

Content Issues in ESD/ESDA in a More Overarching Way – Socialization Content and the Implications for Teacher Education in Practice

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Introduction

Subject matter is always taught within an educational context. The context can be seen as an indispensable part of the content and is communicated to students during the conduct of teaching through teachers' speech and other actions. The context in which subject content is taught is here called the socialization content (Englund, 1990; Östman, 1995). In the last decade there has been a considerable international debate on the nature and progress of education for sustainable development (ESD). Questions relating to what ESD teaching should be aiming at, or what kind of abilities students ought to develop, are vital aspects of these debates (Fien, 2004a, 2004b; Hart, 2003; Huckle & Sterling, 1996; Jensen, Schnack, & Simovska, 2000; Sund & Wickman, 2008; Tillbury & Turner, 1997). The educational content is rarely commented on, however, except to note that the often dominating ecological subject content should be extended to include content from areas such as economics and the social sciences. But ESD is more than just an instrumental tool with which society might reach sustainability. According to Sterling (2004), education itself also needs to be changed.. From a democratic perspective, in the current change from environmental education (EE) to ESD it is essential that content issues are made more visible. In this context the aim could be to see what kind of new content students will encounter when a school subject like EE is transformed into a lifelong teaching/learning perspective like ESD (Breiting, 2000). In this sense, content issues in EE can be regarded as the application of individually learned subject content and attitudes in future situations.

In addition to enhancing knowledge about content issues beyond the view of subject content this paper also attempts to visualise the implications of teachers' actions on students' meaning making. One consequence of teachers' actions is the general value-laden educational content that students learn (Sund & Wickman, b submitted); a content that has both structural and methodological implications for teacher education.

International discussions relating to the implementation of ESD often call for further content studies (UNESCO, 2007). Doyle (1992) understands the dichotomy between subject content and the conduct of teaching as created. Schnack (2000) emphasizes that the actual creation of teaching is to be regarded as a teaching content: "The central curricular question is no longer simply concerning the *process* of education, but must itself form part of the content". If it is as Schnack (2000) and Doyle (1992) describe, then educational researchers need to grasp the content issues in a much more overarching way and study subject content, teaching methods and teachers' purposes simultaneously.

One way of doing this, and at the same time approaching content issues in a new way, is to study teachers' communicated socialization content. In the teaching process this is constituted by different messages *about* the subject content and *about* education. An important point of departure in this research is that the learning of subject content and socialization content occurs simultaneously, and that together they constitute the educational content. This paper focuses on the qualitative aspects of socialization content and provides examples of how this research impacts teacher education and begins with a brief discussion as to why separating ESD from an education for sustainable development approach (ESDA) that is applicable at

the local school level is regarded as fruitful. An analytical tool developed during earlier research (Sund, 2008a) that facilitates the discernment of important qualitative differences in Swedish upper secondary teachers' socialization content by working within three selective traditions of environmental education (Öhman, 2004) is also outlined. In short, when the pluralistic tradition can be regarded as a good foundation for the development of a democratic ESD (Lundegård, 2007; Öhman, 2008) this can be called ESDA.

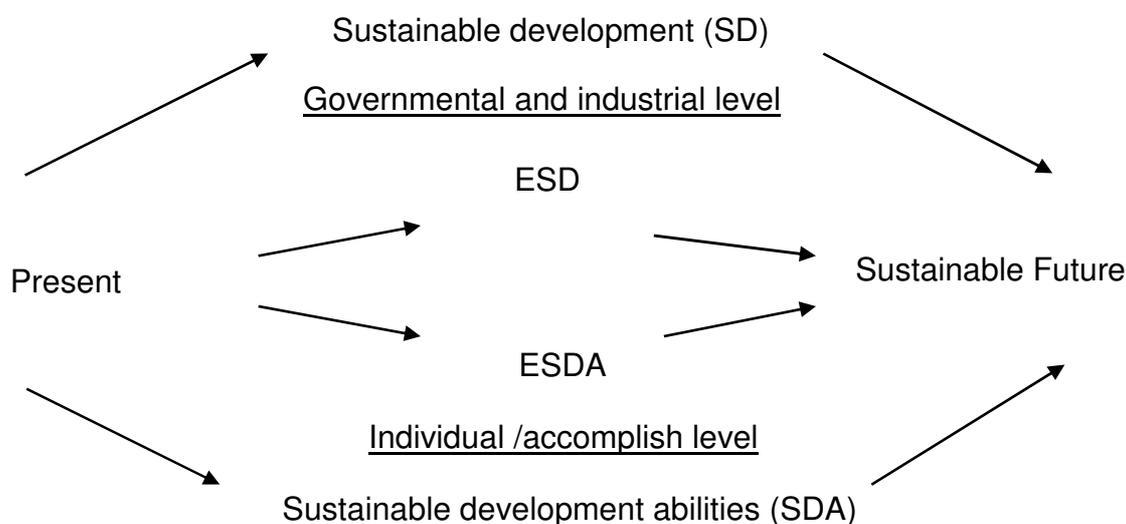
Purpose

The aim of this paper is to contribute to an improved knowledge about socialization content - an indispensable part of the environmental education and education for sustainable development content. The intention is not to dictate which content teachers or teacher educators should include in ESD, but rather to make researchers, teachers and teacher educators more aware of the existence of the different qualitative aspects of the socialization content in which subject matter is taught. Differences in socialization content can be used for specifying certain qualitative differences between EE and ESDA. In this study, subject matter and socialization content are together regarded as an educational content in a more overarching way.

Starting point in ESD discussions

In societal debates about ESD, a small but nevertheless important additional A can be added to the acronym ESD to form ESDA. This is a way of separating a local teaching approach, referred to as an Education for Sustainable Development Approach (ESDA), from the ESD concept used in policy level discussions about education in general (Sund, 2007, 2008b). Indeed, many researchers have already suggested that ESD could be regarded as education taught with a new approach (Breiting, 2000; Hart, 2000; Jensen & Schnack, 1997; Scott & Gough, 2003). But all this can lead to confusion and means that teachers need to differentiate whether the term ESD is being used to describe ESDA in terms of school-based classroom activities, or whether it is referring to a policy level ESD that includes issues such as every one of a country's citizens benefiting from sustainable education (see Figure 1, below) (Sund, submitted).

Figure 1



By way of explanation, Figure 1 indicates one way of understanding the relationships between the different terms commonly used in discussions relating to sustainable development (SD) learning as a whole. In this framework ESD can be regarded as a policy level perspective on education and ESDA as an approach to education at local school level that educates and equips individuals to contribute to the overall SD process. This educational approach promotes different personal abilities, which can be used in both private and societal work.

The research presented here focuses on the essential qualitative educational aspects of the ESDA teaching/learning approach described above. The results illustrate that Swedish upper secondary teachers are already practically involved in developing a changed EE in order to understand what ESD/ESDA means for them. In its focus on the qualitative aspects of teacher teaching this research discusses how these local attempts can help teachers and teacher educators to improve their understanding as to how an ESDA can be both developed and implemented. In the context of this paper, the acronym ESD will be now be left in the safe and capable hands of politicians and other stakeholders at societal policy level while we take a closer look at ESDA and put a little more flesh on its bones.

Theoretical starting point

Doyle (1992) maintains that “teachers *author* curriculum events to achieve one or more effects on students” (italics in the original text). Teachers can thus be regarded as directing their teaching and inviting students to take part in the specific educational situation created. In this situation teachers communicate, through speech and other actions, a number of explicit and implicit messages that communicate what they regard as important or how the content might relate to the world at large. These messages also help students to apprehend a context in which the subject content can be understood. Through the subject and socialization content students can subsequently develop *meaning* (Östman, 1995). But there’s a bit more to it than this. The learning of scientific meaning is also accompanied by additional extras, such as the teacher’s view of nature. These different *companion meanings* (Roberts, 1998) can be seen as offering students opportunities to develop meaning (Englund, 1990). In this sense, different companion meanings constitute different socialization content, i.e. different educational content.

In previous educational research, socialization content has traditionally been understood as being deliberately fostering in order to, for example, maintain specific societal norms (Östman, 1995). Like Östman (1995), these studies do not regard the socialization content as necessarily fostering in that they do not make any distinction between parts of socialization content that could be considered as fostering and those that are not. In addition, there are no distinctions as to whether teachers’ socialization content is communicated consciously (intended) or unconsciously (unintended). An important point of departure for this research is that the learning of subject content and socialization content occurs simultaneously, and that together they constitute the educational content. Although the subject matter included in different environmental educators’ teaching is often relatively similar in character (Sund & Wickman, 2008), important differences in their teaching can often be identified by examining the socialization content.

Roberts and Östman (1998) have pointed out that content other than subject content is communicated in teaching:

Science textbooks, teachers, and classrooms teach a lot more than scientific meaning of concepts, principles, laws and theories. Most of the extras are taught implicitly, often by what is *not* stated. Students are taught about power and authority, for example. They are taught what knowledge, and what kind of knowledge is worth knowing and whether they can master it. They are taught how to regard themselves in relation to both natural and technologically devised objects and events, and with what demeanour to regard those very objects and events. All of these extras we call “companion meanings”. (p. ix, emphasis as the original)

The extras that Roberts and Östman (1998) illuminate here are generally concerned with companion meanings *about the subject*. This research also takes into account that the dichotomy between *what* and *how* can be regarded as created (Doyle, 1992) and seeks to show that socialization content is communicated *through* different *actions*.

Three selective traditions in environmental education

Research into the history of school subjects has indicated the presence of different traditions of how content and methods are selected. These traditions can therefore be termed selective traditions (Williams, 1973). Since the 1960s, three selective traditions, with reference to their roots in educational philosophy and how environmental and developmental problems are perceived by teachers, have evolved in Swedish environmental education: fact-based EE, normative EE and pluralistic EE (Öhman, 2004).

The *fact-based tradition* was formed during the development of EE in the 1960s. Environmental issues are here mainly regarded as ecological issues that can be solved by learning more about the natural sciences. There is an assumption that if teachers teach scientific knowledge to everyone in school then environmental problems caused by human activities will disappear more or less automatically. From an environmental ethical viewpoint, this tradition is situated within modern anthropocentrism – which considers the natural world as something separate from man. From an educational philosophy point of view this tradition is closest to essentialism, where teaching is focused on the subject knowledge needed to solve current problems. The pedagogic task is thus to teach students scientific facts and concepts that will enable them to make the right decisions and behave in the correct way. In this tradition student participation occurs through the teacher taking account of his or her previous experience of students’ attitudes and making use of them when planning lessons (Sandell, Öhman, & Östman, 2005).

The *normative tradition* emerged during the 1980s in connection with changes in educational steering documents and societal debates about e.g. nuclear power. Environmental issues are primarily a question of values, where people’s lifestyles and the consequences of this are seen as the main threats to the natural world. Scientific knowledge is regarded as normative and something that can guide people towards environmentally-friendly and ethically-correct actions and improved values. From an ethical point of view, humans are seen as an inseparable part of nature and should therefore adapt to its conditions. In this tradition the teaching content is often organised in a thematic way, and includes content from disciplines other than science. In order to ensure that the lessons achieve their intended objectives extra attention is given to the use of students’ experiences and attitudes in forming teaching examples and tasks (Sandell et al., 2005). Solving problem in groups in combination with scientific factual information makes this tradition appear as a combination of essentialism and progressivism, which can be called progressessentialism (Östman, 1995).

The *pluralistic tradition* developed during discussions in the 1990s in connection with the 1992 Earth Summit in Rio de Janeiro. Increasing uncertainty about environmental issues and the growing number of different opinions in environmental debates are important points of departure for this tradition. Environmental issues are viewed as both moral and political problems, and environmental problems are regarded as conflicts between human interests. Science does not provide guidance as to any privileged or preferable way to act when it comes to environmental issues. In this tradition, environmental education includes the whole spectrum of social and economic development, which Öhman (2004) refers to as the concept of education for sustainable development. The conflict-based perspective of ESD highlights the democratic processes of classroom activities, such as everyone's opinion being regarded as equally relevant when deciding on a course of action relating to environmental and developmental issues. Pluralism is also an important starting point for the teaching of education for sustainable development. From an environmentally ethical point of view, humans are in focus in that ESD is anthropocentric. As students develop their abilities to engage in democratic discussions about the development of a sustainable society or a more sustainable world, it suggests that the lessons are reconstructivist in character. The varied problems encountered during the lessons indicate that the teaching methods and approaches also vary from individual searching for more scientific facts to writing articles or developing arguments that can be used in debates or published in newspapers.

It is important to point out that the original descriptions of these traditions (above) are in summary form and have been edited in order to make them more succinct. They have also been verified in a large empirical study of teachers (N=568) in the Swedish school system (Swedish National School Agency, 2002).

Research results relating to socialization content

The three selective environmental education traditions outlined above have also been verified by studies of socialization content (Sund & Wickman, a submitted) using an analytical tool developed for researchers, as presented in Table 1, below (Sund, 2008a). In brief, Table 1 illustrates the five research-based analytical questions relating to essential aspects of environmental education that help to make teachers' socialization content visible. Teachers' ways of answering these questions highlight the companion meanings that teachers communicate to students in their teaching. The companion meanings can in turn point to teachers' approaches to the different value-related aspects of teaching.

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| Analytical questions | Companion meanings | Aspects | Examples of answers |
|--|---|---|--|
| 1) Why are environmental issues important? | Views of nature as an object or subject | Relation to nature: Man – nature | Resource management – Survival – The intrinsic value of nature |
| 2) What is the teaching aiming to change? | Views of knowledge and the development of students' tools of change | Purpose of the education: Individual – collective | Facts, values – Communicative democratic abilities |
| 3) What different inter-human relations are established? | Views of inter-generational and human solidarity | Ethical historical dimension: Environment, here, now – Humans, there, then | Insignificant – social and cultural orientation in the world |
| 4) How useful is school knowledge in environmental and development issues? | Views of where environmental issues exist in the students' lives | Teaching relation: School – society | Classroom – communicative knowledge with the surrounding world |
| 5) What role do students play in education and environmental work? | Views of students' democratic citizenship | Power relation: Teacher – student | Limited – active co-creators and citizens |

Applying the analytical tool to the data facilitates the identification of differences in the socialization content between teachers in the selective traditions of environmental education. Teachers' different expressions and number of utterances during research interviews either position them closer to the left or the right term in each educational aspect (Table 1). These shifts are described in relation to the left term as a position that shifts more or less towards the right term. This shift towards the right is illustrated in Figure 2, below.

Figure 2

| | | |
|---|--|---|
| Utterances that express that the teaching is mainly classroom based | Shift towards the right term → Zero minor some major School ----- Society | Utterances that express that the education is often conducted in a interplay with the surrounding world |
|---|--|---|

In short, Figure 2 shows how teachers' utterances can position a teacher's socialization content within an educational aspect, e.g. school – society. The teachers express responses that to some extent answer the question: How useful is school knowledge in environmental and development issues? Their utterances are assessed as to whether they belong to the left or the right term, after which a quantitative analysis is conducted. The shift from left to right is classified as: *zero* shifts to the right (no expression of interplay), *minor* shift (isolated references), *some* shift or *major* shift (repeated expression of the right term).

This summary reflects the research conducted into how ten Swedish upper secondary environmental education teachers position themselves with regard to five important educational aspects. The research showed that the teachers could be grouped into three separate categories. The teachers in each category displayed specific qualitative characteristics in their communicated socialization content, as illustrated by the summary provided in Table 2, below. This summary makes it easier to see the more comprehensive qualitative differences in socialization content between the three categories.

Table 2 describes a quantitative estimation of the shift from left to right in each educational aspect for teachers' communicated socialization content in each category. There are four teachers in categories one and two, and two teachers in category three.

| Cat. | Educational aspects | | | | |
|------|--------------------------------------|--|--|--|-----------------------------------|
| | Nature relation: Anthro.- Biocentric | Ethical historical dimension: Environment- Human ethic | Purpose of education: Individual- Collective | Educational relation: School - Society | Power relation: Teacher - Student |
| I | Minor | Minor | Minor | Minor | Zero |
| II | Major | Zero | Minor | Some | Minor |
| III | Minor | Major | Major | Major | Major |

The categories identified here correspond with the selective traditions in environmental education described earlier by Öhman (2008). In many respects the socialization content of the teachers in Category III has similarities with how pluralistic teachers describe good environmental teaching. The teachers in Category I, on the other hand, focus more on factual knowledge and nature as a human resource. This category has definite similarities with the fact-based tradition, and the teaching they describe is often teacher centered. Teachers in Category II are more normative in their descriptions of teaching and often concentrate on developing or increasing students' environmental awareness. Teachers in Category II can thus be said to accord with the normative tradition of environmental education.

The research project undertaken consisted of specific studies carried out at different times. In the earlier study the participating teachers were categorized according to which selective environmental education traditions they based their teaching on (study one) – a categorization that also corresponds with the categories developed in this study. In comparison with earlier research (Öhman, 2004), an examination of the teachers' socialization content made it possible to discern the selective traditions in environmental education in a new way.

Some major features of the results shown in Table 2 can also be presented in more pictorial form, as in Figure 3. One of the main observations is that the further from the centre the higher the degree of integrative and pluralistic socialization content in a teacher's teaching. This was evident in the interviews conducted with teachers and ran like a thread through each teacher's account of their teaching. Another observation is that the left term in the word-pairs for each educational aspect is in the centre. By moving out from the centre the subject matter and fact-traditions become less dominant, and the teaching becomes much more integrative and pluralistic (Sund & Wickman, a submitted)

The educational content of ESD in a more overarching way...

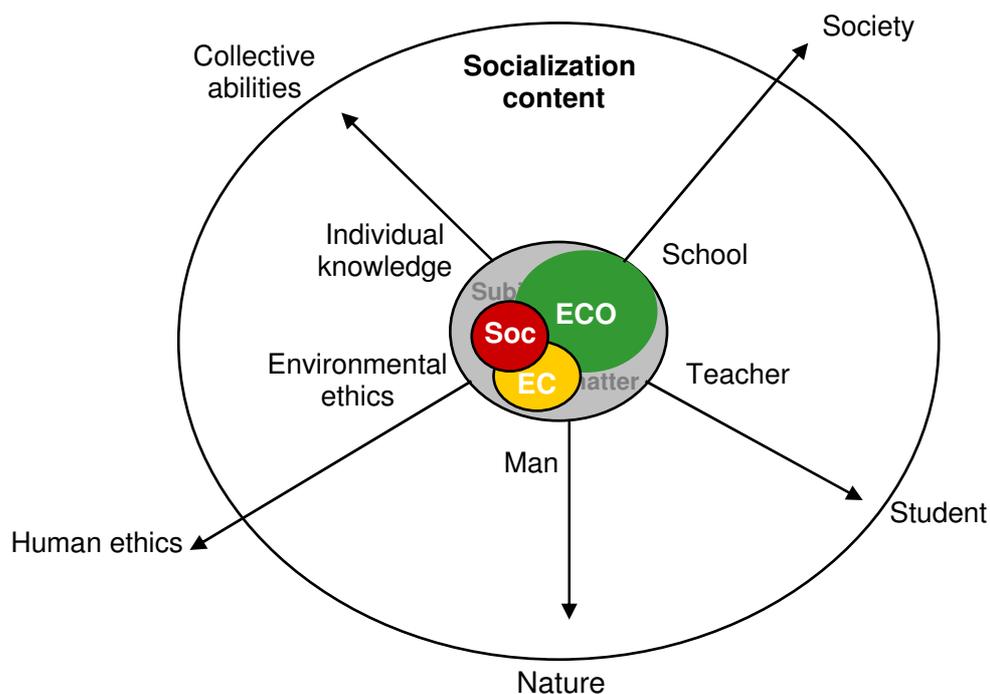


Figure 3. The further out from the centre the higher degree of integrative socialization content in a teacher's teaching. The left term in the word-pairs for each educational aspect (Table 1) is in the centre. By moving out from the centre the subject matter and fact-traditions becomes less dominant, and the teaching become in overall more integrative.

Socialization content in more depth

Comments on the aspects

The teachers in the three selective traditions of environmental education taking part in the studies responded to the interview questions concerning the relation man – nature in a way that matched earlier research (Öhman, 2004). In general, the fact-based teachers responded to the first question “Why are environmental issues important?” (see Table 1) by indicating that the importance of environmental issues is to administer the resources of nature in a rational way, or in a way that will ensure the survival of mankind. Normative-based teachers, on the other hand, appear to be more concerned with trying to change students’ lifestyles and repeatedly argue for more ecologically correct attitudes. In contrast, the pluralistic teachers involve students and encourage them to participate in the democratic process of solving environmental problems; problems that are also considered to be common political issues.

In the ethical dimension there is a clearly discernable difference between environmental education, represented here by the fact-based and normative traditions, and the pluralistic tradition. Environmental education is mainly concerned with questions about man’s relation to and affect on nature. In the pluralistic tradition, different kind of justice and fairness issues are included in discussions of environmental problems, for example, solving the problem of hazardous waste in Western countries by exporting it to under-developed, or so-called third world, countries. Environmental issues and questions of a fair global distribution of natural resources are continuously intertwined. In the pluralistic tradition, however, the studies revealed a definite shift towards the right in the aspects of ethical dimension, namely, from the relation man – nature towards the relation man – man.

A shift in the general purpose of the education is also clear. For example, in environmental education the main emphasis is on individual knowledge and attitudes. Although the pluralistic tradition also puts emphasis on the individual, many of the abilities promoted and developed in this tradition – such as critical thinking, reflection and communication – are designed to be useful in democratic collective situations. In other words, pluralistic teachers try to support their students individually and at the same time enhance and develop their collective abilities so that they become better informed citizens. This type of teaching can be regarded as an educational process that supports the development of an action competence (Jensen & Schnack, 1997).

With regard to the range of school activities on offer, the studies reveal that the fact-based teachers are relatively self-contained in that they conduct most of their teaching in the classroom; a place that seems to meet all their needs. By way of contrast, the normative teachers often express that they take, or intend to take, their students outdoors for lessons; the aim being to develop their feelings of closeness to and connection with nature. To complete the picture, the pluralistic teachers consider school as a vital and relevant part of society and the local community and therefore prefer to interact and communicate with the world at large on a regular basis. In this context more authentic curriculum material is introduced into school in the form of teaching materials created by different governmental and municipal authorities or NGOs. Different actions outside the school also lead to the introduction of material that has not been specifically developed for teaching situations, which in turn also enhances the development of abilities such as criticism of sources.

In the light of the above it would be fair to say that fact-based teachers are teacher centred and the teachers working in the normative tradition are student centred, although in both traditions

the teacher is both the author and the authority in that these teachers plan and organise both lesson content and group work activities. In the pluralistic tradition, however, teachers and students are much more collaborative. For example, pluralistic teachers explicitly say that allowing students to take part in the actions and activities and decide which real life issues are important for them also results in important learning experiences for teachers: “It would be stupid not to let them teach you new things”. In such a tradition students are given the full democratic right to participate both *in* their own education and the development of the common society.

Differences in the socialization content of EE and ESD

Studying the educational aspects makes it possible to both discern and better understand the socialization content. In their studies Roberts and Östman (1998) mainly focused on companion meanings relating to the subject. The present research has tried to extend the use of companion meanings to also include messages communicated to students through teachers' actions during the conduct of teaching. It is reasonable to assume that if EE teaching is carried out in an environment that is limited to the confines of school then students will be offered companion meanings that communicate environmental issues as being predominantly school-based issues. Roberts and Östman's (1998) companion meanings relating to the subject or subject area thus describe the socialization content of a *classical* environmental education, which is often about the application of developed knowledge or attitudes. However, if companion meanings relating to the manner of teaching are included (Munby & Roberts, 1998), a more general and pluralistic teaching approach, which can be called education for sustainable development, can be discerned. This research shows that in many of the aspects the teachers in the pluralistic tradition often communicate a more integrative socialization content to their students that is more shifted towards the right in the qualitative educational aspects (see Table 2) or radiates out from the centre (as in Figure 3).

Studying the companion meanings communicated about the teaching helps to make the differences between EE and ESD clearer. For example, the qualitative shift between categories II and III in Table 2, i.e. between EE and ESDA, is obvious. It would also be possible to define and delimit this difference further, although this would naturally depend on the strength of political and cultural will.

There are differences in the socialization content as been showed earlier and the socialization content is an important and a actual content. Students learn more content during the conduct of teaching than a well integrated subject content. The results of a student study (Sund & Wickman, b submitted) show that the socialization content needs also to be regarded as a real content. Students apprehend teachers, socialization content and use it actions outside classroom situations. This implies that students have learned parts of the socialization content, i.e. made meaning of it. All content you can learn in school and use in different situations such as socialization content and subject content can be called educational content.

An integrative socialization content is useful in the sense of not only making a subject content more integrated, but also of better connecting the education to the world at large. In the light of its emphasis on collaboration and integration, the pluralistic tradition could easily be developed into an ESDA that would benefit all school subjects. In other words it could be regarded as a more general approach to teaching and learning within society as a whole (Breiting, 2000). An important consequence of this general approach is that the present gulf between school material and other more specific material, such as that produced by NGOs or specialist organisations, would be bridged. Pluralistic teachers' human ethical starting points

and their interest in developing collective abilities all contribute to a deeper human interaction between education and the world at large. The pluralistic teachers taking part in this study already teach a well-integrated environmental education with an ESD-approach. Furthermore, this ESDA is feasible for all subjects and subject areas; something that not only makes it a fruitful way of integrating different school subjects but also supports teachers' team work. Even though teachers still retain a specialist expertise in their own subjects, adopting an ESD-approach means that they can discuss mutual educational interests and purposes *and* make the teaching situations more meaningful for teachers and students alike. Here, student participation in the pluralistic approach is crucial, and should neither be forgotten nor omitted from the planning process. The democracy aspect is also vital and needs to be an *integral part* of teaching/learning planning situations and practice. This is in contrast to the fact-based and normative traditions, where value-laden decisions are made by teachers or curriculum developers and built into the education *before* actual teaching takes place. Expressed more succinctly, students should be able to experience and develop democratic citizenship during their education, rather than *after* it (Öhman, 2004).

Implications for teacher education

Researchers are unable to establish what a real or best ESD or ESDA might look like simply by studying e.g. teachers' local practices. In actual fact the development of a uniform, global, pluralistic education that can be called education for sustainable development will probably prove impossible (Nyberg & Sund, 2007). But in practical and realistic terms the issue is more about discussing what a general lifelong approach to teaching and learning can mean for the future within the actual context of culture, language and religion. It is in this actual meaningful context that the development of a more pluralistic education can begin. In the end it will probably depend on a political or other democratic decision being made in a commonly accepted context. But if academics and politicians think and believe that a pluralistic approach can be developed into an ESDA and implemented in formal schooling, it follows that teacher education also needs to be changed and made more pluralistic. The educational aspects outlined above serve as useful hints that point to possible practical solutions and consequences.

In their learning students benefit from theoretical instruction from a *teacher educator team* (e.g. environmental history, sociology, ecological economy and science) where basic knowledge is synthesized by the educators and not left, as is often the case, to the students themselves. This will also give teacher educators an opportunity to become reflective learners within the team and to learn from each other. Teacher education would also do well to be linked to the world at large and draw attention to different human relations by *enhancing encounters between formal and informal educators*. Lectures on different issues, such as learning, global and international problems, could be given by what can be referred to as *internal and external sources*, such as university lecturers, school teachers, student teachers, headmasters, school developers from the local municipality, NGOs, governmental agencies, international development agencies, etc. Students could also be encouraged to assume the role of innovative educators and make use of interesting material from a variety of sources that has not necessarily been developed with schools in mind, such as the plethora of cartoons, video clips, games, role play scenarios, UN-related interactive material, etc., available on the internet. As student teachers often have more time than practising teachers to search for suitable material, this can help to make teacher education something of a joint venture, in that *teacher educators and student teachers* join forces and become *joint learners*.

Continuing in this vein, *student participation* and shared responsibility - or democracy *in* their education – can be better achieved through the provision of a genuine activity space, i.e. less control of the teaching product and more focus on the development of personal and collective abilities through group work. This can be done by forming *student teacher teams*. For example, making student teams *subject heterogeneous* will mean that the subject integrative socialization content is well connected to the world at large, as described above. It is also important that these student teams work *on real life issues* or *authentic school projects* that are perceived as meaningful. One way of going about this could be to create a *partner school system* for teacher education practices, which would entail student teachers spending much of their probationary work placements in one specific school, thereby getting to know the school, its students and the teacher teams very well. This would also lead to students in the final stages of their teacher education becoming *their tutors' peers and/or colleagues*.

Many of the examples mentioned above have already been developed at Maelardalen University in Sweden within the teacher education framework. One course, entitled “A world to take responsibility for”, has been running since 2003 and has been so successful that there are now plans to change it from a mandatory ten week course to a general teaching/learning approach in the entire teacher education programme. The overall aim is to develop a new teaching and learning perspective known as ESDA. While there are still many different obstacles to overcome, the development has been recognized positively among teacher educators and students alike. This change has essentially come about as a result of student demand. In annual course evaluation undertaken by the students the message was both clear and repetitive – we need more of such courses and we need them much earlier in the programme. In some Swedish universities the students themselves have taken the initiative and developed student-driven courses, although at Maelardalen University students' opinions and calls for change have led to the teacher education developing slowly and steadily – and successfully.

While changes in teacher education towards an ESDA are learning experiences for many of the stakeholders at university level, they also have a positive impact on local school development. For example, the authentic school projects that student teacher teams are developing together with teacher teams is a success story that has also forged closer relations between teacher education and teaching practice. Teachers are also making spontaneous visits in order to inform themselves about other school projects that have developed within teacher education. Some of these jointly developed school projects have won national awards in innovative teaching. Student teacher teams have even applied for and been granted funding so that their partner schools can actually carry out projects that they have been planning for years. Schools have also been asking for student-teacher teams to help them to develop new projects or inject new life and inspiration into other teaching projects. Interestingly, as it is students who own the projects they tend to choose both projects and schools that allow them to be more participative in and responsible for their education. Social control in the student group and the moral responsibility of the teacher team to develop a good project leads to them working hard, which in turn can be seen as a consequence of democracy *in* the teacher education.

To conclude, qualitative aspects in the socialization content can serve as fruitful starting points in discussions about how to change teacher education towards an educational approach that can be called ESDA. In short, in terms of ESD/ESDA, content issues are not only important at the local teaching level, but are also vital in the work of re-orienting teacher education.

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