

Chapter 5

Linking Health Education and Sustainability Education in Schools: Local Transformations of International Policy

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Abstract This chapter addresses the relationship between international and national policies regarding sustainability and health promotion which have the potential to affect school-based health education/promotion and education for sustainable development in Denmark. Based on policy mapping and analysis, the focus is on the transformation processes that occur during the transition from international policy frameworks to the national context. The chapter considers the consequences of these transformation processes for educational practices within schools in light of the current major reform of basic general education in Denmark with its aims of ensuring overall school improvement, increasing pupil wellbeing and improving academic outcomes. Analysis of international policy documents, as well as of research literature shows that school-based health education (HE) and education for sustainable development (ESD) share a number of features. These include a whole-school approach, cross-disciplinarity, participatory approaches, cultivating social imagination, and developing critical competences related to working with 'real life' health and sustainability issues. The discussion in this chapter focuses on the common tendency that when health and sustainability education in schools are framed in national action plans, certain critical educational aspects are lost by narrowing the concepts of health and sustainability to fit particular school subjects (e.g. physical education or science), and defining outcomes solely in terms of individual lifestyle factors. This neglects the importance of working with broader social values and the complexity of the interplay between individual and society in relation to both health and sustainability.

Keywords Health education • Education for sustainable development • Policy • Health-promoting schools

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5.1 Introduction

Health and sustainability have been identified among the major societal challenges of the twenty-first century, and the school is considered as a key arena for health education/promotion and education for sustainable development. Both fields are underpinned by high-level policy documents, charters, declarations and agreements between and within governments. For example, within sustainability discourses, climate change is an issue addressed with political urgency on a global level. Similarly, policy discourses on health, characterized by slogans such as “global burden of disease”, and “health in all policies”, are intense, pointing to escalating health problems such as obesity, mental health issues and a range of chronic conditions. Based on the assumptions that there can be no sustainable development without learning (Scott and Gough 2003) and no health promotion without health education (Green and Tones 2010), schools can be considered one of the key sites for working educationally with the promotion of health and sustainability. It is essential that schools incorporate both approaches if they are to respond to global and complex societal challenges and foster children’s competences to deal with these challenges in creative, socially responsible and productive ways.

Although research within the individual fields of health education/promotion and education for sustainable development in schools is well developed (e.g. Clift and Jensen 2005; Simovska 2012a, b; Firth and Smith 2013), and even sometimes combined in joint publications, pointing to the shared educational principles and values (Jensen et al. 2000; Reid et al. 2008), few attempts have been made to combine the two fields and thereby capitalize on the synergies. Davis and Cooke (2007) and Davis and colleagues (2010), for example, have argued in favour of integrating the Australian Health Promoting Schools and Sustainable Schools initiatives. Similarly, Dooris has written about combining the concepts of health promoting and sustainable universities (e.g. Dooris 2012), while Patrick and colleagues have discussed the interconnectedness between humans and the natural environment, and the core competences required if health promotion is to address the health challenges linked to climate change (Patrick et al. 2012). In this chapter we aim to contribute new layers to this debate by exploring the policy background framing both fields and discussing some of the transformations and their consequences related to health education/promotion and education for sustainable development practices in Danish primary and lower secondary schools.

5.2 Rationale for the Study

There are at least three reasons why it is important to place a spotlight on the policy background for educational practice related to the themes of health and sustainability: First, the common denominator for health and sustainability, as well as related school practices, is that they are value-laden and shaped by a number of policies at

global, national, regional and local levels. Second, research points to a persistent gap between, on the one hand, political aims and targets concerning health promotion and education for sustainable development and, on the other hand, the treatment of these topics in school pedagogical practice. This is true for the prescribed teaching and learning processes as well as for the everyday life or culture of the school (Stevenson 2007a; Jourdan 2011; Samdal and Rowling 2013; Nordin 2013). Third, both concepts can be considered to be “essentially contested” - that is socially constructed and open to diverse, often conflicting, interpretations. According to the criteria that Green and Tones (2010) propose, the concepts of health and sustainability can be seen as contested because:

- They are complex, ambiguous and value-laden;
- Their definitions are vague, their meaning depends on the sociocultural, historical and political contexts;
- Their different interpretations are mutually competitive, involving emotional reactions; and
- They hold a degree of authority and credibility.

These characteristics, naturally, pose certain common challenges for schools when it comes to determining the key pedagogical questions such as the aims, content, teaching strategies and desired outcomes of education for health and sustainability.

Against this background, we discuss the findings from the mapping and analysis of selected international and national policy documents, as well as other documents influencing the work with health education/promotion and education for sustainable development in primary and lower secondary education in Denmark. The focus is on identifying similarities and commonalities in the interpretations of the concepts of (promoting) health and sustainability within the policy documents, particularly in terms of the consequences these interpretations have for the educational aims, content, pedagogical strategies and expected outcomes at a national level.

5.3 Methodology

The overall method belongs to the genre of mapping and critical conceptual analysis of documents. We searched the websites of selected key international organisations within both fields for documents of relevance for school practices concerning health and sustainability. At international level the search was focused on international organizations, primarily UN, WHO and EU. Some documents published by the International Union for Health Promotion and Education (IUHPE) are also included as this network collaborates closely with WHO in the area of school-based health promotion and education. Also, the conference resolutions from the four European Conferences on Health Promoting Schools (Thessaloniki, Greece; Egmond, the Netherlands; Vilnius, Lithuania and Odense, Denmark) are included, as well as a Nordic document of relevance for education for sustainable development. The

mapping is focused on the period from the end of the 1980s, as this period marks the emergence of both fields within broader international discourse, following the publication of the Ottawa Charter (WHO 1986) for Health Promotion and the Brundtland Report (UN 1987), until 2013.

In Denmark, health education and education for sustainable development constitute mandatory but transversal themes to be integrated across the boundaries of subject and year group within primary and lower secondary education. National learning objectives have been drawn up for both themes and implemented either in subject-specific or more general curriculum guidelines. Therefore, the search at national level focused on policy and strategy documents, school curricula, national curriculum guidelines and inspiration teaching material published by the Danish Ministry of Education and the Ministry for Children and Young People, during the same period. Relevant documents published by the Danish Ministry of Health were also taken into consideration.

The search strategy included a general screening of publications on the websites of the above-mentioned international and national bodies, and a keyword-based search of the above-mentioned websites. The keywords used (in English and Danish) were: *sustainable development, education for sustainable development, sustainability, climate change, the environment and environmental education, health, health education, health promotion*.¹ To be included, documents had to meet one of the following criteria:

- The document is central in framing the fields of health promotion and sustainable development in general and is therefore relevant for school practices;
- The document explicitly mentions health promotion and/or sustainable development in relation to schools, either in the title or in a specific section.

5.3.1 Analytical Framework

The analysis is based on the premise that there are active processes of reinterpretation and “translation” or transformation of policy taking place, not only on the path from international to national level, but also along the trajectories to regional (i.e. municipality) and further to local (i.e. school) levels. The analytical approach is inspired by studies of educational exchange focusing on how supranational discourses are re-contextualized in local settings (Beech 2006; Moos 2009). This suggests a vertical perspective in the analysis, exploring how health education/promotion and education for sustainable development in schools are constituted and (re)interpreted at different levels. The basic premise is that societal problems and issues are not given but constructed in social processes embedded in a specific

¹ We also consulted two experts in the field, Jeppe Læssøe for the field of education for sustainable development and Monica Carlsson for health education and health promoting schools. Their contribution to the mapping is gratefully acknowledged.

socio-historical context. The identification of problems creates the framework for selecting what is relevant and what is not (Schön 1983). At the same time, as Rein and Schön point out, the very definition of a problem points towards certain solution strategies:

Problem setting is a judgment about the problematic situation – that is, a diagnosis that also contains the prescription of directions for actions (Rein and Schön 1981, p. 238).

This suggests that processes of negotiation in defining the issues at stake, as well as their solutions, are always present. The metaphor of “translation” indicates that something will be lost and something added in a dialectic process of negotiation, re-conceptualization and re-contextualization. In the words of Gherardi:

The metaphor of translation is a way to describe movements between different forms of knowledge and cultural practices, but also of technology and artefacts. It has both a geometric and semiotic meaning: Translation is both the movement of an entity in space and time and its translation from one context to another – as in translating from one language to another, with the necessary transformation of meaning that this always implies (Gherardi 2006, p. 62).

The analytical categories are based on the key educational questions concerning schools’ pedagogical practices: *what* is the content of the teaching (the concepts of health and sustainability); *how* should teaching be done (pedagogical strategies); and *why* are content and pedagogical strategies relevant and appropriate (values and purpose) (Schnack 2003; Biesta 2010). In addition, contextual factors are also taken into account; the context is interpreted as something *created* in the process rather than something that *is* (Gherardi 2006; Schön 1983). Thus, the analytical categories and related questions used in the document analysis include:

- *Aims*: How are the learning objectives related to health and sustainability named and framed?
- *Context*: Which local frames are created through the work with health promotion/education and education for sustainable development in schools, and what are the wider societal conditions in which these frames are established?
- *Pedagogical strategies*: Which pedagogical strategies and intervention initiatives are suggested with a view to promoting health and sustainable development?
- *Competences*: What are the expected outcomes, both in terms of general educational outcomes and health and sustainability related knowledge and skills?

The analysis builds on previous discussions within critical educational approaches to health promoting schools and education for sustainable development research, both in Denmark (e.g. Jensen and Simovska 2005; Carlsson et al. 2009; Læssøe et al. 2009; Breiting and Wickenberg 2010) and internationally (Jensen et al. 2000; Green and Tones 2010; Nutbeam 2008; Clift and Jensen 2005; Porter 2006; Reid et al. 2008; Scott and Gough 2003; Lotz-Sisitka 2007; Wals 2010; Simovska 2012c; Carlsson and Simovska 2012; Bonnett 2013). Within these perspectives, health and sustainability are interpreted as concepts that relate to both individual behaviour and factors affecting the individual’s lifestyle, including physical, social and cultural environment. Both health and sustainability are perceived as being characterized by

an uncertain and unstable body of knowledge which, from an educational perspective, demands specific approaches to teaching and learning, and point to the importance of working pedagogically with cross-disciplinarity, sociological imagination, critical reflection, and change of perspectives as epistemological principles (Stevenson 2007b). Further, the interaction between the individual on the one hand and the physical and social environments at local and global levels on the other is central within both fields (Kickbusch 1997). Schools are viewed as active players, employing the whole-school environment and local systems of meaning, as well as more general values of democracy, equity and social justice, in teaching and learning aimed at the development of pupils' competence related to both health and sustainability. In this way, schools can extend teaching beyond the classroom and also work with local communities.

5.4 Findings and Discussion

A number of policy documents have been identified in the mapping, and these are presented in chronological order in Table 5.1. The documents are categorized as relevant for: school-based education for sustainable development; health promotion/education at school; or, both areas. The international documents are presented first followed by the national documents.

Table 5.2 summarizes the main findings in the analytical categories illuminated with keywords. These findings serve as a basis for discussing the transformations from the international to the national frameworks. The remaining sections will present the analysis following the main analytical categories. For each analytical category, we first discuss the international and then the national discourses.

5.4.1 *Aims and Context*

5.4.1.1 **International Framework: Initiation of a Shared Value Basis and a Need for Social Change**

As shown in Table 5.1, two documents published in the mid-eighties are highly influential in shaping the fields of education for sustainable development and health promotion: The Brundtland report (UN 1987) and the Ottawa Charter (WHO 1986), respectively. Along with the UN Convention on the Rights of the Child (UN 1989), these documents signify a rupture in relation to the existing international frameworks and a basis (initiation) for subsequent developments within their respective fields. We intentionally use the term “rupture”, as suggested by Foucault (1969) to signal discontinuity: a fracturing of the linear, evolutionary process of history. It could be argued, in line with Porter (2006), Scott and Gough (2003), and Wickenberg (1999), that these two documents helped establish professional orientations and

Table 5.1 Chronological overview of international and national documents of relevance for school-based health education/promotion and education for sustainable development in Denmark

International publications

1980–1990	<p>Education for sustainable development Our Common Future 1987. The World Commission on Environment and Development, UN</p> <p>Health promotion The Ottawa Charter for Health Promotion, WHO 1986 Adelaide Recommendations on Healthy Public Policy, WHO 1988</p> <p>Common Convention on the Rights of the Child, UN 1989</p>
1990–2000	<p>Education for sustainable development Agenda 21, chapters 25 & 36 1992, Rio. United Nations Environmental Programme (UNEP)</p> <p>Health promotion Sundsvall Statement on Supportive Environments for Health, WHO 1991 The Salamanca Statement and Framework for Action. UNESCO 1994 Jakarta Declaration on Leading Health Promotion into the twenty-first century, WHO 1997 Conference resolution. The Health Promoting School – an investment in education, health and democracy, 1st Conference of the European Network of Health Promoting Schools, Thessaloniki-Halkidiki, Greece, 1–5 May WHO 1997 Health 21 – Health for All in the twenty-first century, WHO/European, 1998</p>
2000–2010	<p>Education for sustainable development Haga Declaration, Baltic 21, 2000. Baltic Sea States’ Declaration on Environment and Sustainable Development The UNECE Strategy for Education for Sustainable Development 2005 UN Decade 2005–2014 for Education for Sustainable Development, UNESCO The EU Sustainable Development Strategy, 2006 UNESCO Strategy for Action on Climate Change, 2008 Bonn Declaration, UNESCO, 2009 Learning from each other: the UNECE Strategy for ESD, UNECE, Geneva, 2009</p> <p>Health promotion Health Promotion: Bridging the Equity Gap, WHO 2000 The Egmond Agenda. A tool to help establish and develop health promotion in schools and related sectors across Europe. The 2nd European Conference on health Promoting Schools, Egmond aan Zee, the Netherlands, 25–27 September 2002/WHO 2002 The Bangkok Charter for Health Promotion in a Globalized World, WHO 2005 The Nairobi Call to Action, WHO 2009 Achieving health promoting schools: guidelines for promoting health in schools, IUHPE 2009 Better Schools through Health, the 3rd European Conference on health Promoting Schools The Vilnius Resolution 2009</p> <p>Common United Nations Millennium Declaration, UN 2000 Recommendation of the European Parliament and of the Council on key competences for lifelong learning, EU 2006 Improving competences for the twenty-first century: An Agenda for European Cooperation on Schools. EU, 2008 Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training. (“ET 2020”), 2009</p>

(continued)

Table 5.1 (continued)

International publications	
2010–	<p>Education for sustainable development</p> <p>Climate Change Education for Sustainable Development, UNESCO, 2010</p> <p>Education for Sustainable Development, Conclusions of the Council, EU, 2010</p> <p>Learning for the future – competences for education for sustainable development, UNECE, 2012</p> <p>Health promotion</p> <p>The new European Policy for Health – Health 2020 Vision: Vision, values, main directions and approaches, WHO/Europe 2011</p> <p>Early childhood education and care: providing all our children with the best start for the world of tomorrow. Conclusions of the Council, EU, 2011</p> <p>Facilitating Dialogue between the Health and Education Sectors to Advance School Health Promotion and Education, IUHPE, 2012</p> <p>Odense statement, the 4th European Conference on Health Promoting Schools, Equity, Education and Health, CBO 2013</p> <p>Common</p> <p>Council conclusions on the social dimension of education and training, EU, 2010</p> <p>A Resolution to Promote Health, Equity and Sustainable Development in Schools, IUHPE 2012</p>
National publications	
1990–2000	<p>Education for sustainable development</p> <p>‘A touch of green’ [‘Det grønne islæt’], foreword to the Danish Act on primary and lower secondary education, Danish Ministry of Education 1993</p> <p>Objectives and central areas of knowledge and proficiency [Formål og centrale kundskabs- & færdighedsområder], Danish Ministry of Education 1994. Biology, science and technology, social studies etc.</p> <p>Health promotion</p> <p>Health and sex education and family studies (Sundheds- og seksualundervisning og familiekundskab). Danish Ministry of Education 1994; 1999</p> <p>Common</p> <p>Students’ all-round development [Elevernes alsidige udvikling]. Danish Ministry of Education, 1994</p>
2000–2010	<p>Education for sustainable development</p> <p>Local Agenda 21, Danish Ministry of the Environment, 2000</p> <p>Common Objectives [Fælles Mål] 2009, Danish Ministry of Children and Education; history, social studies, home economics, biology, etc.</p> <p>Education for Sustainable Development – national strategy for the United Nations Decade 2005–2014. Danish Ministry of Education 2009</p> <p>Health promotion</p> <p>Healthy for Life: National health targets and public health strategies 2002–2010. [Sund hele livet, de nationale mål og strategier for folkesundheden 2002–10]. Danish Government 2002</p>

(continued)

Table 5.1 (continued)

National publications	
	Healthy food and physical activity in schools [Sund mad og fysisk aktivitet i skolen], Danish Ministry of Education 2004
	The government's programme for children's health [Regeringens indsats for børns sundhed]. Danish Ministry of Health 2007
	Inspiration for health education in primary and lower secondary education [Inspiration til folkeskolens sundhedsundervisning]. Danish Ministry of Education 2008
	Common
	Revision of the Danish Act on primary and lower secondary education 2003
	Revision of the Danish Act on primary and lower secondary education 2006
	Teacher training [Lærerruddannelsen] 2006
	Students' all-round development. Common Objectives, subject booklet 47 [Udvikling af elevernes alsidige udvikling. Fælles Mål, Faghæfte 47]. Danish Ministry of Education 2009
2010–	Education for sustainable development
	The ESD portal, EMU. Danish Ministry of Children and Education 2012
	Health promotion
	Health and sex education and family studies. Common Objectives, subject booklet 21 [Sundheds-seksualundervisning og familiekundskab. Fælles Mål, Faghæfte 21] Danish Ministry of Education 2009
	Physical activity and exercise in primary and lower secondary education [Fysisk aktivitet og motion i folkeskolen], Danish Ministry of Education 2010
	Common
	New Nordic School [Ny Nordisk Skole], Danish Ministry of Children and Education 2012
	Reform of Act for Primary and Lower Secondary School [Lov om ændring af lov om folkeskolen og forskellige andre love. Lov Nr. 1640.] Danish Ministry of Education 2013

norms within education for sustainable development and health promotion. Discontinuity is evident in the introduction of new concepts and redefinition of other key concepts. For example, in the Ottawa Charter, the biomedical health concept is supplemented by an eco-holistic health concept, integrating the dimensions of positive wellbeing, emotional, social, sexual and spiritual health, as well as societal determinants of health alongside individual lifestyle. Furthermore, the concept of *settings* is introduced and recommended as a new approach to health promotion. Health is seen as created and lived by people within the settings of their everyday life; where they learn, work, play and love (WHO 1986). Similarly, in the Brundtland Report, the definition of sustainable development emphasizes the interrelation of socio-economic, cultural and environmental issues, rather than focusing solely on economic or technical perspectives. The assumption in both documents is that the development of the societies they address is unsustainable and does not promote health. Therefore, both documents emphasize the need for social change, underlining the important role of education, learning and competence development.

Table 5.2 Local transformation of international policy on health and sustainability

	Aims	Context	Strategies	Competences
International documents				
Initiation; shared values	Social justice Equity Solidarity Democracy	Rising global interdependency complexity, inequities Limited global resources Health problems Environmental problems, climate change	Collaboration Facilitation Participation Empowerment Re-orientation of services and education Setting approach Networks Partnerships	Co-production of knowledge Multidimensional knowledge Action-oriented competences
Dissemination	Implementation Scaling up Streamlining Cost effectiveness	Global targets Indicators International networking Common standards Evidence imperative	 Decentralization Innovative examples Cross-sectorial work (but also) Strong national governance Measurement Evaluation Best practices	Cross-disciplinarity Knowledge based on the synergy between policy-research-practice Change (problem solving) orientation

National documents	Transformation/Translation	Physical activity	Nordic welfare	Voluntarism	Behavior change, Attitudes and skills
	Healthy diet Climate change education	Economic crisis School reform	Cross-disciplinarity Sharing of experience on local level	Action competence Limited participation	
	Evidence-based practice Focus on individual behaviour	Focus on subjects Measurement/assessment	Project work External partners working with schools		
		Lack of teacher professional development "What works" culture			

These views of health promotion and sustainable development are framed within the context of the great challenges of the twenty-first century, as summarized in Table 5.2: growing interdependence brought about by globalization, climate change, unsustainable consumption, social inequality, poverty, chronic disease and inequity in global health. The response to these challenges is based on a foundation of shared values, endorsing equity, democracy, solidarity and social justice which are also supported by the UN Convention on the Rights of the Child, as a document influencing both fields. Health and sustainability are treated as interrelated and overlapping issues; unsustainable consumption, for example, is directly linked to (a lack of) access to clean drinking water, and cross-references are often made between health promotion and sustainable development.

5.4.1.2 Danish Context: A ‘might’ Instead of a ‘must’

The policy frameworks in Denmark for school-based education for sustainable development and health education/promotion differ in the sense that health education has its own national curriculum guidelines (Danish Ministry of Education 2009a), with clear content, aims and teaching strategies, whereas sustainability is integrated in a number of subjects. The aims expressed in the current curriculum guidelines for health education are more or less in line with the principles found in the Ottawa Charter. Although in the time of working on this chapter they are being revised within the school reform process, the assumption is that the key aim will remain the same. It is formulated as follows:

Teaching should contribute in every way possible to the development of pupils’ ability to take a critical stance and act, both individually and in cooperation with others, to promote their own and others’ health. (Danish Ministry of Education FH21 2009a, p. 4).

This passage stresses the importance for health of pupils’ ability to act, whether individually or as part of a community. Clearly, this approach is linked to enablement as outlined in the Ottawa Charter. The focus is less on lifestyle and more on competence development and joint action in support of better health.

Furthermore, the curriculum explicitly proposes that the whole-school environment comprise the framework for health education and health promotion. This means that in addition to teaching and learning processes, the school leadership and the physical and psychosocial environment should be considered important if schools are to be learning communities conducive to promoting health. Again, this is consistent with the Ottawa Charter and the introduction of the concept of settings as important for health promotion.

However, not all seems to be in harmony with the international policy framework. Although health education in Denmark is among the compulsory topics integrated within the curriculum, it is a topic with no centrally allocated hours. Consequently, it is up to the local authorities (municipalities), with responsibility for schools, as well as to the individual school leader and teachers to decide when and how to integrate health education and health promotion in classroom teaching or in the everyday whole-school practices. As such, there is a risk that health education gets lost in

the mix by attempting to do ‘too much and too little’ at the same time. This risk is confirmed by recent research on health education and promotion in Danish schools which indicates that, although health education is a compulsory topic, many teachers are not aware of the existence of the national curriculum guidelines for *Health, sexual and family education*, and, even when they are, they are not familiar with its content (Nordin 2013; Smidt 2012). This is not helped by the fact that health education and promotion are not included in the compulsory subjects for pre-service teacher education (Høj et al. 2011), nor in the systematic in-service professional development, despite the expectation that all teachers in Denmark, regardless of subject specialisation, are supposed to be able to teach health education. The practice field has mainly developed through externally financed educational interventions aimed at health promotion initiated by municipalities (Nordin 2013) and other organizations in the local community following national recommendations by the Ministry of Health (Justiniano et al. 2010), or through international initiatives (Simovska et al. 2012; Simovska 2013). Often, the aims and desired outcomes in such interventions clash with the broader values advocated for in policy documents and with the clear educational agenda. Most interventions have clear objectives for health and health behaviour, which are to be achieved over the course of a limited period of time, limiting the possibilities for working with participatory and action-oriented educational strategies as suggested in the national curriculum guidelines.

With education for sustainable development, the situation is somewhat different. Sustainability is part of the curriculum within a number of subjects; e.g. science and technology, social studies, history, geography, home economics, health education and design. In each case, sustainability learning objectives are outlined in accordance with the overall aims for the subject. The aims presented in the curriculum guidelines for social studies, for instance, include:

The teaching should lead to the development of the requisite knowledge and skills among pupils to discuss sustainable development in light of economic growth and the environment (Danish Ministry of Education, FH5 2009b, p. 5).

The concept of *sustainable development* has secured a foothold in existing national curricula; however the ideas and principles of *education* for sustainable development are not unfolded. Furthermore, as is the case with health education, there is no systematic teacher training within education for sustainable development in Denmark, neither pre- nor in-service. Another similarity to health education is that the practice field within education for sustainable development has mainly developed through sporadic educational development projects and ‘theme weeks’ in schools (Læssøe et al. 2009). The difference is that, in the case of education for sustainable development, the developments are not primarily initiated by municipal departments, but mainly by environmental NGOs. Consequently, recent research has shown that Danish schoolteachers still express uncertainty about the meaning of the concept of sustainable development and appropriate teaching strategies (Madsen 2013; Breiting and Schnack 2009).

When considering curriculum guidelines it is important to also take into account the issues of assessment and evaluation. As neither health education nor

education for sustainable development are part of compulsory national testing and examinations, the responsibility for working with these issues, as mentioned above, is left to municipalities, school leaders and individual teachers. In principle, municipalities, schools and teachers in Denmark have considerable autonomy in terms of planning and developing pedagogical approaches and local teaching plans under the umbrella of the common learning objectives within national guidelines (Danish Ministry of Education 2009a, b). However, with the growing influence of national and international comparative assessments, quality assurance mechanisms, and the culture of “what works”, educational areas which, while mandatory, are not subject to evaluation or examination are prone to neglect. There is a risk that working with health education and education for sustainable development in schools is perceived as something which ‘*might* be included’, rather than something which ‘*must* be included’ in the core pedagogical practice.

At the same time, even when it does exist, evaluation within these two fields of practice can be challenging given the dominant evaluation and evidence discourses (Simovska and Carlsson 2012). From a critical educational perspective, which underpins both health education and education for sustainable development, it is problematic to focus evaluation solely on the sort of narrowly defined learning outcomes which lend themselves to measurement and performance comparison (e.g. knowledge and/or skills) while neglecting related values, comprehensive competences and critical awareness. In other words, in order to remain consistent with the values endorsed in both international and national policy documents in both fields, the approach to evaluation within health education and education for sustainable development needs to broaden the question of “what works” by asking “what works for whom”, as well as “how does it work and in which circumstances” (see Carlsson and Simovska 2009). This is clearly in contrast with an increasingly rigid evaluation culture within education and the imperative for standardized “evidence-based practice”, as emphasized in the national guidelines and priorities related to the on-going school reform in Denmark (Danish Ministry of Education 2013).

Thus, the analysis shows that the Danish national curriculum for health education can only partially be regarded as a norm-supporting structure (Wickenberg 1999), particularly in terms of its conceptual and ideological foundations. The curriculum’s aims and content are indeed based on an eco-holistic health concept, which includes the physical, psychological and emotional dimensions, as well as the socio-cultural determinants and living conditions, as introduced in the founding documents for health promotion. The fact that sustainable development is integrated within a number of subjects could be seen as conducive to an interdisciplinary approach to this topic in schools, although, unlike health education with its separate curriculum guidelines, without a medium for outlining such an approach in practice. On the other hand, the lack of support, whether in terms of resources, inclusion in the quality indicators for schools, or through initial or in-service professional development of teachers, could be seen as a norm-hindering structure (Wickenberg 1999), particularly in terms of resources that would allow implementation of the

broader objectives and values outlined in the key international documents in both areas. The level and effectiveness of the implementation of the recommendations stated in the Ottawa Charter and Brundtland report therefore depend on the ‘translation’ process into local practice. Consequently, those who are actually involved in health education and education for sustainable development in schools, for example municipal education and health consultants, headmasters and individual teachers, can also be seen as “policy makers” on a micro, practice level (Lipsky 2010). While this could be seen as a positive opportunity, it still requires systematic support for schools and teachers; support which appears absent from the reforms proposed by the Danish Ministry of Education.

5.4.2 *Pedagogical Strategies*

5.4.2.1 **International Action Plans: Dissemination and Re-orientation of Education**

While the Brundtland Report and the Ottawa Charter formed a bedrock of values upon which to base subsequent health promotion and education for sustainable development efforts, the international action plans which followed can be seen as attempts to flesh out and popularise these values by outlining strategies and approaches, and suggesting methods - both on an organizational level and as teaching and learning approaches. These plans call for a re-orientation of existing education systems in line with the overall aim of social change. These documents include, for example, Agenda 21 (UN 1992); UN 2008; UNECE 2012; Sundsvall statement on Supportive Environments for Health (WHO 1991) and Jakarta Declaration on Leading Health Promotion into the twenty-first century (WHO 1997a) (see Table 5.1). The call for reorientation of education is best illustrated with the following excerpt from the UNECE Strategy for Education for Sustainable Development:

ESD demands a reorientation [of education] away from focusing entirely on providing knowledge towards dealing with problems and identifying possible solutions (UNECE 2009, p. 18).

While referring to education for sustainable development, this outline of necessary changes is equally valid for health education. The action component is visible in the suggested shift from the transmission of knowledge towards problem solving and identifying solutions. Suggesting that existing education systems are not conducive to what Biesta (2010) would call subjectification (as additional educational dimension to qualification and socialization), at least in relation to sustainable development, another document from the same organization states:

... at present, education often contributes to unsustainable living. This can happen through a lack of opportunity for learners to question their own lifestyles and the system and structures that promote these lifestyles. It also happens through reproducing unsustainable

models and practice. The recasting of development, therefore, calls for the reorientation of education towards sustainable development. (UNECE 2012, p. 6).

Both passages above point towards the need for more comprehensive educational efforts that would support the development of critical competences related to sustainable development understood in a broader sense than solely economic growth.

In a similar vein, the recommendations and action plans following the Brundtland Report and the Ottawa Charter suggest that *participation and empowerment* are among the key strategies conducive to both sustainability and health promotion (Table 5.2). Empowerment is described at individual and/or group levels; participation is defined in a number of different ways, ranging from participation of the target groups in the formulation of aims (for sustainability or health) to participation as taking part in carrying out predetermined aims. As such, participation of youth at various levels of decision-making is stressed in Agenda 21, pointing to the aim of ‘...encouraging the involvement of youth in project identification, design, implementation and follow-up’ (UN, Agenda 21, Chapter 25.9 g). In line with this, the Jakarta Declaration on health promotion points to participation as essential – both in decision-making and in education (WHO 1997a).

From a critical education perspective, one can argue that the perspectives on participation reflected in these international documents could signify both ‘symbolic’ and ‘real’ participation, the latter involving a certain redistribution of power in decisions and frames regarding the lives of the target groups, including pupils in schools (Simovska 2012a, b, 2013). This latter view of participation, suggesting a considerable degree of redistribution of power and expertise, also challenges universal models and approaches, as well as detailed planning and a traditional understanding of experts as ‘... masters over a body of knowledge and its relevant techniques’ (Fischer 2000, p. 29).

Furthermore, the international documents within both fields emphasize the setting approach as a way forward. The setting strategy advocates including many aspects of school life in health promotion and sustainability work – from school management to the school environment to teaching practices to school building and gardens. The concepts of the Green Flag award for Eco-Schools in Denmark, coordinated by the Danish Outdoor Council, and The Schools for Health in Europe (SHE) internationally (Buijs 2009) could be seen as collaborative examples endorsing the setting approach. This is reiterated in all the conference resolutions and statement of the network, from its formation in 1997 in Thessaloniki, Greece to 2013 in Odense, Denmark. The latest conference statement within the SHE network, the Odense Statement, was published while this chapter was being written (CBO 2013). The statement is based on the proceedings of the 4th European Conference on Health Promoting Schools, which took place in Odense, Denmark in October 2013. The Odense Statement reaffirms the key values, aims and strategies from the previous work within the health promoting schools in Europe (e.g. empowerment, the whole school approach and participatory teaching strategies), with a renewed focus on research. Additionally, it is noteworthy that the Odense Statement explicitly links the health promoting schools initiative with education for sustainable development. Section B, point 4 states:

... [Health Promoting Schools offer] support to education's contribution to sustainability – the health of the people is inextricably linked with the health of societies and of the planet (CBO 2013).

The UN Decade of Education for Sustainable Development (2005–2014), launched in 2005, with UNESCO as the lead UN agency, unfolds principles, approaches and concrete methods of *education* for sustainable development aimed at both informal and formal education. An empowerment-oriented approach is stressed, focusing on ownership, critical thinking, collaboration, action and social imagination, reflecting critical and emancipatory ideas, or ideals, of education. This is highlighted in the following extract from the UNESCO website presenting education for sustainable development:

It [ESD] also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. Education for sustainable development consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way (UNESCO 2012).

Similarly, the action plans suggested in the international documents following the Ottawa Charter (see Table 5.1) propose approaches and strategies specifically in relation to health education and health promotion. As part of the Health Promoting Schools initiative, the IUHPE suggests the following nine prerequisite conditions for development: supporting policies, support from school management, cross-sector coordination between groups at the schools, analysis of existing health promoting work, clear aims and strategies at the schools, development of a charter for the schools' work with health promotion, celebration when milestones are reached, teachers' professional development, and, finally, recognition that changes take time – it might take 3–4 years to establish a health promoting school (IUHPE 2009, pp. 1–2).

Additionally, the analysis shows that the international documents within the fields of both education for sustainable development and health education/promotion which follow in the wake of the Ottawa Charter and Brundtland Report reflect a mixture of two, sometimes contradictory strategic approaches – on the one hand, local collaborative strategies and participation; on the other hand, global indicators, measurements and best practice (Table 5.2). Two tendencies can be identified in this respect:

- (a) Appeals to the responsibility of national governments to formulate clear aims and strategies, as well as measurable outcomes for health promotion and sustainable development. At the same time, governments are expected to draw on softer governance approaches which give weight to collaborative processes within states, NGOs, companies, educational institutions and research institutions, and emphasise community-based approaches and knowledge exchange through network learning. This is reflected, for instance, in the UNECE strategy for ESD which stresses the importance of Ministries of Education in developing aims and strategies within the field while also underlining the key role played by local actors and local schools and the need to ensure the participation of all relevant

stakeholders (UNECE 2012). Along the same lines, only this time in relation to health promotion, WHO states that:

...governments have special responsibilities to guarantee basic and universally accepted human rights, support democratic and participatory processes, and create infrastructures and conditions which support action to address the determinants of health (WHO 2000, p. 18).

- (b) An emphasis on efforts to identify common approaches and assessment tools across national borders and local communities by focusing on the development of indicators, evaluation schemes, collections of good examples and the identification of universal ‘best practices’.

A shift in terminology and argumentation can be seen, especially within health promotion, from underlying social change based on arguments of equity and justice, to a growing focus on ‘effective implementation’ based on ‘evidence based knowledge’ and ‘best practice’, as exemplified in the Jakarta Declaration (1997) and the Bangkok Charter for Health Promotion in a Globalized World (2005). We agree with Porter’s (2006) characterisation of the development from the Ottawa Charter to the later Bangkok Charter as moving from ...a ‘new social movements’ discourse of eco-social justice in Ottawa to a ‘new capitalism’ discourse of law and economics in Bangkok (Porter 2006, p. 75).

Nevertheless, despite the growing focus on common standards and measurement, there is also an emphasis evident within both health promotion/education and education for sustainable development on a wide array of diverse approaches and methods, stressing local relevance, the importance of local actors and the socio-historical context. The diversity of the suggested approaches and methods is highlighted in a number of collections and catalogues of examples from all over the world within both health promotion and ESD, as seen, for instance, in the catalogue (UNU 2007) of examples of education for sustainable development at the global RCE webpage (www.ias.unu.edu), or in the book of examples from practice which was published following the 3rd European Conference of Health Promoting Schools in Vilnius, Lithuania (Buijs et al. 2009). These examples do not necessarily emphasize “best” practices, but feature innovative, challenging and inspiring examples to learn from.

The importance of diverse methods of practice embedded in the context, but also of sound research and evaluation, is explicitly addressed by the WHO in the report Health Promotion: Bridging the Equity Gap (WHO 2000), based on the Fifth Global WHO Health Promoting Conference in Mexico. This is best illustrated by the following excerpt:

...it is difficult to determine a simple and universally agreed set of rules of evidence for health promotion. ‘Evidence’ is inevitably bound to social, political and cultural context, and will be related to the method of action, process of change and measure of outcome which are valued by the population affected by actions to promote health (WHO 2000, p. 18).

Thus, ambiguous messages are once again reflected in the international documents, giving the responsible government bodies the leeway to interpret and transform their content in different ways within national policy, which, in turn, is re-interpreted at local levels prior to realisation within classroom and/or school practices.

5.4.2.2 Danish Context: Risk of Losing the Key Educational Aspects

In 2009, the Danish (centre-right) government presented their national ESD strategy, 'Education for Sustainable Development – a strategy for the United Nations Decade 2005–2014' (Danish Ministry of Education 2009c). In line with the international policies discussed above, in the introduction, the strategy focuses on integrating sustainability education within all relevant school practices. However, in later passages, education for sustainable development is framed primarily in terms of a more general focus on the natural sciences, with reference to 'solid scientific knowledge' and 'science Bildung'.²

The interdisciplinary approach and the notions of empowerment, participation and collaborative approaches which are introduced in the international documents within ESD are only vaguely reflected in the Danish ESD strategy. Nature, technology and health are key terms in the strategy, and three primary objectives are stressed: (1) personal responsibility for sustainable development, (2) development should be based on a solid natural science foundation, and (3) economic growth, *ideally*, should not affect future generations or people living on the other side of the world (Danish Ministry of Education, National Strategy for the UN Decade of ESD 2009c).

Nevertheless, it would be fair to say that some efforts have been made on a national level to encourage more comprehensive and critical approaches to education for sustainable development. For example, the Danish Ministry of Education developed a website in 2012 introducing the broad concept of ESD, the international frameworks, links to key stakeholders, descriptions of field trips and collections of 'good examples' (www.ubuportalen.dk). In this way, interested schools or teachers can find resources and inspiration if they want to focus on education for sustainable development. However, as mentioned previously, with no time specifically allocated to ESD as part of the curriculum and with no formal examinations, one can argue, in line with Breiting and Wickenberg (2010), that education for sustainable development in Danish schools has been more or less restricted to a relatively small number of enthusiastic teachers, champions, or 'fiery souls' as they are called in Denmark.

In contrast, health promotion/education has had a high profile in Denmark, politically speaking, during the last decade: national action plans published by both the Ministry of Health and the Ministry of Education address health education in schools (see Table 5.1). In these documents health promotion is embedded within a framework where both parents often work full-time, and it is normal that children and young people spend a lot of time on computers etc. Thus, health promotion is predominantly related to the risks of 'lifestyle diseases', such as obesity and type 2 diabetes, emphasizing the so-called KRAM-factors (food, smoking, alcohol and physical activity), as particularly reflected in the following publications (Table 5.1):

²The term 'Bildung' refers to the German educational tradition of "Didaktik" emphasizing the broader educational aims of raising critically aware citizens, as developed by the German philosopher Wolfgang Klafki, among others.

- *Healthy for life – aims and strategies for public health 2002–2010* (Danish Government 2002),
- *Healthy food and physical activity in school* (Danish Ministry of Education 2004) and
- *Physical Activity and exercise in schools* (Danish Ministry of Education 2010).

In this sense, the approaches and methods found in national action plans and strategies related to health promotion and health education in Denmark, although consistent with the general values suggested in the Ottawa Charter, can be seen as endorsing disease prevention and individual lifestyle change rather than positive eco-holistic health promotion and critical health education. The approaches suggested in the national policy documents could be seen as using the school as an arena to reach large numbers of children and young people, and to work with predefined interventions aimed at health behaviour change. The settings approach, which treats schools and local communities as active partners in health promotion and education, that are involved in the process of formulating aims, strategies and priorities within the context of everyday school life and the main educational priorities of the school (Green and Tones 2010; Dooris 2012; Jensen 2012; Mathar 2013), seems to be “lost in translation”.

In summary, the analysis of the national documents providing the framework for school practice within the fields of health education/promotion and education for sustainable development shows that, while basically consistent with the values endorsed in international documents, the national policy framework is not conducive to broader, comprehensive concepts of health and sustainability and a focus on their socio-historical contexts. By emphasizing narrowly defined concepts of sustainability and health, the focus remains on an individual rather than social change, which, consequently, seems to restrict the possibilities for fostering the educational outcomes such as critical action competences of children and young people.

5.4.3 Competences

5.4.3.1 International Framework: Co-production of Knowledge

Analysis of the international documents in relation to the various competence categories (Table 5.2) shows that an opening of the classroom towards the local community and co-production of knowledge in collaboration with external actors and organizations, e.g. local sports clubs, cultural institutions, ‘green guides’ and local farmers, is characteristic of both fields. As formulated in Agenda 21:

Schools should involve schoolchildren in local and regional studies on environmental health, including safe drinking water, sanitation and food and ecosystems and in relevant activities, linking these studies with services and research in national parks, wildlife reserves, ecological heritage sites etc. (UN, Agenda 21, Chapter 36.5 e).

This facilitates cross-disciplinary and problem-based learning, working with ‘real life’ issues, multiple perspectives and experimental teaching approaches. Knowledge is seen as closely related to action, and competence development is

related to experience, participation and action taking, as expressed in the following passage from the UNECE strategy for education for sustainable development:

...[the aim is to] *equip people with knowledge of and skills in sustainable development, making them more competent and confident and increasing their opportunities for acting for a healthy and productive life in harmony with nature and with concern for social values, gender equity and cultural diversity.* (UNECE 2009, p. 16).

The analysis shows that the international action plans and guidelines within both health education/promotion and sustainability reflect a dual view of knowledge. On the one hand, the documents emphasize local knowledge and diverse ways of knowing and learning. On the other hand, they promote expert knowledge and expert-defined goals related to health promotion and sustainability. In other words, the policies point to the importance of individual knowledge about “healthy lifestyles” and “sustainable behaviour”. The view on learning and competence development which is reflected in these documents could be seen as a combination of accumulative learning (adding new knowledge to already established cognitive schemes), and accommodative learning (challenge the existing pre-conceptions and understandings) (Piaget, 1946 in Illeris 2009), emphasizing cognitive insight, engagement, self-reflexivity, visions and critical sense. The development of competences and knowledge is related to both pupils and teachers in schools. The teacher also becomes learner, and teachers are described as ‘agents of change’, whereby the development of teachers’ competences amounts to an ‘empowerment’ of teachers. This is seen, for instance, in the UN publication ‘Learning for the Future – Competences in Education for Sustainable Development’ (UN 2012). Key competences for teachers are here divided into four main categories: ‘learning to know, learning to do, learning to live together and learning to be’ (UNECE 2012, p. 13). An overall aim is professional teacher development through a critical, self-reflective practice.

5.4.3.2 Danish Context: Competence – For What?

The current Danish government proposed a reform of basic general education in 2012, to be implemented from August 2014. The reform was initially branded as *New Nordic School*, and with the slogan “Academic improvement of the school”. The Ministry of Education published a *Manifesto for the New Nordic School* (Danish Ministry of Education 2012) outlining the main focal points of the reform. One of the 10 points in the manifesto explicitly stressed sustainability:

By its teaching, pedagogical practice and exemplary conduct in the daily work and activities in the institutions, make children and young people co-creators of a democratic and sustainable society – socially, culturally, environmentally and economically (Danish Ministry of Education 2012, p. 10).

Interestingly, following the broad political agreement among most of the parties in the parliament, the notion of sustainability disappeared from the school reform (Danish Ministry of Education 2013). The terms sustainability, sustainable development, and education for sustainable development are all missing from the

final agreement. Health, on the other hand, is mentioned a number of times, primarily in relation to physical activity and healthy diet. Although the broader concept of wellbeing is also mentioned a number of times, including the imperative that schools promote the wellbeing of all pupils, there is a clear indication that wellbeing will primarily be the subject of monitoring and documentation rather than of initiatives, whether at the whole-school or classroom level, to address determinants of psychological wellbeing and the links between wellbeing and learning outcomes.

Thus, in the Danish context, the co-production of knowledge through democratic processes of teaching and learning does seem to be reflected in national policy. However, the content of this knowledge, and the competences deemed necessary, seemingly remains rooted in the narrow categories of health behaviour (that is, knowledge about risks and behavioural change to avoid these risks). The educational concept of action competence, which implies multi-dimensional knowledge, including visions related to social changes and actual experience with initiating change, seems to be absent. The concept of sustainability and related competences and knowledge are not visible at all. The next step in the school reform process will be to translate the overall objectives into specific learning objectives for each subject. It remains to be seen whether sustainability, as well as a broader understanding of health education, will be included here.

5.5 Concluding Reflections

Based on the assumption that societies in their present form do not contribute sufficiently to sustainable and health-promoting development, the need for structural change of current school systems so as to support the development of critical competences among children and young people has been emphasized in the international policies and action plans following the Ottawa Charter and the Brundtland Report. However, such changes are more easily expressed in policy documents, in the form of intentions, calls for action, suggestions and recommendations, than as specific practices, as stressed by Stevenson (2007b), among others. A 'gap' is apparent between political intentions and aspirations on the one hand and local everyday practices on the other (Nordin 2013). Both health education/promotion and education for sustainable development compete with a number of other issues to be addressed in a busy school day, where demands by both students, parents and school management need to be met; for example, the introduction of more detailed requirements for lesson planning and quality assessment combined with a greater demands on efficiency and a reduction in the available hours for preparation (Jourdan 2011; Stevenson 2007b).

One criticism of the concepts of sustainable development and health promotion is that their broadness limits their usefulness through a process of dilution. There is a danger that sustainability and health promotion are applied as umbrella terms for

a wide array of visions and initiatives about ‘a better world’ and ‘the good life’, which are not necessarily directly linked to either health or sustainability. Thus, working with either issue presents a challenge to schoolteachers in terms of establishing boundaries for relevant content.

Health promotion has been defined as *health policies X health education* (Green and Tones 2010), indicating that the one cannot fully function without the other. Similarly, sustainable development could be defined as *sustainability policies X sustainability education*. Within such definition, it can be seen as problematic if the stated aims, visions, ambitions and strategies in the policies are not followed by clear and specific efforts to strengthen the educational component in the form of explicit curriculum guidelines and priorities, in-service professional development for teachers, space for experimentation and sharing knowledge and experience. In a Danish context, strong national discourses on climate change, green growth, science education and lifestyle diseases risk reducing the fields of health education and education for sustainable development to a question of natural science education, green skills, physical activity and healthy eating to stay healthy and match labour market demands. Although mental wellbeing is mentioned in the new school reform document, it appears that the focus remains on narrowly defined lifestyle indicators, monitoring and measurement.

There seems to be a need for developing new supporting structures (Wickenberg 1999) able to help explore and generate local experiences with health education/promotion and education for sustainable development at municipal and school levels. Especially in relation to health and sustainability, which are considered among the major global societal challenges, international and supranational organizations have an interest in formulating specific recommendations and guidelines within education, even though education is normally a matter of national jurisdiction. As stressed by Kickbusch (1997), the tendency is that these international policies are expanding their domain, thereby often interfering with national policies. Referring to the WHO action plans, Kickbusch states:

We will clearly see these types of agreements increasing, sometimes undermining national standards, sometimes going far beyond them (Kickbusch 1997, p. 279).

In the terminology of Moos (2009), international guidelines, recommendations, reports and statistics can be seen as ‘soft laws’. Opposite to ‘hard laws’, which are legally binding, soft laws are characterized by the use of persuasion with a view to influencing the norms in a specific setting or country. However, the real influence of these international policy documents and guidelines on national education policies has been questioned in the fields of both school-based health promotion and education for sustainable development. Sterling (2000), for instance, claims that the education community has not truly responded to the calls within sustainability/environmental education and health education/health promotion:

...we cannot expect environmental, health and other forms of ‘education for change’ to be effective, if they are working from a marginalized status, that is, if the dominant conception of the purpose and goals of education as a whole are largely unsympathetic to the changes called for in the international mandate (Sterling 2000, p. 254).

As pointed out by Kickbusch (1997), the international policies, guidelines and agreements often lack decision-making structures at the global level and work in various ways. Linkages between the international, national and local levels take form as various initiatives - stretching from structural initiatives, for example the European Union's education exchange programmes; to associations, for example the International Union for Health Promotion and Education (IUHPE); to networks, such as the Schools for Health in Europe Network (SHE); to collections of inspiration materials presenting 'good examples' on e-learning platforms; and international conferences aimed at exchanging knowledge and experiences. As such, the international guidelines and initiatives within education for sustainable development and health education/promotion could be said to form "*norm supporting structures*", as emphasized by Wickenberg (1999, 2004). The support is provided on two levels - on a symbolic level by highlighting, pooling resources, and prioritizing health and sustainability, and on a specific level by providing inspiration, knowledge sharing opportunities and examples of practice. Based on the framework of critical education, this support could provide space and time for joint experimentation, self-reflective practices, co-learning and collaborative processes, problem solving and opening of the school towards the local community.

In Denmark, the existing policy framework seems to narrow down the fields, as a number of action plans and strategies within health and sustainability do not fully reflect the *educational* ideas and approaches called for in some of the international policies. The analysis shows that the links between international and national policies are most clearly reflected in the curriculum guidelines for health education whereas the calls for action on social change and re-structuring of the education system do not seem to be reflected in the existing school framework or in the reform documents.

However, it is fair to acknowledge that some policy frameworks do exist which could form the foundation for future work on health education and education for sustainable development, such as the aim in the current school reform to open the school to the local community and the surrounding world, and the potential for integration of sustainability and health in relation to the specific subjects in the current reformulation of curricular aims for all the subjects.

If health education/promotion and education for sustainable development in schools are to go beyond the work of a few 'fiery souls', and be anchored systematically within the everyday life of the whole school, supporting structures, in the form of clear prioritization of the fields in national policies, followed by adequate pedagogical initiatives and approaches, including formative and realistic evaluation, seem necessary. In this sense, future research would do well to look not only at what is 'lost' when international policies are translated into a national context, but also what is 'gained' in the interplay with local practices and meaning construction at school level.

Acknowledgements The authors gratefully acknowledge the research funding within the AU IDEAS PILOT CENTRES scheme, granted by Aarhus University Research Foundation for the period 2012–2016. The AU IDEAS funding scheme aims to support visionary and innovative interdisciplinary research ideas over a period of 5 years.

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