoring of pre-schools are necessary to provide constant support in their health promotion efforts;
- CHERISH Junior Award criteria should be reviewed constantly so that these criteria remain relevant and current for pre-schools;
- Feedbacks of pre-schools is also important and should be included in the review process.

Links to references and further reading

Lee, A., Cheng, F.F., Fung Y. & St Leger, L. (2006). Can Health Promoting Schools contribute to the better health and wellbeing of young people? The Hong Kong experience. *Journal Epidemiol Community Health*, 60(6),530-536.

Lee, A., Cheng, F.F., Fung Y., St Leger, L. & Hong Kong Healthy Schools Team (2007). The status of health-promoting schools in Hong Kong and implications for further development. *Health Promotion International*, 22(4), 316-326.

17. WALES (UK)

Results based accountability for health promoting schools

Mary Macdonald (mary.macdonald@wales.nhs.uk)

Public Health Wales

Keywords: health outcomes, accountability, measurements

What did you do?

The Welsh Network of Healthy Schools (WNHSS) needed a standardised reporting mechanism that both the education and health sector could understand. Results Based Accountability (RBA) was chosen as a disciplined way of embedding outcome based decision making into delivery and reporting for multi faceted schemes such as healthy schools. Local and national outcomes measures were needed that both the education and health sector could assess and improve their capacity to promote health through schools. The RBA process starts with the health outcomes you want for children; for example, children are hydrated. It then works backwards to identify a measurable indicator to identify the health outcome for example children drinking water throughout the day. This has a performance measure to see how well you have done, for example how many children are drinking enough water to stay hydrated. This process allows us to focus on how student's lives improve rather than just whether they get a service or a service that is efficient. The process has two types of accountability - population accountability which can be classed as all children in Wales or all children in a local region or even in a school and performance accountability which measures health benefits for students. Population outcome measures to which the healthy school schemes contribute to, were mapped across the seven health action areas of the National Quality Award document. These are:

- Food and fitness – Children eat well and are active;
- Substance misuse - Children avoid harm caused by substance misuse;
- Mental and emotional health and wellbeing - Children enjoy good mental health and emotional wellbeing;
- Personal development and relationships - Children enjoy healthy personal development and have good relationships;

- Hygiene - Children enjoy good personal hygiene;
- Environment - Children enjoy a clean and sustainable environment;
- Safety - Children are safe

The following set of performance measures were mapped against the population outcomes.

Theme 1 – Food & Fitness

On a normal day, do you eat at least 5 pieces of fruit and vegetables?

On a normal day, do you drink enough water to stop you being thirsty?

On a normal day do you do a total of at least 60 minutes moderate to vigorous physical exercise (this can include walking to school, physical education, playground games, dance or sports clubs)?

Theme 2 – Mental & Emotional Health & Wellbeing

Do you feel happy when you are at school?

Do you feel welcome and that you belong at school?

If you have a problem at school do you feel that you have someone to talk to?

Theme 3 – Personal development & relationships

Do you feel you are treated with respect by friends and family?

In a normal week, do you take part in leisure or sporting activities outside of school with friends?

Do you feel you are treated with respect by other people at school (this includes staff and other pupils)?

Have you been taught about the importance of safe-relationships and/or safe-touch?

Theme 4 – Substance use & misuse

Have you smoked a cigarette or other tobacco product in the last month?

Have you drunk any alcoholic drink in the last month?

Have you used a drug in the last month (except as directed by a medical professional such as a doctor or nurse)?

Theme 5 – Environment

Do you think your school is a clean and pleasant place to be in?

Do you help create a sustainable environment at home/outside of school (Including recycling, allotments etc.) ?

Do you participate in sustainable travel? (including walking, cycling to school, car share etc.) ?

Theme 6 – Safety

Do you feel safe at school?

Do you know how to set your privacy settings on-line or using social media?

Have you been sunburnt at any time in the last 12 months?

Have you ever been taught First Aid at school or elsewhere (e.g. a club)?

Theme 7 – Hygiene

Do you brush your teeth at least twice a day?

Do you normally wash your hands regularly (e.g. after using the toilet)?

Do you think the toilets at school are normally in an acceptable and usable condition?

Why did you choose to do this?

The requirement to focus on outcomes in the planning, delivery and evaluation of the Welsh Network of Healthy School Schemes heralds a shift away from the setting of output targets and reliance on process measures that have traditionally been used to monitor performance and 'success'. A careful distinction between 'outcomes' and 'process indicators' is important, because measuring 'success' on the basis of outputs alone can be misleading. It is entirely possible for schools to deliver services that meet a wide range of process targets, including health policies, healthy environments and high student participation levels, yet still not succeed in improving health outcomes.

Any measurements of effectiveness of health promotion in schools need to be sensitive to the local education authority's methods of assessment. If the method of measuring effectiveness of school health promotion can be closely linked to the methods and tools the local education authority understand, then the chance of the work in health promotion being sustainable and supported should be greatly increased. Increasing healthy school coordinators are being asked to prove what difference healthy schools are making against health outcomes.

Who were the participants?

A working group worked over six months to plan, test, pilot and finalise the student questionnaire. The group included an external performance management consultant, representation from Welsh Government, Public Health Wales, and healthy schools coordinators from both education and health.

What actually happened?

A questionnaire based on the population and performance outcomes measures was developed with a results section added to the existing national database to allow for data to be recorded for each school to give whole school student outcome results. This involved working with the external host of the national database. A training day was held for all healthy school practitioners to allow for greater understanding of how to input and extract data. Guidance for schools was developed to explain the new data collection questions, how to use them and why they were needed.

What were the results?

The student outcome results help demonstrate how the Welsh Network of Healthy School Schemes contribute to the health and well-being outcomes of school children. The results can be fed into graphs on a school level to show class or year distinctions. It has been found to link in with numeracy and literacy. On a school level the school and health staff can identify strengths and weaknesses and areas to focus on. We now have school level data and complimentary student health outcome level data for schools.

What difficulties were encountered and how were these overcome?

The diverse and wide ranging interaction that healthy school schemes have with school populations, the wider community, partners and agencies makes it extremely difficult to demonstrate the impact and contribution the schemes have on direct health outcomes. It is easier to measure how much we have done and how well but it proved extremely difficult to measure if anyone was better off. Where there was insufficient evidence for a direct health impact outcome, an assumption from research evidence had to be made. In terms of consequences for the time frame of the development of the outcomes, identifying existing data was less time consuming, but didn't cover all aspects of the programme. This meant that new data had to be developed and collected with the database having to be updated and amended. The new data had to be collated and will ultimately mean someone has to collect it which adds to the burden on coordinators and support staff.

Which aspects went particularly well?

Healthy school schemes are complicated and multifaceted which has made it difficult to know if the settings approach it utilizes, is making a difference. By using common sense measures as defined in the RBA process we can be honest with ourselves about whether we are making progress. The common language that both the education and health sector recognize, has managed to link the medical model of mortality and morbidity measures with the health promoting aspects of happy socially resilient students having higher educational achievements.

How do you know how successful it was?

Schools have welcomed the student data outcome results as they can be used in reporting and planning.

Local education and health sectors have welcomed the results as the student and school level data can be combined to show regional trends.

Results can demonstrate how healthy schools are contributing to local and national health priorities. In today's fiscal focus on delivering health with less money we will know how successful it is by continued funding and support from the partnerships involved.

What can we learn?

Time needs to be taken with identifying the questions you want to ask to demonstrate the health outcomes you want. It would be a mistake to think that results based accountability would provide evidence on the effectiveness of the healthy school approach on its own. By looking at population outcomes and performance outcome the results will hopefully show that a balance of universal and targeted approaches can result in increased healthy behaviour and less risk taking behaviour. This is a work in progress and hopefully as more schools use the questionnaires and populate the database we will have more lessons to learn. Reporting should become easier and showing how population and performance levels fit together will indicate the success of the process.

18. WALES (UK)

Assessing schools as health promoting by the National Quality Award

Sue Bowker (sue.bowker@wales.gsi.gov.uk)

Welsh Government, Wales

Mary Macdonald (mary.macdonald@wales.nhs.uk)

Public Health Wales

Keywords: assessment, accreditation, equity, indicators, quality

What did you do?

The Welsh Network of Healthy School Schemes (WNHSS) has been running in Wales since 1999. Schools have been provided with clear criteria, plus guidance and support from local healthy school coordinators. Schools set objectives for each of the first 3 years, and are assessed locally against these objectives (phases 1-3). They are then assessed locally every 2 years (phases 4 and 5).

As schools moved through the phases it became clear that some sort of end point was needed and so the National Quality Award (a Welsh Government award) was introduced in 2009. This has clear and well-defined indicators for 4 aspects of school practice – Leadership and Communication, Curriculum, Ethos and Environment, and Family and Community Involvement – for seven aspects of health (Mental and emotional health and wellbeing; Food and fitness; Personal development and relationships; Substance use and misuse; Environment; Safety; and Hygiene). In addition there are specific criteria for the development of the school as a health promoting workplace; and minimum standards for food in schools, linked to Appetite for Life – the Welsh Government programme for food in schools; for hygiene, linked to the publication Teach Germs a Lesson, and for grounds to be smoke-free. Recently a requirement has been introduced for schools to include e-cigarettes in their school smoking policy.

Assessment was originally undertaken by a small team of independent assessors appointed by Welsh Government Public Health Wales, the national public health agency, has now taken over the management of the Welsh Network and the National Quality Award (NQA). A small independent company now manages the assessments.

Why did you choose to do this?

We introduced the national quality award to provide initial quality assurance with local coordinators supporting schools in their locality. Alignment to the national criteria, and an assessment of the work of local schemes in supporting schools gave initial quality assurance regarding consistency of approach across Wales. As the work progressed, and schools were involved for longer periods, it was felt necessary to ensure excellence within individual schools, and equity and comparability of achievement across Wales. The National Quality Award provided this assurance.

Who were the participants?

All local healthy school coordinators in Wales contributed to the development of the NQA indicators, but the detailed work was taken forward by a small national working group, comprising the national coordinator and two local coordinators. This group undertook trial visits to three schools who were identified as demonstrating excellent practice by their supporting coordinator.

The process was then refined, and was used firstly by independent NQA assessors appointed by Welsh Government, and now by the independent company appointed to manage the assessments. Regular discussions with assessors inform improvements to the assessment process.

What actually happened?

Schools apply for independent assessment for the NQA after nine years involvement. They assemble portfolios of evidence covering all criteria for each health topic. An assessor is appointed; then visit dates are confirmed, covering two consecutive half days. The first afternoon is used to look at the portfolios. The second day includes a presentation from a student group, prepared by them, on 'What have you done to make this school a healthy school?' They are asked to cover as many health topics as possible within this presentation. This is followed by a student-led tour of school; and an opportunity to speak separately to the head teacher and/or other appropriate member of the management team; the in-school healthy school coordinator; various staff members, governors, parents, and other people/agencies as appropriate. The assessor also sees to breakfast and break-time provision, and has a normal school lunch with the students.

Short feedback is given at the end of the visit, and then a detailed report is written by the assessor. This report is quality assured before being sent to the national coordinator in Welsh Government, with a recommendation as to whether or not

the school should be awarded the NQA. The assessor's report and decision letter is sent from the national coordinator in Welsh Government.

What were the results

Schools have embraced the National Quality Award and see it as something they want to achieve. As of 30th April 2014, fifty schools have achieved the NQA and others are due to be assessed during the current school year. This assessment contributes to assurance of equity in provision, delivery and achievement in healthy school work across Wales.

What difficulties were encountered and how were these overcome?

The visit needs to be as concise as possible, but giving the assessor sufficient time to make an accurate judgment. Some assessors feel that they need to do more work in advance of the visit and ask to see school policies in advance.

We initially asked for the written report to be no more than 6-8 pages long; with an additional page of feedback to students, and a page of feedback to the local coordinator who has supported the work in the school. Assessors see so much good practice that it is often difficult to limit their report to this requirement.

Assessors receive regular training, and the new company managing the assessments has changed the format of the report slightly so that assessors have more detailed guidance on what to include. It also creates opportunities to share good practice between assessors and local healthy school coordinators.

Initially some schools came forward for assessment who were not ready, and so the award had to be deferred. Local healthy school coordinators have been offered the opportunity to accompany assessment visits, and are now better aware of the standards required.

Welsh Government has set targets for the percentage of schools who should achieve the award – 10% of maintained schools by March 2015. This target has to be balanced against the desire to only assess schools who are ready to achieve the award.

Which aspects went particularly well?

The assessment process is thorough. Assessors are able to make a sound judgment of the work in the school and their success in embedding health in the life of the school. Emphasizing the views of students via the presentation and school tour gives a real picture of what is happening.

Schools generally report the visits to be a positive experience and are delighted when they are awarded the NQA. The NQA award plaque is usually presented to the school at a celebration event to which a range of people can be invited; thus providing another opportunity to demonstrate the embedding of health in the culture of the school.

How do you know how successful it was?

Fifty schools have been awarded the NQA by May 2014, and a number of others have asked for assessments. The introduction of the NQA has provided a new focus for schools as there are now clear requirements of schools to build on the self-identified priorities of their earlier work.

Local healthy school coordinators also report that their expectations of schools have increased over the years as health becomes more embedded in the culture of schools in Wales.

What can we learn?

The Welsh NQA criteria and assessment provide a way of defining exactly what a health promoting school looks like. The NQA demonstrates the application of theory to practice by taking a theoretical model and identifying specific approaches for change. The whole school approach is achieved by considering all of the criteria together, and schools awarded the NQA really do 'Think Health'.

There is some flexibility in the approach so although all schools meet the criteria, there will be some differences in what they actually do. Even though schools are awarded the NQA, there is always more that can be done - and schools continue to identify new opportunities because good health is the cornerstone of their thinking.

The NQA approach has now been successfully used with pre-school settings, and criteria for Higher and Further Education settings have also been developed.

Links to references and further reading

Welsh Network of Healthy School Schemes National Quality Award. <http://wales.gov.uk/topics/health/improvement/index/quality/?lang=en>

Welsh assembly government (2006). *Teach Germs a Lesson! Infection Control Guidance for Primary and Secondary Schools*. Cardiff: Welsh Assembly Government. <http://wales.gov.uk/topics/health/protection/communicabledisease/publications/teachgerms/?lang=en>





CHAPTER 4

EVIDENCE FOR EFFECTIVE
ACTION ON HEALTH PROMOTING
SCHOOLS: BACKGROUND PAPER
OF SHE FACTSHEET ON EVIDENCE

CHAPTER 4

EVIDENCE FOR EFFECTIVE ACTION ON HEALTH PROMOTING SCHOOLS: BACKGROUND PAPER OF SHE FACTSHEET ON EVIDENCE

Ian Young, Lawry St Leger, Goof Buijs

1. INTRODUCTION

This chapter is the background paper of the SHE Factsheet 2: 'School health promotion: evidence for effective action'. It provides an overview of the evidence of health promotion in schools, with almost 90 scientific references to support the case for the Schools for Health in Europe (SHE) network. The chapter builds on the document: 'Promoting Health in Schools: From evidence to Action' (2010), by Ian Young and Lawry St Leger for the International Union for Health Promotion and Education (IUHPE).

Although this chapter focuses on school health promotion, this focus requires a wide-angle lens because this concept has great breadth and is inter-sectoral in its scope and ramifications. Health promotion in a school setting is a broad concept which includes health education and is viewed as any activity undertaken to improve and/or protect the health and well-being of all school users. It includes provision and activities relating to: health promoting school policies, the school's physical and social environment, the curriculum, family and community links, and health services.

In the SHE network a 'health promoting school' is defined as 'a school that implements a structured and systematic plan for the health, well-being and the development of social capital of all pupils and of teaching and non-teaching staff. This is characterized as a whole school approach (or 'whole of school approach') and in the different European countries other terms are used such as 'healthy schools', 'good and healthy schools', but they all have a similar intention.

SHE core values

On the European level, the following core values are shared and these values underpin the health promoting school approach:

- Equity. Equal access for all to education and health;
- Sustainability. Health, education and development are linked. Activities and programmes are implemented in a systematic way over a prolonged period;
- Inclusion. Diversity is celebrated. Schools are communities of learning, where all feel trusted and respected;
- Empowerment. All members of the school community are actively involved;
- Democracy. Health promoting schools are based on democratic values.

SHE pillars

On the European level, the following pillars are shared that underpin the health promoting school approach:

- Whole school approach to health. Combine health education in the classroom with development of school policies, the school environment, life competencies and involving the whole school community;
- Participation. A sense of ownership by student, staff and parents;
- School quality. Health promoting schools create better teaching and learning processes and outcomes. Healthy pupils learn better, healthy staff work better;
- Evidence. Development of new approaches and practices based on existing and emerging research;
- School and community. Schools are seen as active agents for community development.

This chapter reflects the above core values and pillars and explores the evidence on the part they play in effective school health promotion. It also explains *why* health promotion in schools is important. As the SHE network uses as an evidence-based approach to developing effective school health policies, it summarises the growing body of evidence related to this vital work.

2. A GLOBAL CONTEXT- A EUROPEAN INITIATIVE

There are various important initiatives at global and European level which provide a context for the work on health promoting schools in the SHE network.

First of all, the United Nations Millennium development goals² set school education as a clear priority. The second goal relates to basic education for every girl and boy by 2015. Advances have been made since the targets were set in 2000, but some 60 million children are still out of school, 32 million of them girls and 28 million of them in conflict zones.

The World Health Organization (WHO) Commission on the Social Determinants of Health³ published its report in 2013. The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.

The report calls on the WHO and all governments to lead global action on the social determinants of health with the aim of achieving health equity. The report emphasises the wide range of action required and it refers to the importance of making schools healthy places for children and young people.

The European Union (EU) and the WHO Regional Office for Europe fully acknowledge that health is determined, to a large extent, by factors outside the health sector and all EU policies are required by an EU treaty⁴ to follow a 'Health in all Policies' approach. It is recognised that education is one of the key settings for the promotion of health which provides a context for health promoting school development in the European region. However, health promoting schools are not simply a way of improving the health of young people, as education and health are inextricably linked in many ways. This document will show that health promotion can also assist schools to meet their targets in educational attainment and to meet their social aims.

The SHE network started operating in 1992 as a network of five national pilot projects of health promoting schools. In the 21st century there is more global sharing of research and activities with networks such as the International Schools Health Network (ISHN)⁵ and organisations such as ASCD⁶ supporting a whole school approach and a 'whole child initiative' internationally. In addition there are related networks in Europe and globally, for example in community schools, school connectedness, sustainable schools and eco-schools which share many of the SHE principles and core values of the health promoting school approach. What all these initiatives have in common is their commitment to improve the health and well-being of all our young people and at the same time to make schools a better place to learn and work.

3. LINKING EDUCATION AND HEALTH PROMOTION

Before reviewing the evidence of what works in school health promotion, it is important to clarify the conceptual scope of health promoting schools and to show how this links with a progressive view of education.

‘Health promotion in a school setting’ could be defined as any activity undertaken to improve and/or protect the health of all the school community. ‘Health education’ in a school is a communication activity and involves learning and teaching pertaining to knowledge, beliefs, attitudes, values, skills and competencies. Health education is often focused on particular health topics, such as tobacco use, alcohol use, healthy eating, hygiene and mental health; or it may involve reflecting on our health in a more holistic way. Both health promotion and modern concepts of education share a participative approach.

Health promotion in a school community involves the following:

- A participatory and action-oriented approach to health education in the school curriculum;
- Bearing in mind that pupils have their own concept of health and well-being;
- Developing healthy school policies which promote health and well-being;
- Developing a healthy physical and social school environment. The physical environment includes the buildings, grounds and school surroundings. For example, creating a healthy physical environment may include making the school grounds more conducive to recreation and physical activity. The social environment relates to the quality of the relationships between school community members, e.g. between pupils and school staff;
- Developing life competencies. This is accomplished through the formal and informal curriculum and activities to support skills development and capacity building related to health, well-being and academic achievement;
- Making effective links with home and the community. These are links between the school community and the pupil’s families and the school community and key groups and individuals in the surrounding community;
- Making efficient use of health services. Health services in the school context are local or regional school-based or school-linked services that are responsible for the direct health care and health promotion of pupils;
- Recognising that the school offers opportunities for workplace health promotion and should consider the health of all school users.

The concept of health promotion is often more familiar to those working in the health sector compared with the education sector. This is partly because the term had its origins in WHO documents in the health sector, but also because professionals in the education sector have a broad concept of the term curriculum and would describe several or all of the above components of a health promoting school as being part of the extended or whole curriculum of the school. Therefore, many in the education sector do not make this distinction between health education and health promotion in the same way as in the health sector. This is not necessarily a problem, but requires mutual understanding and respect for respective conceptual frameworks and associated professional language when working in partnership. A collaborative approach is essential if school health is to progress and there are indications that it is now being addressed in many parts of the world. The use of the terms such as 'school connectedness', 'democratic schools', 'sustainable schools', a 'whole school approach' and a 'whole child approach', are more common in the education sector. As stated earlier, these are examples of initiatives or approaches which are related conceptually to health promoting schools. The evidence in this background document will draw on their literature as well as studies in the area of health promotion.

A more traditional approach to health education in schools focuses on individual health topics, such as healthy eating, smoking, physical activity and mental health. This is not only reflected today in some of the initiatives in schools but is also reflected in the perceptions of outside funders for research or curriculum initiatives on, for example, obesity or substance misuse. However, the health topics are not separate in the lives of young people or in their health-related and risk-taking behaviours. For example, teenage sexual activity can be linked to alcohol and drug use and many mental health states of young people are good predictors of high risk behaviours in other topic areas. In a topic-based approach, health may be viewed at the level of the individual and their relationship to the topic being explored, when in fact the social environment may be more powerful in determining behaviour. For example, research on teenage pregnancy or on topics such as obesity suggest that social class and other social factors have a large influence as well as individual decision-making.⁷ While it can be argued that the act of separating mental health as a discrete topic could be helpful to increase its profile, it also holds inherent risks that the mental and emotional aspects which are integral to all health issues may be neglected in other topics.

While a topic approach in school health education can play an important role in the promotion of health in schools, there are a growing number of health topic programmes and initiatives that are taking account of a whole school approach. A recent development looks at the transfer of learning across different topics in health education. The term 'transfer' refers to a process in which knowledge and skills learned in one context (e.g., a particular health behaviour domain) are applied to another context (e.g., a different health behaviour domain).⁸ This is based on the assumption that the knowledge and skills relevant to various domains share common factors. A recent research study in the Netherlands concluded that transfer is possible. This involved a specially designed transfer-oriented programme about smoking behaviours and safe sex, to achieve effects on behaviour and determinants not only in the domains of smoking and safe sex, but also in the closely related domain of alcohol and the less closely related domain of healthy nutrition.

The reality is that school curricula reflect a topic and/or subject approach, and much of the research on health in schools also focuses on this and it is important to acknowledge that reality. However even at the level of individual subjects such as language, mathematics, physical education etcetera it is evident that there are closer links between the subjects than many curriculum designers may have believed in the past. A systematic review of physical activity and academic performance⁹ concluded that participation in physical activity is positively related to performance in other subjects studied by children. Modern neurophysiology reveals that physical exercise and cognition use similar biological processes and circuits in the brain. The brain areas which were previously thought to be reserved for memory functions, are also important for motor processes and similarly the cerebellum is now known to be important in cognitive development as well as its importance in motor function and physical activity.^{10, 11}

All of the above is an argument for ensuring that if a health topic is being explored, that possible connections are made to other topics in the classroom and in the wider life of the school. In a child-centred or student-centred approach we should be facilitating the young people to consider the issues in the reality of the social and environmental contexts of their lives. There are uniting themes that can cut across topics and subjects at a theoretical and pedagogical level. The life skills and competencies, which young people should develop in the context of health promoting schools, can be important and common to all topics. For example, the skill of being assertive or the ability to critically reflect on their role as individuals in a complex society with conflicting values about health. In the SHE network

the concept of action competence¹² has been central to the approach in many countries. This refers to children's and young people's ability to use their knowledge and skills to initiate change in their own lives as well as in the living conditions related to their health and wellbeing.

A health promoting school approach can provide holistic support for innovative work in the curriculum. For example, a school curriculum on healthy eating can be supported by the students playing an active part in all related aspects of food provision in the school.

This could include features¹³ such as:

- Ensuring healthy school food is available at breakfast or lunch time;
- Developing a policy on snack provision;
- Ensuring fresh water is available in classrooms;
- Encouraging students to develop skills in food cultivation, preparation and purchase with the involvement of parents and local food organisations;
- Making provision for related physical activity initiatives, such as safe and active routes to schools or secure bicycle storage;
- Making links with associated issues, such as mental and emotional health, the cultural role of food, and the role of the media in marketing food.

To conclude this section it is clear that education and health are inter-related and can be viewed as synergistic in their relationship. The evidence suggests that:

- Healthy young people are more likely to learn more effectively;
- Health promotion can help schools to meet their social aims and to improve educational attainment;
- Young people that attend school have a better chance of good health;
- Young people that feel good about their school and who are connected to school and significant adults are less likely to undertake high risk behaviours and are likely to have better learning outcomes.

The research literature reveals many interactions between education and health and although all the causal links are not yet fully understood¹⁴ we have sufficient evidence to justify action. Many government education ministries have not yet fully invested in what they may perceive as a health-related initiative and yet it is now clear there are potentially huge benefits in educational terms for the education sector to consider.

Simovska¹⁵ suggests that health promotion in schools would do well to reconnect with the traditions of educational theory and to develop innovative forms of educational practices and interventions in the face of complex societal challenges concerning health and health promotion. She believes that this will help to bridge the gap between the health and education sectors. The next section acknowledges this and draws on evidence from a variety of approaches including public health science, education and the social sciences.

4. THE RESEARCH ON THE EFFECTIVENESS OF HEALTH PROMOTION IN SCHOOLS

The summary on the research on the effectiveness on health promotion in schools is presented in this chapter in three sections:

- Research on effectiveness on contextual matters;
- Research on effectiveness on health topics in the school setting;
- Research on effectiveness on whole school approaches.

4A. THE RESEARCH ON EFFECTIVENESS: CONTEXTUAL MATTERS

The following section summarises the research on effectiveness on the contextual matters which are most influential in relation to change and innovation in schools, including the introduction and establishment of health promoting schools.

Equity

Top of this list of important contextual matters for health promoting schools are inequalities in health and the impact these have on peoples' lives. As stated in the introduction, the WHO report on the social determinants of health emphasizes the wide range of actions required to tackle inequalities in health and it refers to the importance of making schools healthy places for children. A 2014 report on Early Years, Family and Education from a WHO regional office for Europe task group,¹⁶ states that investments in children, particularly those designed to reduce the effects of inequalities, can be effective. It also calls on politicians at the highest level to support such initiatives. It requests that at a service level, head-teachers and senior officers in social and health care need to be visibly committed to reducing health inequalities if changes are to be implemented. The report also comments on the evidence that such multi-sectoral approaches will not be effective unless they are sustainable and given sufficient time. They are not time-limited projects or interventions.

Teacher education and training

The level and quality of the preparation of teachers to implement health promotion in schools is identified as a crucial factor.¹⁷ Both the importance of initial and pre-service teacher education are central for school health promotion. The evidence is clear that teacher attitudes and knowledge are key factors in their intention to work with health-related content. Teacher education plays an important role in shaping teachers' identities as educators of the whole person as well as subject experts, which is of great consequence for the effectiveness of the whole-school approach to health promotion. The section reporting on effectiveness of health promotion and specific health topics reinforces the importance of the skills of the teacher in relation to the effectiveness of specific initiatives.

Understanding the culture of schools

Schools are complex social structures and this has to be recognised as being as important as the individual teachers' beliefs, attitudes and skills, referred to above, when innovations are planned. The research indicates that there are powerful factors at the level of the whole school which can inhibit or promote change.¹⁸ Many traditional models in public health assume that if one defines an issue, test 'interventions' and then build this into professional practice, then success will result. However the last stage of building and disseminating new ways of working in other settings is very complex and there are many barriers to overcome. The fact that the growing evidence in the literature of health promoting school approaches being effective is not matched by the uptake of this approach in education systems across Europe and other parts of the world, is due in part to a failure to recognise fully the complexity of bringing about such changes to the practice of schools. There is growing understanding in the health promotion, social science and education literature of this complexity.^{19,20,21}

The research suggests that teachers must feel ownership of any major change in their way of working in the system. Fullan²² uses the term 'moral purpose', defined as making a difference in the lives of students, as a critical motivator in addressing and sustaining complex reform. However the evidence suggests that to sustain changes this will not be sufficient if it only exists at the level of the individual teachers. There is also a pre-requisite for leadership and ownership at the school level as well as political and practical support at regional and national level.^{23,24}

This type of capacity building and national support have been features of initiatives where success has been achieved in establishing health promoting schools in the mainstream of education systems. There is also evidence that for major changes to be successful, they require a reduction in the gap between high and low performers at all levels including individual teachers in classrooms and managers in schools.

If teachers need to be deeply motivated in terms of improving the lives of their students, then the teachers' self-esteem, health and well-being are central to this change process. A report²⁵ on baseline findings of a school-based intervention in Finland and Estonia on schools aiming to improve the occupational wellbeing of school staff, suggested that the wellbeing of the school staff is related to professional competence and to opportunities for its continuous development as a part of working life. This is broadly supportive of the health promoting schools role in improving and protecting the health and well-being of all school users and it has relevance to the effectiveness of teachers not only in terms of health promotion but in their roles in improving educational attainment of their students. This concept is explored further below.

Pupil/student participation and ownership

In addition to the evidence on the nature of educational change, there is a growing body of evidence, particularly from the 'school connectedness' movement in the USA, that the more connected young people feel to their school then the greater their emotional well-being and educational attainment.²⁶ The challenge for policy makers and school managers is putting into place policy and strategies which can increase the connectedness students feel towards their school. Health promoting schools fit well with the connectedness movement as they aim to improve not only the physical environment of the schools but also the social and emotional climate within the school and the links with parents and carers of the young people. A report from The American Center for Disease Control (CDC) entitled 'Fostering School Connectedness' offered an extensive set of practical suggestions to school principals or head teachers. Under the heading of 'Creating trusting and caring relationships that promote open communication among administrators, teachers, staff, students, families, and communities', the following are selected as examples of the advice given based on current research evidence relating to effective practice:

- Allow students and parents to use the school facility outside of school hours for recreation or health promotion programmes;
- Provide opportunities for students of all levels to interact, develop friendships, and engage in teamwork;

- Involve students in parent-teacher conferences, curriculum selection committees, and school health teams;
- Communicate expectations, values, and norms that support positive health and academic behaviours to the entire school community.

A systematic literature review of evidence for the effects of student participation in school health promotion²⁷ revealed that with respect to the students' acquisition of skills, competencies, knowledge, as well as health-related effects, there is promising evidence that the participation of students is beneficial for their lives in general. A specific case study²⁸ on student participation concluded that, if given sufficient guidance, children can act as agents of health-promoting changes. The main goal of participation was construed as the development of students' capacities to actualize their ideas and the pupils were positive about their involvement.

Linking health promotion to the core tasks of schools

A special edition of the journal Health Education¹⁵ which was devoted exclusively to health promotion in schools concluded that the evidence of practice to date suggested that health promotion in schools needs to be linked with the core task of the school – education, and to the values inherent in education, such as inclusion, democracy, participation and influence, critical literacy and action competence in relation to health. At a government policy level the evidence suggests that effective partnerships between the education and health sectors is the way forward, but the demands of this approach and the extent to which it challenges existing professional demarcations, has to be acknowledged. In Germany the health promoting school movement has been linked to the school core tasks relating to learning, through the concept of 'the good and healthy school'.²⁹ However most countries have had only limited success in developing effective inter-ministerial or inter-sectoral partnerships which have led to health promoting schools being established in the fabric of a country's education system. There is evidence on the nature of the barriers to successful partnerships between education and health and there are examples of countries where these barriers have been successfully negotiated. It is evident that partnership-working requires shared clarification of basic concepts and terminology, assumptions, values and methods. This process needs to be nurtured and maintained if partnerships are to be sustained.

In countries such as Poland³⁰, Portugal and Scotland²³, health promoting schools are in what has been described as an establishment phase³¹ which is characterised

by policy statements at national level in the health sector feeding into the education sector. In addition policy statements on specific school initiatives relating to health are increasingly placed in the context of health promoting schools, for example curriculum policy statements and food provision policy in schools. This phase is also characterised by the education sector gradually taking on greater responsibility for health promotion in schools and integrating health promotion into mainstream education. At the level of individual schools, health promotion becomes institutionalised, that is it becomes integral to the schools core values and normal ways of working.

Involving parents and carers in school health promotion

The evidence is clear that parental and family influences are the main influence on young peoples' lives. A review of the impact of parental involvement on children's education confirmed the long held view that the impact of parental involvement is large. It concluded³² that what parents do with their children at home through the age range, is much more significant than any other factor open to educational influence. A recent review reported strong evidence that school-based interventions with the involvement of family or community and multi-component interventions can increase physical activity in adolescents.³³ In addition, there is clear evidence that the active involvement of parents in practical nutrition education had positive effects on the outcomes of such work.³⁴

Promoting staff health and well-being

Schools are viewed as settings for health promotion of the students, staff and all school users. The term 'health promotion setting' was introduced in 1986 in the Ottawa Charter and is defined as the place or social context in which people engage in daily activities in which environmental, organisational, and personal factors interact to affect health and well-being. Schools are one such setting³⁵ both as a workplace and an educational domain, and within that setting the health of the staff is paramount as well as the students. A review of the evidence on work-based health promotion programmes³⁶ suggested that successful programmes have the following features:

- Take account of employee needs;
- Have senior management support/buy-in;
- Are aligned with the schools overall goals;
- Allow teachers to lead on-going change and initiatives;
- Build in assessment of the outcomes of the programme.

There is evidence that investing in teachers' and other professionals' personal development can have positive effects on their self-esteem, attendance rates and their own view of their professional work.³⁷ There is also evidence that young people learn better from teachers they respect. Teachers who provide emotional support, reward competence, and promote self-esteem can decrease the vulnerability of high-risk students in response to stressful life events.³⁸ It is clear that investing in teachers' health can have benefits for individual staff and, through them, on their students.

4B. THE RESEARCH ON EFFECTIVENESS: HEALTH TOPICS

Most of the evidence on the effectiveness of health education and health promotion in schools is from work on specific health topics. This reflects the reality that it is easier for researchers to get access to undertake this approach rather than to research the complex variables inherent in a whole-school approach. However there is much in this topic-related evidence that supports programmes which could be classed as a health promoting school or a whole school / whole child approach.

Mental health

Mental health initiatives in schools seek to build the social, emotional and spiritual wellbeing of students to enable them to achieve education and health goals and to interact with their peers, teachers, family and community in ways that are respectful and just.

The evidence shows successful mental health initiatives:

- Are well designed and grounded in tested theory and practice; ^{39,40,41,}
- Link the school, home and community; ^{42,43,44,41,}
- Address the school environment; ^{41, 42,43,}
- Combine a consistency in behavioural change goals through connecting students, teachers, family and community; ^{44,45,42,43,}
- Foster respectful and supportive relationships among students, teachers and parents; ^{41,43,}
- Use interactive learning and teaching approaches; ^{40,44}
- Help to increase the connections for each student. ^{43,46,47,48}
- Help to develop improvements in achievement tests, social and emotional skills and decreases in classroom misbehaviour, anxiety and depression. In addition there are significant benefits in relation to reductions in aggressive behaviour, school drop-out rates and in building a sense of community in the school. ^{49,50,51,52,53,54,55,56,57}

Substance use and misuse

The evidence shows that school-based initiatives on tobacco, alcohol and drugs are more likely to be effective if the programmes are interactive rather than teacher-centred; focus on life skills, e.g. refusal skills, assertiveness; take a whole school approach; link with the family and local community; and address the improvement of connections for students.

The evidence also indicates that:

- Effect sizes (at best) are modest, but compare well with results of clinical trials,^{58,59}
- Some successful gains may include a short term delay in use and or short term reduction in usage,^{58, 59}
- Positive effects are more likely to occur influencing tobacco, than alcohol or illicit drugs,^{59,60,61,}
- Specific programmes are more likely to have no effects or harmful effects on alcohol use;⁶⁰
- Teaching staff, who understand mental health issues, achieve higher health and educational outcomes for the students.^{62,63}

Hygiene

The scientific evidence about the health benefits for children and adolescents of hand washing, drinking clean water and using proper sewage systems is very strong. However there are limited quality published outcomes of the initiatives taken by schools to promote healthy hygiene.

The evidence indicates that in developing countries well designed and implemented initiatives, which have included a whole school approach involving the physical environment, links with the health sector, and which have suitable policies and curriculum, have increased school attendance rates and reduced worm infestations (mainly through the provision of worm eliminating drugs), but that it is more difficult to sustain the students' hygiene-related behaviours outside the school.^{64, 65,66}

Sexual health and relationships education

Sexual health and relationships education programmes, when conducted by trained and empathic educators:

- Increase sexual knowledge; may increase safe sex practices;^{67,68,69,70}
- May delay the time of first sexual intercourse resulting in young people reporting on better communication in their relationships;^{70,71}
- Do not promote earlier or increased sexual activity in young people;^{67,71,72}
- May explicitly promote and build school connectedness for students and this is strongly associated with reduced sexual activity in adolescence.^{42,46,67}

Healthy eating

Healthy eating programmes that follow evidence-based teaching practices and a whole school approach have been shown to regularly increase student knowledge about food and diet. However, changes in student eating behaviours have been less successful. Girls tend to benefit more than boys and some quality initiatives have reported a modest increase in vegetable consumption.

Those initiatives which did achieve some biological and behavioural changes had some or all of the following features:

- A whole school approach;^{73,74}
- Links with parents and food preparation at home;^{75,76}
- Consistency between the taught curriculum and food availability in the school;⁷⁵
- Programme longevity (over three years) and regular inputs by staff and students in planning and implementing activities;^{76,77}
- On-going capacity building opportunities for staff.^{71,77}

Physical activity

The evidence suggests that:

- Physical activity initiatives in schools are most effective if they adopt a comprehensive approach; e.g. the development of skills, establishing and maintaining suitable physical environments and resources, upholding supportive policies to enable all students to participate;^{50,71,78,79}
- Daily physical activity at school improves pupils' motivation and has no negative effects on cognitive development even though less time may be available for cognitive tasks;^{75,79,80,81}
- There is a strong direct correlation between being physically active at school and undertaking physical activity in adulthood;^{75,82}
- Students gain more benefit from physical activity if they have opportunities to be active at regular times during the school day;⁷⁵

- If students collaborate with school staff in deciding the type of physical activity to be undertaken, which could include other activities not viewed as sport, such as dance, then they will be more committed to participation;^{82,83}
- A Cochrane review of physical activity in schools concluded that positive effects were observed for the duration of physical activity, television viewing, VO2 max (a measure of oxygen uptake), and blood cholesterol as a result of school physical activity. However the level of physical activity available in most schools usually had little effect on total physical activity rates, systolic and diastolic blood pressure, body mass index (BMI), and pulse rate;⁸⁴
- The results from biological measures, e.g. BMI, blood pressure measures and measures of oxygen use, have limitations and may be ineffective in assessing physical fitness levels of growing pupils and other outcomes of school-based physical activity;⁸⁴
- Programmes that cater for student diversity in areas such as ethnicity, physical ability, gender and age are more effective in terms of student participation and engagement.^{71,75}
- There is a mixed picture in terms of the amount of physical education being offered to young people in Europe. Many countries have a statutory minimum provision but policy and practice do not always match up.⁸⁵

4C. THE RESEARCH ON EFFECTIVENESS: WHOLE SCHOOL APPROACHES

A conclusion of a major review⁷¹ of health promoting school approaches suggested that, on the basis of evidence, mental health should be a feature of all school health promotion initiatives and that effective mental-health promotion is more likely to reduce substance use and improve other aspects of health-related lifestyles that may be driven by emotional distress. It also concluded that programmes on healthy eating and physical activity are among the most effective health promotion programmes. The review pointed out the shortage of experimental studies relating to a health promoting schools approach but said there was evidence that multifactorial approaches, contribute to effectiveness. The overall conclusion was that there is evidence to show that sustained, multifactorial, whole school approaches in schools are the most effective.

The outcomes from the health topic research needs to be viewed in the context of whole school approaches as there is complementary research supporting this broader approach taken by SHE and others working in this domain. Examples

come from studies that have investigated or reviewed whole school approaches. For example, there is evidence that schools vary in their smoking, drinking, and drug use, and those that have an ethos which engages pupils are more health effective than those which do not. This variability in the extent to which schools approximate to a health promoting school model is itself evidence of the potential of the health promoting school.⁸⁶

In addition there is now a wealth of good case studies of whole school or health promoting school approaches which record the successes and failures of whole school initiatives internationally.^{19,23,28,29} It is important that as well as evidence-based practice we acknowledge practice-based evidence. These cases not only provide a wealth of information about outcomes in relation to methods, but also inform on the process of change, innovation, sustainability and the political context of successful innovation.

The fact that there is growing evidence of a health promoting school approach being effective is not matched by the uptake of this approach in education systems across Europe and other parts of the world. Many traditional models in public health assume that if you define the issue, develop and test 'interventions,' build this into professional practice then success will result. However the last stage of building and disseminating new ways of working in other settings is very complex and there are many barriers to overcome. There is growing understanding in the social science and education literature of this complexity.^{18,20,21}

A recent paper of the International Union for Health Promotion and Education⁸⁷ summarises what has been shown to work well and are prominent features of effective schools. These are:

- Developing and maintaining a democratic and participatory school community;
- Developing partnerships between the policy makers of the education and health sectors;
- Ensuring students and parents feel they have some sense of ownership in the life of the school;
- Implementing a diversity of learning and teaching strategies;
- Providing adequate time for class-based activities, organisation and coordination, and out of class activities;
- Exploring health issues within the context of the students' lives and community;

- Utilising strategies that adopt a whole school approach rather than primarily a classroom learning approach;
- Providing ongoing capacity-building opportunities for teachers and associated staff;
- Creating an excellent social environment which fosters open and honest relationships within the school community;
- Ensuring a consistency of approach across the school and between the school, home and wider community;
- Developing both a sense of direction in the goals of the school and clear and unambiguous leadership and administrative support;
- Providing resources that complement the fundamental role of the teacher and which are of a sound theoretical and accurate factual base;
- Creating a climate where there are high expectations of students in their social interactions and educational attainments.

The research literature demonstrates substantial congruence between three fields:

- The research and evaluation literature on school health;
- What constitutes successful learning and teaching in schools;
- What makes schools effective in achieving educational, health and social outcomes.

The close relationship between these fields is a product of the interaction of school management and educational practices. When a supportive educational climate is created this will motivate the young people to be effective learners and as part of this process it will encourage them to reflect on their own health and well-being at a personal and societal level.

5. CONCLUSIONS

Ten years ago the evidence on the effectiveness of health promoting school approaches existed but was not well established. However the evidence published in the 21st century on both educational and health outcomes is very positive and there is a need for policy makers to act now to establish and further develop health promoting schools in Europe given the strength of the evidence. As well as evidence relating to outcomes we also have evidence on the factors that influence the process of change in schools and educational systems. It is clear from the countries that have achieved a degree of success in the establishment of health promoting schools within a national educational system that this takes time and requires the following:

- Political will;
- Partnership working and mutual understanding between the education and health sectors to build trust and capacity;
- Leadership and support from school managers;
- Building of ownership of a health-related initiative within the education system;
- Recognition of local/regional initiatives within the national development programme;
- Training of teachers.

The UN commission on the social determinants of health has provided a clear view of what requires to be done in terms of the schools role in reducing inequalities. It is clear that schools alone will not solve the problem of these inequities if there is not a supporting context, and the report suggests that a multi-strand and multi-level approach is required. The report of the Commission acknowledges the importance of schools but makes it clear that other strands such as pre-school, social services, parental support, clinical health, transport access and safe stimulating environments are also needed. The evidence suggests that it may also be necessary to target vulnerable children within schools and other settings if a reduction in health inequities is to be achieved.

It is clear that from published case studies that any investment in children, particularly those specifically designed to reduce the effect of inequality, takes time to show positive results. It is critical that policy-makers support such investments where they are based on good evidence. The results may not show within an electoral cycle and if there is to be progress in reducing health inequalities, head teachers and senior officers in social care and the health sector need to show commitment and work together to make a difference.

Finally, it is evident that there is a need to support research which use a wide range of methods.^{88, 89} There is also a need for more systems research which attempts to assess the synergistic interactions which can occur in the complex ecology of a school. This is necessary to make sure that professional practice in this vital work continues to be based on the best possible evidence. We also need to ensure that good practice is also seen as part of the evidence and that where there have been successes, we acknowledge this and disseminate it through good case studies. We have made great progress in the last thirty years in Europe in understanding health promotion in schools, but the goal of embedding good practice in education systems is only partially achieved and we now know that schools have the potential to play an important part in the task of reducing inequalities in health in Europe and across the world.

References chapter 4

- 1 Schools for Health in Europe. (2013). *SHE Factsheet 1. State of the art: health promoting schools in Europe*. CBO, Utrecht. www.schoolsforhealth.eu
- 2 United Nations Development Programme (2000). *The Millennium Development Goals*. www.undp.org
- 3 World Health Organisation (2013). *Report on the Social Determinants of Health*. Geneva. http://www.who.int/social_determinants/en/
- 4 Finnish EU Presidency (2006). *Health in All Policies: Prospects and potentials*. Finnish Ministry of Health and Social Affairs/European Observatory on Health Systems and Policies. http://www.euro.who.int/__data/assets/pdf_file/0003/109146/E89260.pdf
- 5 The International School Health Network (2013). <http://www.internationalschoolhealth.org>
- 6 ASCD (2013). www.ascd.org
- 7 Spencer, N. Ed. (2001). The social patterning of teenage pregnancy *J Epidemiol. Community Health* 55:5, London
- 8 Peters, L. (2012). *Searching for Similarities: Transfer-oriented learning in health education at secondary schools*. University of Amsterdam Singh, A et al (2012). Physical Activity and performance at school: A systematic review of the literature including a Methodological Quality Assessment. *Arch Pediatr Adolesc Med.* 66: 49 – 54.
- 9 Cotman, C.W. and Berchtold N.C. (2002). Exercise: a behavioural intervention to enhance brain health and plasticity. *Trends in Neurosciences*. Vol 25:6.
- 10 Akshoomoff, N. and Courchesne, E. (1992). A new role for the cerebellum in cognitive operations. *Behavioral Neuroscience*, 106 (5), 731-738.
- 11 Jensen, B. B. (1995). Concepts and models in democratic health education. In Jensen, B. B. (ed.). *Research in Environmental and Health Education*. Research Centre for Environmental and Health Education. The Royal Danish School of Education.
- 12 St Leger, L., Young, I., Blanchard, C. and Perry, M, (2010) *Promoting Health in Schools: from Evidence to Action*, IUHPE, Paris.
- 13 Cutler, D.M. and Lleras-Muney, A. (2006). *Education and health: evaluating theories and evidence*. Cambridge, MA, NBER (Working Paper No. 12352).
- 14 Simovska, V., (2012). What do health-promoting schools promote? Processes and outcomes in school health promotion. *Health Education*, 112 (20) 84 – 88.
- 15 WHO regional office for Europe (2014). *Report on Early Years, Family and Education: task group on the social determinants of Health*.
- 16 Jourdain, D., Stirling, P., Mannix McNamara, P. and Pommier, J. (2012). The influence of professional factors in determining primary school teachers' commitment to health promotion. *Health Promotion International*, 26(3) 302-10.
- 17 Fullan, M. (1997). The complexity of the change process. In M. Fullan (Ed.), *The challenge of school change*. Illinois: Skylight Training and Publishing.

- 18 Samdal, O and Rowling, L. (2012). *The Implementation of Health Promoting Schools*. Routledge.
- 19 Wandersman, A., Duffy, J., Flaspohler, P., Noonan, R., Lubell, K., Stillman, L., Blachman, M, Dunville, R., & Saul J. (2008). The Interactive Systems Framework for Dissemination and Implementation. *American Journal of Community Psychology*, 41. 171 -181.
- 20 Emshoff, J. (2008). Researchers, practitioners, and funders: Using the framework to get us on the same page. *American Journal of Community Psychology*, 41, 393-403.
- 21 Fullan, M. (2002). *Moral Purpose Writ Large*. The School Administrator Web Edition
- 22 Young, I and Lee, A. (2009). Scotland: sustaining the development of health promoting schools: The experience of Scotland in the European context. In Vince Whitman, C. and Aldinger, C. (eds) *Case Studies in Global School Health Promotion*. Springer, New York.
- 23 Inchley, J., Guggleberger, L. and Young, I. (2012) Germany and Scotland: Partnership and Networking in Samdal, O and Rowling, L. *The Implementation of Health Promoting Schools*. Routledge.
- 24 Saraanen, T. (2012). "Processes and outcomes in school health promotion: engaging with the evidence discourse", *Health Education*, 112: 3.
- 25 U.S. Centers for Disease Control and Prevention. (2011) *Fostering School Connectedness: improving student health and academic achievement*. http://www.cdc.gov/healthyYouth/AdolescentHealth/pdf/connectedness_administrators.pdf
- 26 Griebler, U., Rojatz, D., Simovska, V. and Forste R. (2012). *Evidence for the effects of student participation in designing, planning, implementing and evaluating school health promotion: A systematic literature review*. Ludwig Bolzman Institute, Working paper 12.
- 27 Simovska, V. (2012). Case Study of a Participatory Health-Promotion Intervention in School. *Democracy and Education*, 20 (1), 4.
- 28 Paulus, P. (2012). Germany and Scotland: Partnership and Networking in Samdal O and Rowling, L. *The Implementation of Health Promoting Schools*. Routledge.
- 29 Woynarowska, B and Sokolowska, M. (2009). Poland: The national Health Promoting School certificate In Vince Whitman, C. and Aldinger, C. (eds) *Case Studies in Global School Health Promotion*. Springer, New York.
- 30 Young, I. (Ed.) (2005). Health Promotion in Schools: A historical perspective. *Promotion and Education* xii, 3-4. IUHPE, Paris
- 31 Desforges, C. and Abouchaar, A. (2003). *The impact of parental involvement, parental support and family education on pupil achievements and adjustment: A literature review*. Department for Education and Skills, Research report RR433, London.

- 32 Van Sluijs, EMF., McMinn, AM., Griffin, SJ. (2007). Effectiveness of interventions to promote physical activity in children and adolescents: systematic review of controlled trials. *BMJ*, 335:703.
- 33 Perry, C. (1988) "Parent Involvement with children's health promotion: The Minnesota Home Team." *American Journal of Public Health*. 78:11156-11160.
- 34 Whitelaw, S., Baxendale, A., Bryce, C., Machardy, L., Young, I. & Witney, E. (2001) 'Settings' based health promotion: a review. *Health Promotion International*, 16:4 339-353.
- 35 Hill, D., Lucy, D., Tyers, C., & James, L., (2007) "What works at work? Review of evidence assessing the effectiveness of workplace interventions to prevent and manage common health problems", Institute for Employment studies for Health Work and Wellbeing Executive, 2007.
- 36 Monaghan, F., McCoy, M., Young, I. & Fraser, E. (1997) Time for Teachers: The design and evaluation of a personal development course for teachers. *Health Education Journal* 56, pp 64 –71.
- 37 Werner, E. (1990). "Protective Factors and Individual Resilience." In *Handbook of Early Childhood Intervention*, edited by S. Meisels and J. Shonkoff. New York: Cambridge University.
- 38 Masters, G. (2004). "Beyond political rhetoric: what makes a school good" *On Line Opinion – e Journal of Social and Political Debate*.
- 39 Muijs, D. and Reynolds, D. (2005). *Effective Teaching: Evidence and Practice* Paul Chapman Publishing. London.
- 40 Wells, J., Barlow, J. & Stewart- Brown, S. (2003). A systematic review of universal approaches to mental health promotion in schools. *Health Education Journal*, 103, 4, 197-220.
- 41 Patton, G. Bond, L., Carlin, J., Thomas, L., Butler, H., Glover, S., Catalano, R. & Bowes, G. (2006). Promoting social inclusion in schools: A group-randomized trial on student health risk behaviour and well-being. *American Journal of Public Health*, 96, 9, 1582-1587.
- 42 Browne, G., Gafni, A., Roberts, J., Byrne, C. & Majumdar, B. (2004). Effective/ efficient mental health programs for school age children: a synthesis of reviews. *Social Science and Medicine*, 58, 1367-1384.
- 43 Weare, K and Markham, W. (2005). "What do we know about promoting mental health through schools?" *Promotion and Education* 12; 3-4, 118-122.
- 44 Rowe, K. (2008). *Effective Teaching Practices* ACER, Melbourne.
- 45 Blum, R., McNeely, C. & Rinehart, P. (2002). *Improving the odds: The untapped power of schools to improve the health of teens*. Center for Adolescent Health and Development, University of Minnesota.
- 46 McNeely, C. Nonnemaker, J. and Blum, R. (2002). "Promoting School Connectedness: Evidence from the National Longitudinal Study of Adolescent Health" *J Sch Health* 72: 4 pp138-146.
- 47 Vilnius Resolution. 3rd European Conference on health promoting schools.

- (2009). 'Better Schools through Health', <http://www.schoolsforhealth.eu/>.
- 48 Greenburg, M., Weissberg, R., Zins, J., Fredericks, L., Resnik, H & Elias, M. (2003). "Enhancing school based prevention and youth development through coordinated social, emotional and academic learning". *American Psychologist* 58: 6-7, 466-474.
- 49 Wallin, J. (2003). "Improving School Effectiveness" *ABAC Journal* 23: 1, 51-72.
- 50 Green, J., Howes, F., Waters, E., Maher, E. and Oberklaid, F. (2005). Promoting the social and emotional health of primary school aged children: reviewing the evidence base for school-based interventions. *International Journal of Mental Health Promotion*, 7, 2, 30-36.
- 51 Shepherd J., et al. (2002). "Barriers to, and facilitation of, the health of young people: a systematic review of evidence on young peoples' views and on interventions in mental health, physical activity and healthy eating." *Volume 2 – Complete report – Evidence for Policy and Practice Information and Coordinating Centre*, London.
- 52 Barry, MM; Clarke, AM., Jenkins, R. & Patel, V. (2013). A systematic review of the effectiveness of mental health promotion interventions for young people in low and middle income countries. *BMC public health*, 13 (1). p. 835. ISSN 1471-2458.
- 53 Weare, K. and Nind, M. (2011). Mental health promotion and problem prevention in schools: What does the evidence say? *Health Promotion International, Special Issue 26*, 29-56.
- 54 Schaps, E., Battistich, V. & Solomon, D. (2004). Community in school as key to student growth: Findings from the Child Development Project. In Zins, J., Weissberg, R., Wang, M. & Walberg, H. (Eds.), *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press.
- 55 Durlak, J A., Weissberg, RP., Dymnicki A B., Taylor R D. & Schellinger K. (2011). The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions. *Child Development*; 82:474-501.
- 56 Wilson, SJ., Lipsey, MW. (2007). School-based interventions for aggressive and disruptive behaviour: update of a meta-analysis. *American Journal of Preventive Medicine*; 33: 130-143.
- 57 White, D. and Pitts, M. (1998). "Educating young people about drugs: a systematic review" *Addiction* 93: 10, 1475-1487.
- 58 McBride, N. (2003). A systematic Review of school drug education. *Health Education Research* 18:6 729-742.
- 59 Tobler, N. & Stratton, H. (1997). Effectiveness of school-based drug education programs: a meta analysis of the research. *Journal of Primary Prevention*, 18, 1, 71-128.
- 60 Thomas R., (2002). "School-based programmes for preventing smoking" *The Cochrane Database of Systematic reviews*. Issue 2, Article N° CD001293.

- 61 Bond, L., Patton, GC., Glover, S., Carlin, JB., Butler H., Thomas, L. (2004). The Gatehouse Project: can a multilevel school intervention affect emotional well-being and health risk behaviours? *J Epi Commun Health*. 58, 997–1003.
- 62 Victorian Health Promotion Foundation. (2000). *Mental Health Promotion Framework*. Vic. Health, Melbourne.
- 63 Luong, TV. (2003) De-worming school children and hygiene intervention. *International Journal of Environmental Health Research* 13, 153 –159.
- 64 Brian, A. and Haggard, S. (2003) *Hygiene Promotion: Evidence and Practice*. School of Hygiene and Tropical Medicine. London.
- 65 Kremer, M. and Edward, M. (2001) Worms: Education and Health Externalities in Kenya. Poverty Action Lab. Paper No.6. Coalition for Evidence Based Policy.
- 66 Kirby, D. (2002). The impact of schools and school programs upon adolescent sexual behaviour *Journal of Sex Research*, 39, 1, 27-33.
- 67 Young Song E., Pruitt, B., McNamara, J. & Colwell, B. (2000) "A meta-analysis Examining Effects of School Sexuality Education Programs on Adolescents Sexual Knowledge 1960-1997". *Journal of School Health*, 70:10 p 412 – 416.
- 68 Kirby, D. (1997) *No Easy Answers: Research Findings on Programs to Reduce Teen Pregnancy* The National Campaign to Prevent Teen Pregnancy. Washington, DC.
- 69 Silva, M. (2002). The effectiveness of school-based sex education programs in the promotion of abstinent behaviour: a meta-analysis. *Health Education Research*, 17, 4 471-481.
- 70 Stewart-Brown, S. (2006). What is the evidence on school health promotion in improving school health or preventing disease and specifically what is the effectiveness of the health promoting schools approach? Copenhagen: World Health Organization.
- 71 Henderson, M., Wight, D., Raab G, Abraham, C., Parkes, A., Scott, S., & Hart G. (2007). The impact of a theoretically based sex education programme (SHARE) delivered by teachers on NHS registered conceptions and terminations: final results of cluster randomised trial. *British Medical Journal* 2007; 334:133-135.
- 72 Gortmaker, S., Peterson, K., Weicha, J., Sobol, A., Dixit, S., Fox, M. & Laird, N. (1999). Reducing obesity via a school-based interdisciplinary intervention among youth: Planet Health. *Archives of Pediatric & Adolescent Medicine*, 153, 409-418.
- 73 Sahota, P., Rudolf, M., Dixey, R., Hill, A., Barth, J. & Cade, J. (2001). Randomised control trial of a primary school based intervention to reduce risk factors for obesity. *British Medical Journal*, 323, 1-5.
- 74 Lobstein, T. and Swinburn, B. (2007). "Health Promotion to Prevent Obesity: Evidence and Policy Needs" in McQueen, D. & Jones, C (eds.) *Global Perspectives on Health Promotion Effectiveness*. New York: Springer Science & Business Media.

- 75 Perry, C. (1988). "Parent Involvement with children's health promotion: The Minnesota Home Team." *American Journal of Public Health*. 78:11156-11160.
- 76 Lister-Sharp, D., Chapman, S., Stewart-Brown, S. & Sowden, A. (1999). Health Promoting Schools and Health Promotion in Schools: Two Systematic Reviews. *Health Technology Assessment*, 3, 1-207.
- 77 Campbell, C., Waters, E., O'Meara, S. & Summerbell, C. (2001). Interventions for preventing obesity in childhood. A systematic review. *Obesity Reviews*, 2, 149-147.
- 78 Timperio, A., Salmon, J. & Ball, K. (2004). Evidence-based strategies to promote physical activity among children, adolescents and young adults: review and update. *Journal of Science and Medicine in Sport*, 7, 1, 20-29.
- 79 Van Beurden, E., Barnett, L., Zask, A., Dietrich, U., Brooks, Land Beard, J. (2003). "Can we skill and activate children through primary school physical education lessons? – a collaborative health promotion intervention" *Preventive Medicine* 36: 493-501.
- 80 Pollatscheck, J.L., O'Hagan, F.J. (1989). An investigation of the psychophysical influences of a quality daily physical education programme. *Health Education Research* 4(3) 341-350.
- 81 Donovan, E. (2001). *PDHPE Literature Review – A report for the NSW Board of Studies*. University of Wollongong, Sydney.
- 82 Weiss, M. (2000). "Motivating kids in physical activity" *Research Digest – Presidents Council on Physical Fitness and Sports*. 3, 11, 1-8.
- 83 Dobbins, M., Husson, H., DeCorby, K. & LaRocca, R.L. (2013). School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18. *Cochrane Database of Systematic Reviews* 2013, Issue 2. Art. No.: CD007651. DOI: 10.1002/14651858.CD007651.pub2.
- 84 Hardman, K., & Marshall, J.J. (2008). *World-wide Survey II of School Physical Education. Final Report*. Berlin, International Committee on Sports Science and Physical Education (ICSSPE).
- 85 West, P., Sweeting, H. & Leyland, L. (2004). School effects on pupils' health behaviours: evidence in support of the health promoting school. *Research Papers in Education*, 19, 31, 261-291.
- 86 St Leger, L., Young, I & Perry, M. (2008). *Achieving Health Promoting Schools: Guidelines for Promoting Health in Schools*. IUHPE, Paris.
- 87 McQueen, D. V. & Jones, C. M. (2007). *Global Perspectives on Health Promotion Effectiveness*. New York: Springer Science & Business Media.
- 88 Barnekow, V., Buijs, G., Clift, C., Jensen, B.B., Paulus, P., Rivett, D. & Young, I. (2006). *Health Promoting Schools: A resource for developing indicators*. European Network of Health Promoting Schools.

EQUITY, EDUCATION AND HEALTH: LEARNING FROM PRACTICE



a **TNO** company



THE 4TH EUROPEAN CONFERENCE ON HEALTH PROMOTING SCHOOLS

Equity, Education and Health