

EARLY CHILDHOOD EDUCATION AND LEARNING FOR SUSTAINABLE DEVELOPMENT AND CITIZENSHIP

Solveig Hägglund¹ and Ingrid Pramling Samuelsson²

SUMMARY

Since the end of the 1980:s when OECD published the Brundtland report, in which the concept of sustainable development as a critical global issue was introduced, the role of education for global survival has been frequently discussed and explored, by politicians as well as researchers. In school curricula and educational practice, efforts have been made to include material and issues related to, for example, climate changes and nature resources in teaching and learning. Surprisingly little attention has however been paid to the question of the way (and on what premises) early childhood education might (and should) be involved. In this article we discuss some aspects of early childhood education with a bearing on its role in education for sustainable development. The fact that early childhood education belongs to the larger educational system means that global political and economical issues are involved when planning and conducting education for sustainability in pre-school as much as in the rest of the educational system. Recent changes in Swedish educational policy, characteristic traits in pre-school pedagogy and the pre-school child as learner of sustainability are commented upon and discussed.

RÉSUMÉ

Depuis la fin des années 1980, lorsque l'OCDE a publié le rapport Brundtland abordant le concept du développement durable comme problème majeur, le rôle de l'éducation pour la survie globale a été fréquemment discuté et exploré par les politiciens et les chercheurs. Dans les programmes scolaires et dans la pratique éducative, des efforts ont été faits pour inclure dans l'enseignement et dans l'apprentissage du matériel et des questions liées, par exemple, aux changements climatiques et aux ressources naturelles. Étonnamment peu d'attention a été accordée à l'implication de l'éducation de la petite enfance. Dans cet article, nous discutons de quelques aspects de l'éducation de la petite enfance, dont son rôle dans le développement durable. L'éducation de la petite enfance faisant partie du système d'éducation dans sa globalité signifie que les questions de politique et d'éducation mondiales sont en cause lorsqu'il s'agit de planifier et d'offrir l'éducation relative au développement durable à l'école maternelle, aussi bien que dans le reste du système scolaire. Les récents changements dans la politique scolaire suédoise, traits caractéristiques de la pédagogie de l'école maternelle et de l'enfant de maternelle se formant au développement durable sont les éléments commentés et discutés.

RESUMEN

Desde fines de los años 80, cuando la OCDE publicó el informe Brundtland, en el que se introduce el concepto de desarrollo sustentable como un asunto crítico a nivel global, el rol de la educación para la

¹ Karlstad University, Sweden

² Göteborg University, Sweden

sobrevivencia global ha sido objetivo de discusión y análisis permanente por parte de políticos e investigadores. En el curriculum escolar y en las prácticas educacionales, se han desplegado esfuerzos para incluir materiales y asuntos relacionados con, por ejemplo, el cambio climático y los recursos naturales en la pedagogía y el aprendizaje. Sin embargo, resulta sorprendente que se considera poco en qué forma y sobre qué premisas puede y debería participar la educación preescolar. En este artículo, analizamos algunos aspectos de la educación preescolar respecto de su rol en la educación para el desarrollo sustentable. El hecho de que la educación preescolar pertenezca al sistema educacional general significa que hay asuntos políticos y económicos globales involucrados al momento de planificar y orientar la educación para la sustentabilidad tanto en la educación preescolar como en el resto del sistema educacional. Aquí, se comentan y analizan cambios recientes en la política educacional sueca, rasgos característicos en la pedagogía preescolar y los preescolares en su condición de personas que aprenden sobre sustentabilidad.

Keywords: Education for Sustainable Development (ESD), Early Childhood Education

INTRODUCTION

During the last decades, media, policy and research have directed increasingly and concerted attention towards problems related to global survival. A complex net of interrelated issues covering climate change, decreasing energy resources and increasing poverty has been demonstrated. Also, related to these problems, global justice and democracy as necessary and fundamental frames for global survival have been articulated. When the OECD in the end of the 1980s published the Brundtland report (WCED, 1987) on sustainable development this was a manifestation of an increasing international awareness of a number of serious global problems that called for global policies and strategies. The UN and its sub-organisations play a significant role in initiating and supporting world meetings and summits connected with this theme. So do other actors, in particular various NGOs who have been active in finding ways to agree on international strategies for political, economic and cultural action to meet global threats to the survival of the planet and mankind.

Education plays an important role in this endeavour. A considerable amount of literature and documents have been produced on the role of education as a strong force to initiate and practice ways to prepare citizens all over the world to act as to change the situation. When UN declared 2004-2015 as the Decade of Education for Sustainable Education, this underlined the idea that education is a major road for realising global sustainability (UNESCO, 2004). The UN declaration has been developed at regional and local levels, for example by the UN Economic Commission for Europe and its Committee on Environmental Policy, who has outlined a strategy for education for sustainable development in Europe during the period (UNECE, 2005). Thus, without hesitation, there is a clearly articulated political and moral call for education to take part in the project to “save the world”. However, surprisingly little attention has been paid to in what way and on what premises early childhood education might and should be involved. This observation was taken as a departure point

for an international work shop on *The role of early childhood education for a sustainable society*, organised by UNESCO and Göteborg University in 2007 (Pramling Samuelsson & Kaga, 2008; SOU, 2004:104). During the workshop, a variety of perspectives on early childhood education as a contributor to a sustainable world were presented. The main conclusion from the workshop was a general agreement that early childhood education has all the necessary requirements for contributing to education for sustainability. Its professional competences, cultural experiences, interdisciplinary knowledge base, and personally engaged young and grown up participants were all examples of the arguments that were brought forward.

In this article we will discuss some premises of early childhood education that may be regarded as strengths in education and learning for sustainable societies, but which also may raise critical comments. Our discussion is based on research primarily conducted in Sweden, but with theoretical and conceptual framings linked with recent international research on education and young children. An introductory overview of the role of education for sustainable development in a general perspective will be followed by a discussion of the relationship between early childhood education and the rest of the educational system. Swedish policy during the last decades will serve as an example. Thereafter we will present and discuss some aspects on pedagogical practice as studied and developed in the context of early childhood education. Finally we will discuss the young child as an actor in the sustainability project by raising issues related to the child's position as a right holder and citizen, as a member of a childhood invited to a dialogue on the status of the globe or locked up in a space where justice and belonging are detached from adulthood's care and concerns.

SUSTAINABLE DEVELOPMENT AND EDUCATION

Neither sustainable development nor education can be seen as only, or primarily, a national issue. Both concern social, cultural, environmental, economical and political courses of events with bearing on a global arena. Such a perspective goes well with how the concept sustainable development has been defined. According to the Brundtland report:

1. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs. It contains within it two key concepts:
 - the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
 - the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.
2. Thus the goals of economic and social development must be defined in terms of sustainability in all countries – developed or developing, market-

oriented or centrally planned. Interpretations will vary, but must share certain general features and must flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it. (WSED, 1987, chapter 2)

This definition emphasises the global perspective. It also recognizes economic and cultural diversity, in terms of needs as well as in terms of contexts for interpretation and implementation of the goals set out in the report. Further, the concept of sustainability is presented in the report as dynamic rather than static, as a means rather than an end, as a challenge for continuous cultural and social change rather than a once and for all measurable outcome, and, finally, as challenging in terms of the development of global solidarity and justice.

When “translating” the definition of sustainable development into educational goals, the integration of environmental, social, economical and value dimensions is emphasised. In this sense, the way education for sustainable development is conceptualized in a similar way to peace education, education for democracy, values education, and citizenship education (Björneloo, 2007; Björneloo & Nyberg, 2007; Hägglund, 1996, 1999; Hägglund & Hill, 1999; Siraj-Blatchford, 2008; Wickenberg et al, 2004; Öhman, 2007). Taken together, this constitutes a field of educational research and practice with explicitly normative signatures, implying ideological and political criteria to direct educational policy and practice. This means that education for sustainable development is not only a matter of finding “subject-areas” for teaching and instruction, but also should integrate values related to democracy, solidarity and justice as necessary contributors to the survival of the earth and mankind. When, at the World Education Forum in Dakar 2000, more than 160 governments agreed upon a common framework for strategies to expand learning opportunities for all, this was a demonstration of the importance of education for global survival on fair conditions, in line with the core idea of sustainable development (UNESCO, 2008). In the recent report on the progress of the millennium goals, there is some optimism, but in general, a pessimistic tone dominates, it suggests that the goal that was set in 2000, education for all in 2015, will not be reached. The report is pointing at several reasons for this, among other things; “...failure of governments to tackle persistent inequalities based on income, gender, location, ethnicity, language, disability and other markers for disadvantage. Unless governments act to reduce disparities through effective policy reforms the EFA promise will be broken.” (ibid, p. 1).

The Dakar agreement suggests that education has an outstanding role to play to support the development of democracies, and to transform knowledge and values. The history of education also illustrates, however, that success in this matter is dependent on power and economical structures, more or less interrelated with colonialism (Davies, 2004). To a large extent, the idea of education as a tool for supporting economical and democratic development has been implemented in north-to-south, industrialized-to-non-industrialized or “enlightened” to “non-enlightened” directions. This model of transformation of

knowledge as a means to create a better world is now met by critical voices, arguing that there are reasons to re-define this one-directional model as the model for successful education (*ibid.*). There are at least two reasons for this model to be questioned.

The first is based on theoretical and empirical insights on the strong impact of contextual and situational dimensions in all kinds of learning. This has contributed to an understanding of education and transformation of knowledge rather as a socio-cultural project than a question of “exporting” knowledge from one culture to another (Vygotsky, 1986). A second reason concerns globalization and its implications. The extensive changes in social and cultural meanings of national borders, brought about by the shift from local to global economy, has revealed that other borders than the ones defined by nations are at work. When overpopulation, environmental damage, climate catastrophes, war and famine are no longer seen as uniquely caused by lack of knowledge among local populations, but linked to complex, global systems with extensive contributions from nations in the North Western hemisphere, then education as a solution to these problems accept some new challenges (Lauder et al, 2006). According to Lauder and others (*ibid*) one such challenge has to do with the fact that modern educational systems are closely integrated with global economy, directing education towards needs being born within systems nourished by global market ideologies. Without going into this analysis any deeper, we can note that one fundamental issue raised is the question whether “...education is in some sense separate and removed from society so that it can act on it as an independent force for progress” (*ibid*, p. 61). Referring to the western education system and its role in social segregation, the authors conclude that the existence of inequality and lack of recognition of difference is a severe impediment to this, but that

... inequality is not just a matter for education but for the structuring of the labour market and the welfare state, ... Without the appropriate economic and social conditions issues of social justice and democracy will not be settled. And, arguably, these are the necessary conditions for addressing the most fundamental problem of all, the sustainability of the planet (Lauder et al, p. 61-62).

In brief, the role of education is described here in terms of increasing inter-relationship with economic systems, thereby risking its independency and critical role in society.

Although not specifically directed towards early childhood education, this very brief over-view of education in a global perspective indicates some, as we see it, fundamental issues that need to be considered in creating a relevant basis for researching early childhood education and sustainable development. Bearing in mind its outstanding potential to contribute to global change on one hand, and its troubled relationship with globally established structures of injustice on the other, we will now enter early childhood education as a “specific case” of education. We will do so by taking a closer look at the Swedish preschool as an institution in the educational system, at pedagogical practices in early childhood

education, and at the preschool child as a learner with the right to be involved in issues that concerns her life here and now and in the future.

THE SWEDISH PRESCHOOL

A majority of Swedish children participate in preschool from their early years. Before the age of two, 84% of all children attain preschool. In the Swedish educational policy, the preschool is seen as a part of the education system, expected to be the first step on a life-long learning process. A national curriculum directing the educational agenda, and a university-based teacher training programme integrated with education for school teachers, are examples of changes that during the last decades have had impacts on the development of the Swedish preschool institution (SOU 1999:63). These changes can be traced to and are linked with changes in the Swedish family, the labour market, and to educational policies over the years (SOU 2000:3). In various ways the preschool has been used to strengthen political agendas in these areas rather than to support young children's learning. The overall object of preschool is however declared to be to support parents' needs of child care, contribute to equality between women and men, and to give all children opportunities to develop their intellectual and social abilities.

In the first official national curriculum for the Swedish preschool in 1998 sustainable development as such is not described as a particular goal (Ministry of Education and Sciences, 1998). However, its content explicitly refers to basic values which are relevant for sustainable development defined as above, including solidarity, tolerance, equality and justice. The establishment of a national curriculum, and the more recent increasing focus on university status of the pre-school teacher training has been interpreted as a political recognition of pre-school as being a full-worthy member of the educational system. However, has been pointed out that the relationship between institutions for early childhood education, other educational institutions, and society, in a historical perspective have not been stable, but have changed over time. For example, Vallberg Roth (2002) has shown how curricula, and discourses for young children's education have shifted during history according to views of the relation between men and women, children and adults, and the roles of religion and society. Historically, she suggests various curricula emphasising "time-typical" views of gender and authority, with a curriculum focused upon God, around 1850 to 1890 (with a patriarchal code), a curriculum of the Good Home, around 1890 to 1930/40 (a sex segregated code), a curriculum of the Welfare State, around 1950s to the middle of the 1980s (the gender-neutral equality code), and a curriculum of the Situated World Child, from the late 1980s up to today (a pluralistic, sex/gender code).

When it comes to a curriculum specifically directed towards sustainable development, such a curriculum is not available in Sweden or in the rest of the world. In fact education for sustainable development is hardly discussed as an

object, or as an act of learning (Pramling Samuelsson et al, 2008). The object of learning, that is, what children are supposed to learn in preschool is defined in the Swedish curriculum in terms of goals to strive for. This means that the directions that the teachers are supposed to focus children's interest towards, rather than the exact content that the children are to learn, is emphasised. With reference to what was earlier mentioned, that it is possible to link values as formulated in the Swedish national curriculum for the pre-school to the definition of sustainable development, one may argue that this is a way to integrate sustainable development into the agenda for pedagogical activities in the Swedish pre-schools. That is, to respond to the call for education for sustainable development as a vision, or a perspective rather than as a specific content.

In Sweden today, there are signals indicating a political re-orientation for the status and position of the pre-school in relation to the rest of the educational system. One line of change concerns an increasing number of institutions governed by interests other than the public ones. This goes for pre-schools as well as for compulsory and secondary schools. Critical voices have been raised warning for an increasing social and cultural segregation as a result. A second line of change concerns a suggested re-structuring of the organisation of professional training for teachers in early childhood education. According to a recently launched official report (SOU 2008:109), the period of training will be shorter and less integrated with school-teachers to be, compared to today's organisation.

Taken together, when considering the Swedish pre-school institution and education for sustainable development, we have pointed at some issues worth closer attention and reflection. The lack of a curriculum explicitly formulating goals directed towards sustainable development, changes in governing structures, and the expected re-organisation of teacher training may contribute to a less powerful position for the pre-school to support social justice and equality. These are complex issues and we realize that what have been introduced here can hardly be seen as a complete picture. However, in the light of education for sustainable development, we find it important to consider the status of the Swedish pre-school institution as an independent (and potentially critical) actor at the educational stage, something that currently may be at risk. However, even though external conditions are objects for change at the moment, this does not necessarily mean a change in the daily practice inside the institutions. We will now turn to some aspects of pedagogical practice in early childhood education with relevance for learning for sustainable development.

THE PRESCHOOL PEDAGOGY

The preschool was developed on other grounds and merits than the school, and is still run differently in most places in the world. The idea of young children's education in Sweden has in its origin strongly related to Fröbel and his views on

how to educate pre-school children (Fröbel, 1995). The idea of using the child's every day life as a frame of reference, formed a fundamental principle in his pedagogical theory. All activities performed at home, like kitchen work, sawing, working with wood work, gardening, etc. served as basic foundations for learning. This can be seen as a way of coming close to children's experiences and to what is familiar and well known for them (Sommer at al, in press). Learning should start from where the children are, according to Fröbel. He also knew that young children were different from older children and therefore he advocated a pedagogical approach based on play, learning and work. As he saw it, young children have to be active in body and mind in order to find interest in and respond to opportunities for learning.

The idea of transmitting knowledge to children, commonly practiced in school, has never been an issue in the preschool context. Even though practice can have different qualities and give each child various experiences, according to Wals, preschool pedagogy has its own tradition and qualities:

So let us return to kindergarten and explore why kindergartens offer more for moving towards a more sustainable world than many of our universities. Kindergarten ideally is or can be places where young children live and learn, explore boundaries, in a safe and transparent world without hidden agendas. Kindergartens are places where conflicts emerge everyday and used as a 'teachable' moment. Kindergartens today are multi-cultural places where kids with different backgrounds all come together and get to know each other as they are, not as they are portrayed by others'. Kindergartens are places where different generations meet and interact (children, parents and grandparents). //...// There are no dumb questions in kindergarten and there's always time for questions and questioning. The life-world of the child forms the starting point for learning and not disciplinary problems (Wals, 2006, p. 45).

Even though this description of pre-school transmits a somewhat idealised image, it carries some qualities, potentially efficient in learning for sustainable development. One important trait that is identified is the emphasis on regarding the child as a whole individual. This implies that care and learning have to be integrated as of equal importance (Pramling Samuelsson & Johansson, 2006). The balance between these approaches has been discussed by Halldén (2007). She argues that it is important to see the child as an independent agent, but she also underlines that this agency must be balanced by care provided by the adults and society. According to her there is a risk to loose aspects of care in our ambitions to teach and transmit knowledge to children. As we see it, care is an important aspect of all learning when it comes to young children. In the context of early childhood education for sustainable development it would be difficult not to include aspects of care as a necessary dimension in learning solidarity, democracy and rights.

Research has shown that preschool children's lives in Sweden are highly institutionalized. Also, it has been shown that daily life in pre-school constitutes an arena for developing and practising moral, ethical and social dimensions of relationships (Johansson, 2007, Löfdahl & Hägglund, 2006, 2007). This is an

important observation when discussing sustainable development as it has bearing on the recognition of social difference, a fundamental dimension in care and solidarity, core concepts in sustainable development.

Research on pre-school children and learning has shown that children learn through play as individuals, and that we should learn from this and integrate play and learning into a wholeness in goal directed preschools. Johansson and Pramling Samuelsson (2006, 2007) studied the opportunities that teachers' had to achieve this, and found that there were certain criteria that had to be met. There must be an oscillation between fantasy and reality, the positions of the teacher and the child have to be equal (both interested and curious), both teacher and child need to be actively involved, and there should be space for children's initiatives and ideas. Following this approach, the teacher regards the child as competent and willing to try to understand. Elkind (2007) suggests play, work and love as the three criteria for a new model of early childhood education. Although somewhat different from the one presented by Johansson and Pramling Samuelsson, there are similarities in the way play and learning are integrated.

There is a lot of knowledge in the world that is unknown for children. Working towards making the unknown visible to them means to create opportunities to discover the unknown in what they do and work with (Sommer et al, in press). This puts demands on the teachers to be aware of what the child's learning should be directed towards (Pramling Samuelsson & Kaga, 2008). On the other hand, there are also unknown phenomena for the teachers, particularly concerning the future. From a pedagogical perspective, this is a difficult challenge. One way to deal with this might be to try to identify what all children may benefit from in the future. Johansson (2007) suggests that courage, integrity, critical thinking and responsibility are necessary personal attributes in order to be prepared for an unknown future. Also, we would say, the ability to recognize injustice, and to discern when human rights are violated is needed.

A central question for teachers working systematically with education for sustainable development is to articulate goals in terms of ideas of sustainable development in their own minds and also be able to meet and challenge children's experiences and ideas (Pramling Samuelsson, 2005). This puts high demands on the pedagogical approach. An openness to diversity and to applying children's own ideas and experiences in fostering their awareness of meanings is likely to be successful (Pramling, 1996). Although there is a broad agreement on the fact that children's play is a most important aspect of learning, many teachers in the Western part of the world have not found ways to develop this into practice. The opposite is found, for example in many Chinese contexts, where teachers are engaged in children's play since they believe that this is the best way to influence children to learn what they intend (Pramling Samuelsson & Fler, 2008).

During the international workshop referred to above, recommendations for education for sustainable development were formulated (Pramling Samuelsson & Kaga, 2008). It was concluded that early childhood education carries traditions based on, among other things, thematic oriented instruction, authentic topics, and close relationships between teachers and children. Some problems were also articulated, first and foremost the fact that in a global perspective, not all children have access to preschool education and even where they do, many don't have the high quality educated teachers and safe and secure environments to learn. When it comes to education for sustainable development, it was suggested that teachers needed to develop and make concrete their ideas on what sustainable development might mean in young children's everyday life. During the workshop it was also suggested that there is a tendency among adults to image the future as a catastrophe, and to feel that they should protect children from information about the problems that lie ahead. As has been shown however, children develop concepts and make sense of difficult, abstract and dark phenomena such as war, famine and death, even if they have not concretely experienced it (Hong-Ju, 2006, Hakvoort & Hägglund, 2001).

In this section we have presented a summarized overview of some aspects of the pedagogical practice in preschool, aspects that we see as important in the perspective of education for sustainable development. We have pointed at traits in the fundamental ideas of learning and teaching in the preschool tradition, such as the integration of playing and learning, of care and learning and the necessary link between children's life experiences and learning. We have considered the new directions that are being taken in Swedish educational policy in general and early childhood education in particular. In a recent national evaluation of the Swedish pre-school, it was concluded that the planning, conduct and evaluation of pedagogical activities tend to be more and more "school like", with a greater emphasis being placed on intellectual achievement and the grading of each child's development (Skolverket, 2008). Since a fundamental pedagogical challenge in early childhood education is to find approaches allowing for combining the traditional school subjects, and in transforming and practicing values, the object of learning in early childhood education for sustainable development needs to be articulated as an inclusive, experience based matter rather than as a narrow, abstract piece of measurable knowledge.

THE CHILD AND LEARNING FOR SUSTAINABLE DEVELOPMENT

A final focus in our discussion concerns the child's involvement in education for sustainable development. One of the unquestionable demands is that the acquired insights and knowledge are sustainable, i.e. they must survive time and space. This means not only long lasting knowledge for each child, but also that the content in what is learned makes the child aware that time and place are changing entities. Such an approach does not only provide foundations for

education for sustainable development, but it is also a way to create a sense of connection and belonging for the child. Such a sense of connection, of being part of something that stretches further than one's own person, may be considered an important prerequisite in learning for sustainable development.

This way of looking at the child in a wider context challenges traditional models of development and learning, where the child is regarded as not-yet-grown-up, as someone not yet complete as a human being. According to Lee (2005), the concept of separation as it has been used and understood in research on children and their development, needs to be more closely examined and questioned. One of his arguments for this is that if parents and teachers are striving for the child to reach independence and have the ability to separate from other people, they may create an individual who is unable to connect and relate to other human beings. Instead of trying to foster the ability to separate from others (i.e. to stress individualistic norms), Lee argues for 'separability', that is, an ability to both separate and connected in relation to other people. If this ability to meet other people as both dependent and independent is encouraged, the value of dependency and attachment is also recognized: "If all separateness rests on separability, then everyone, adult and child, no matter how effective their performance of separateness is in gathering value to themselves, is always attached, connected and dependent" (Lee, 2005, p. 156).

We think that the ability to act independently and to recognize dependency in relation to other human beings is a core issue in learning for sustainable development. This way of understanding the fundamental condition of humanity corresponds to what has sometimes been referred to as an inbuilt tension in the UN Convention on the Rights of the Child (UN Publications, 2009). The Convention articulates both the child's right to be protected and her/his right to participate, both the right to be dependent and to be independent. Compared to the general Declaration of Human Rights, the Convention opts for a right holder who is not only able to separate from others but who is also allowed and able to ask for support and protection from others.

When discussing the issue of connectedness and belonging, it is also well worth underlining the content in article 12 in the Convention on the Rights of the Child, according to which the child has the right to have a say and to be heard in questions that will have consequences for her/him. Sustainable development truly belongs to those issues that will have consequences for the life of the next generation and beyond. Therefore it is logical to argue that children should be involved in these matters. However, such an ambition demands careful planning and reflection in order to meet the necessary balance between the child's right to be protected and to act independently, as discussed above. It also demands a thorough examination of what kind of experiences in children's present life are likely to have long-lasting bearing on future competence to contribute to sustainability. In a recently conducted study on children's social learning in pre-school settings we found that the collective

social knowledge such as rules for social inclusion, and views on what kind of resources (age, gender, ethnicity) have social value, were to a large extent developed by the children without much involvement from adults (Löfdahl & Hägglund, 2006, 2007). If this observation holds, there are reasons to consider children's experiences of social justice and equity in informal situations in pre-school. One may argue that if this primarily is a matter of child-child interaction it means a kind of situated social knowledge, developed in a context separated from adult guidance and control.

Our image of the child as a learner for sustainable development is a person with the ability to comprehend complex and difficult truths about life, today and tomorrow. This child holds rights and a kind of citizenship which recognizes her/him as someone who can demand serious efforts from responsible adults and institutions to create effective contexts for learning about premises for sustainability.

CONCLUDING COMMENT

In this article we have discussed a range of issues involved in early childhood education for sustainable development. We have considered the fact that early childhood education belongs to the larger education system and therefore is a target for global political and economical forces which may jeopardize its possibilities to act independently in forming and conducting education for sustainability. We have pointed at some recent changes in Swedish educational policy which probably will influence conditions for life in pre-school, and we also commented some characteristic traits in pre-school pedagogy, traits that we find important to develop and articulate in education for sustainable development. Finally, we pictured a child who we expect to be prepared for learning about sustainability. Included in this child's learning is an awareness of a life long responsibility and a conviction that working for a sustainable world demands co-operation between human beings across borders of time and space. We have not argued that this is an easy pedagogical task, but hopefully we have encouraged further discussion and reflection.

REFERENCES

- Björneloo, I. (2007). *Innebörder av hållbar utveckling*. [Meanings of Sustainable Development. A study of teachers' statements on their education.] En studie av lärares utsagor om undervisning. Göteborg: Acta Universitatis Gothoburgensis. Diss.
- Björneloo, I. & Nyberg, E. (2007). (Eds.), *Drivers and barriers for implementing learning for sustainable development in pre-school through upper secondary and teacher education. Education for Sustainable Development in Action*. Technical paper N 4, 2007. UNESCO Education Sector.

- Davies, L. (2004). *Education and conflict. Complexity and chaos*. London: Routledge Falmer.
- Elkind, D. (2007). *The power of play*. Cambridge: Da Capo Lifelong Books.
- Fröbel, F. (1995). *Människans fostran*. Lund: Studentlitteratur.
- Hakvoort, I. & Hägglund, S. (2001). Peace and war described by seven-to-seventeen-year-old Dutch and Swedish girls and boys. *Peace and Conflict. Journal of Peace Psychology*, 7(1), 29-44.
- Halldén, G. (2007). *Den moderna barndomen och barns vardagsliv*. [Modern childhood and children's everyday life.] Stockholm: Carlssons.
- Hong-Ju. (2006). Teaching and Learning about the Concept of "nation" in Preschool Classroom. *International Journal of Early Childhood Education. The Korean Society for Early Childhood Education*, 12(2), 129-150.
- Hägglund, S. (1996). Developing concepts of peace and war: Aspects of gender and culture. *The Peabody Journal of Education*, 71(3), 29-41.
- Hägglund, S. (1999). Peer-relationships and children's understanding of peace: A socio-cultural perspective. In A. Raviv, L. Oppenheimer & D. Bar-Tal (Eds.), *Children's and adolescents' understanding of war, conflict and peace: International perspectives* (pp. 190-208). San Francisco: Jossey Bass.
- Hägglund, S. & Hill, M. (1999) Education for democracy in a European context. In A. Perucca & J. Calleja (Eds.), *Peace education, context and values* (111-135). Lecce: Pensa Multimedia Lecce.
- Johansson, E. (2007). *Etiska överenskommelser i förskolebarns världar*. [Ethical agreements in preschool children's worlds, in Swedish.] Acta universitatis Gothoburgensis. Göteborg Studies in Educational Sciences 251. Göteborg: Göteborgs universitet.
- Johansson, E., & Pramling Samuelsson, I. (2006). Play and learning – inseparable dimensions in preschool practice. *Early Childhood Development and Care*, 176(1), 47-65.
- Johansson, E. & Pramling Samuelsson, I. (2006). *Lek och läroplan. Möten mellan barn och lärare i förskola och skola*. [Play and curriculum: Encounters between children and teachers in preschool and school.] Göteborg: Acta Universitatis Gothoburgensis.
- Johansson, E. & Pramling Samuelsson, I. (2007). *Att lära är nästan som att leka. Lek och lärande i förskola och skola*. [Learning is almost as playing. Play and learning in preschool and school.] Stockholm: Liber.
- Lauder, H., Brown, P., Dillabough, J.-A., & Halsey, A. H. (2006). Introduction: The prospects for education. Individualization, globalization and social change. In H. Lauder, P. Brown, J.-A. Dillabough, & A. H. Halsey (Eds.), *Education, globalization and social change* (pp. 1-70). Oxford: University Press.
- Lee, N. (2005). *Childhood and human value. Development, separation and separability*. London: Open University Press.

- Löfdahl, A. & Hägglund, S. (2006). Power and participation. Social representations among children in pre-school. *Social Psychology in Education*, 9, 179-194.
- Löfdahl, A. & Hägglund, S. (2007). Spaces of participation in preschool. Arenas for establishing power orders. *Children and Society*, 231, 328-338.
- Ministry of Education and Science in Sweden (1998). *Curriculum for pre-school. Lpfö 98*. Stockholm: Fritzes (www.skolverket.se).
- Pramling, I. (1996). Understanding and Empowering the Child as a Learner. In D. Olson & N. Torrance (Eds.), *Handbook of Education and Human Development: New Models of learning, teaching and schooling* (pp. 565-592). Oxford: Basil Blackwell.
- Pramling Samuelsson, I. (2005). Can play and learning be integrated in a goal-orientated preschool? *Early Childhood Practice: The Journal for Multi-Professional Partnerships*. Spring. www.earlychildhoodpractice.net 7(1).
- Pramling Samuelsson, I. & Kaga, Y. (Eds.) (2008). *The Contribution of Early Childhood Education to Sustainable Society*. Paris: UNESCO
- Pramling Samuelsson, I. & Fler, M. (Eds.) (2008). *Play and learning in Early Childhood Settings: International perspectives*. New York: Springer Verlag.
- Pramling Samuelsson, I., Asplund-Carlsson, M., Olsson, B., Pramling, N. & Wallerstedt, C. (2008). *Konsten att lära barn estetik*. [The art of teaching children aesthetics.] Stockholm: Nordstedts Akademiska Förlag.
- Siraj-Blachford, J. (2008). The implications of early understanding of inequality, science and technology for the development of sustainable societies. In I. Pramling Samuelsson & Y. Kaga (Eds.), *The Contribution of Early Childhood Education to a Sustainable Society* (pp. 67-71). Paris: UNESCO.
- Skolverket (2008). *Tio år efter förskolereformen. Nationell utvärdering av förskolan*. [Ten years after the preschool reform. National evaluation of preschool.] Stockholm: Skolverket, Rapport 318.
- Sommer, D., Pramling Samuelsson, I. & Hundheide, K. (in press). Child perspectives and children's perspectives in theory and practice. New York: Springer.
- SOU (1999:63). *Att lära och leda. En lärarutbildning för samverkan och utveckling*. [Teaching and guiding. A teacher education for interplay and development.] Lärarutbildningskommitténs slutbetänkande. Stockholm, Utbildningsdepartementet.
- SOU (2000:3). *Välfärd vid vägskäl. Utveckling under 1990-talet. Delbetänkande. Kommittén Välfärdsbokslut*. [Welfare at cross-roads. Development during the 90's.] Stockholm, Fritzes.
- SOU (2004:104). *Att lära för hållbar utveckling. Betänkande av kommittén för hållbar utveckling*. [Learning for sustainable development.] Stockholm: Utbildningsdepartementet.
- SOU (2008:109). *En hållbar lärarutbildning. Betänkande av Utredningen om den nya lärarutbildning (HUT 07)*. [A sustainable teacher education.] Stockholm:Fritzes.

- UNECE (2005). Draft for UNECE Strategy for Education for Sustainable Development. Swedish version. Strategi för hållbar utveckling. Stockholm: Regeringskansliet. Utbildnings- och kulturdepartementet. www.unece.org/env/esd/strategytext/strategiSwedish.pdf
- UNESCO (2004). *United Nations Decade of Education for Sustainable Development. Framework for a draft international implementation scheme*. Draft document. October 2004.
- UNESCO (2008). *EFA Monitoring Report 2009. Education For All. Overcoming inequality: Why governance matters*. Oxford: Oxford University press.
- UN Publications, <http://www.un.org/publications> (090212).
- Vallberg Roth, A.-C. (2002). *De yngre barnens läroplanshistoria*. [The young children's curriculum history.] Lund: Liber.
- Vygotsky, L. (1986). *Thought and language*. Boston, MA: MIT Press.
- Wals, A. (2006). The end of ESD... the beginning of transformative learning – emphasizing the E in ESD. Paper presented at the Gotenburg Consultation on Sustainability in Higher Education.
- WCED (1987). *Our Common Future. A report from the United Nations World Commission on Environment and Development*. Oxford: Oxford University Press.
- Wickenberg, P., Axelsson, H., Fritzén, L., Helldén, G., & Ödman, J. (2004). *Learning to change our world? Swedish research on education and sustainable development*. Lund: Studentlitteratur.
- Öhman, J. (2007). The ethical dimension of ESD – Navigating between pitfalls of indoctrination and relativism. In I. Björneloo & E. Nyberg (Eds.), *Drivers and barriers for implementing learning for sustainable development in pre-school through upper secondary and teacher education. Education for Sustainable Development in Action*. Technical paper N 4, 2007. UNESCO Education Sector.

Correspondence about this paper should be addressed to:

Solveig Hägglund
Faculty of Arts and Education
Karlstad University
651 88 Karlstad
Sweden
solveig.hagglund@kau.se