

Preschool teachers' view on learning in preschool in Sweden and Denmark

Broström, S., Frøkjær, T, Johansson, I., and Sandberg, A.

European Early Childhood Education Research Journal Fall 2012 (in press).

Introduction

In Denmark and Sweden, preschool is the first step in, and an integrated part of the formal education system. The aims and principles for children's learning are formulated in national curriculum documents: the Swedish "Läroplan för förskolan, Lpfö 98" (Ministry of Education and Science 2010), and the Danish "Pædagogiske læreplaner" [Act on Educational Curriculum] (Ministry of Social Affairs 2004). It is the responsibility of the head of each preschool and the teachers to apply and transform the principles into educational practice.

Both the Swedish and Danish curricula are based on broad definitions of learning. Learning is seen as being integrated with care and upbringing, consideration of the child's well-being, and a foundation for a lifelong learning. Thus, learning is related to children's everyday life and their relationships with other children and adults. Play is emphasized in both curricula and children are actively involved in their own learning processes, and preschool teachers inspire children to explore the surrounding world. Parents' participation in their children's learning is valued.

In Denmark the concept of 'learning' was implemented in the Social Service Act in 1998 and in a more powerful version in 2004 through the Act on Educational Curriculum (Ministry of Social Affairs 2004). In Sweden the concept of 'learning' was given a significant role in Curriculum for the Preschool, Lpfö 98 (Ministry of Education and Science 2010). The concept was used in a number of studies founded by the Danish Ministry and Social Affairs (Nørgaard et al. 2003; Bjørg et al. 2003; Herskind et al. 2005), and also in Sweden (Johansson and Sandberg 2010). Researchers from Malmö University have conducted a meta-analysis of children's learning (National Agency for Education 2010).

Theoretical background

According to Dewey (1960), experiences for learning occur through the children's interactions with people and the surrounding world. Experiences do not occur in isolation but are the result of actions - interactions - performed on the basis of previous experiences, which are the result of other actions etc., in a process which Dewey calls the "continuity of experiences". Correspondingly, Leontiev (1978) emphasizes the learner's own activity, participation and interaction with other people. Through this process, the child appropriates or internalises the culture in which they live, in other words, they learn.

Appropriation of culture is not possible for a child in isolation. Vygotsky (1978) suggests that the transformation or internalisation of experiences will only succeed through social interaction with other people. Since the human mind originates through social interaction in a specific culture, the preschool teacher must pay attention to the interaction between teacher and child, and also ensure that social situations occur in which children can construct meaning and individual cognitive development can take place. Rogoff (1990, 1993) argues that one important form of interaction is 'guided participation', which results in children's cognitive learning and development. In guided participation, adult and child/children share an activity and the process is active and mutual for each participant (Rogoff 1993). However the transformation from the external to the internal does not happen automatically and the concepts may not be understood literally. Vygotsky states that "[e]very function in the child's cultural development appears twice: first on the social level, and later on the individual level; first between people (interpsychological), and then inside (intrapsychological)" (Vygotsky, 1978, 57). However, this process is individual, it has many detours, and with Vygotsky's words, it [i]s the result of a long series of developmental processes" (Vygotsky, 1998, 57). That means this notion cannot pave the way for make education effective. Rogoff's interpretation is that the adult leads the child in accordance with the child's perspective. If an adult takes too much responsibility, the child's own initiative, motive and interest may be overlooked. The aim is to establish a shared and joint interaction, to emphasize the mutual complementarity; in short, to set up an activity and relationship characterized by dialogue and *intersubjectivity*.

The American scholar James Wertsch (1985) illustrates the concept of intersubjectivity in an analysis of a dialogue between a mother and child who were doing a puzzle together.

Although the mother adjusted her communication to the child's capacity to learn, she also challenged the child. Thus intersubjectivity is not only a symmetrical dialogue (Wertsch 1998; Rogoff 1990). Inspired by Bakhtin (1981), Wertsch (1985) suggests that intersubjectivity reaches a new quality when there are diverse meanings, when the dialogue contains 'voices in conflict'.

Thus preschool teachers play an active role in children's learning processes through the establishment of an active learning environment. The preschool teacher has to challenge the child in an individual and specific way. In Vygotsky's words, a zone of proximal development occurs when "learning awakes a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with peers" (Vygotsky 1978, 90). However, there is a risk of simplification in using the idea as a mechanical instrument. Holzman (1997) warns us by saying the zone of proximal development is not at all a 'zone' but a 'life space', which human beings are involved in, and through which higher mental functions arise and develop. That means the child himself, the parents, siblings, elder friends and the preschool teachers must be seen as influential dimensions. Cole and Griffin (1984), Engeström (1987) and Stetsenko (1999) also warn against regarding the ZPD as a merely mechanical tool for the appropriation of existing knowledge. However in general learning arises via social interaction and when the preschool teacher supports the child through "guided participation" (Rogoff 1990), and acts as a scaffold (Bruner 1985). These theoretical perspectives, especially Vygotsky can be applied to the preschool setting. This means that the content of the preschool is dynamic and includes a lot of learning relationships. More related to the zone of proximal development it also holds an idea of a supporting challenge of children.

A study by Johansson and Sandberg (2010) shows most preschool teachers and preschool student teachers consider that children learn by seeing how other children act, and support a group-oriented approach in which children's interactions are given great freedom. In contrast, 73% of preschool teachers and fewer preschool student teachers believed that children learn through challenges. This reflects Vygotsky's theory of a zone of proximal development where children's abilities are challenged to stimulate learning in relation to children's current level of knowledge and skills. Results from Swedish research (Williams 2001) also show that interactive situations constantly arise between children. The primary goal for the children is to acquire specific knowledge and skills, which lead to knowledge of how to be a participant in the existing peer culture. Children are eager to learn from each other in the preschool through play and in recurrent everyday activities. Children explore and learn from active interaction with the surroundings (Pramling Samuelsson, Sommer and Hundeide 2011). This puts specific demands on the preschool teacher: to guide children's interests to specific learning

tasks, and also to stimulate and relate to children's innate interest for learning. Thus the teacher needs to create a stimulating learning setting that encompasses the whole preschool environment or 'rooms for learning' which inspire active experiences and participation (Björklid 2005).

What is the role of participation? The concept of participation is complex and difficult to explain *in an unambitious way*, different researchers have different definitions. In this study, we have assumed some Swedish researchers' previous studies of participation. These definitions relates and are interpreted in terms to the utterances of the preschool teachers in this empirical study about participation related to children's learning in preschool. In a study by Sandberg and Eriksson (2010), Swedish preschool staff defines participation as the ability to influence. Preschool staff tends to suggest that children are participating when they perform an activity or actively take part in decision-making. Communication and the notion that a child's intentions are being interpreted as well as manifested are seen as considerable parts of participation. In addition, the staff believed that children's communication is their main opportunity for influencing decisions in their daily activities. Sheridan and Pramling Samuelsson (2001) opinion that children's participation is about interpreting children's intentions and actions and to have trust, even expectations, that a child can handle and manage things with the right support and guidance from adults. In a study by Johansson and Sandberg (2010) there preschool teachers and preschool teacher students participated. In comparison, the older preschool teachers and those with more experience, in contrast to the students, tended to emphasize that participation is about listening to others, feeling respect and being part of the group. The students tended to emphasize that participation is about listening to others, feeling respect and being part of the group, to a higher extent than the older preschool teachers and those with more experience,

There is little or no research with a comparative analysis about how Danish and Swedish preschool teachers understand learning and the conditions that support learning in preschool. This study was therefore designed to examine and compare the views of preschool teachers in Sweden and Denmark about how children learn and the conditions that support learning.

Method

To identify teachers views about how children learn in preschool, a questionnaire was developed under four main questions: What is learning? How do children learn? What are the

best conditions for children's learning? How do preschool teachers understand participation related to children's learning in preschool? Each question had a set of 6 to 10 predefined response options and participant teachers had the opportunity to also write personal comments. Response options reflected the educational aims and principles expressed in the preschool curricula of Sweden and Denmark as well as aspects of the educational work discussed in the literature review above. Teachers were asked to rank the importance of each of the response options using a scale of 1 to 4 (1=most important; 4=least important).

The content of the items were inspired by the theoretical perspective mentioned above.

Teachers were also asked to supply background information including the age of children they were working with, the year they completed their education, plus years of work experience.

The Swedish sample involved a cluster selection, and the Danish sample was identified using stratified sampling. The Swedish questionnaire was given to 78 preschool teachers in and around the area of Stockholm. Sixty eight questionnaires were completed with a response rank of 87%. The Danish questionnaire was disseminated to all preschools in 13 municipalities in Denmark, a total of 2,708 preschool teachers, of which 1,340 questionnaires were returned, a response rank of 48%. The sample size is sufficient for the survey to be representative in the participant countries (Krejscie and Morgan 1970; Cohen, Manion, and Morrison 2000).

Ethical aspects of the research were taken into consideration, i.e. requirements for confidentiality, consent, information and autonomy, and highlighting that participation in the study was voluntary (Humanistic Social Science Research Council 2002; Statens Samfundsvidenskabelige Forskningsråd 2002).

Analysis

To identify and compare the views of preschool teachers in Sweden and in Denmark, analyses of item responses that teachers ranked as most important for each question were summed, tabulated and compared. To identify the relationships between responses across and between questions, simple Pearson correlation analyses were conducted

Results

Characteristics of the respondents

Preschool teachers were asked to indicate the year they completed their university degree, years of work experiences and the age of children they worked with. Predominantly, Swedish preschool teachers completed their education during the 1990s and about one third had completed their education 20 or more years ago. Preschool teachers were predominantly educated in the 1990s. The Danish preschool teachers had generally completed their education more recently with almost half the group completing it after 2000. Overall, Danish teachers had fewer years teaching experience (less than 10 years) than Swedish teachers.

The dispersion within the group of respondents in relation to the ages of children they worked with; 1-5 years, 1-3 years or 3-5 years, were rather evenly distributed in both Denmark and Sweden.

Situations that characterise learning

Situations that teachers in both countries ranked as most important for children's learning were: those that contribute to children's social competences, situations that build on children's own initiatives and free play (see Table 1). Creative activities, circle time and activities that involve reading and writing were less frequently ranked highly.

While Swedish and Danish preschool teachers' evaluation of situations which characterize learning were very similar, free play and play where children and adults participate together were more valued by Swedish preschool teachers than by the Danish teachers.

Table 1: *Rankings by Swedish and Danish preschool teachers of situations that characterise learning in preschool*

<i>Activity</i>	Sweden	Denmark
	<i>Rank 1 (%)</i>	<i>Rank 1 (%)</i>
Situations which contributes to children's social development	76	84
Situations which build on children's own initiatives	63	56
Free play	58	45
Play where children and adults participate together	49	41
Conflicts in everyday life which children try to solve on their own	40	45
Creative activities - both indoors and outdoors	33	31
Circle time	31	26
Activities to develop reading and writing	24	19

Responses for each situation were differentiated in relation to the years in which teachers completed their education. The Swedish preschool teachers who graduated in 1979 or earlier generally ranked situations that contribute to children's social development, free play, and conflicts in everyday life which children try to solve on their own more highly than other situations. Those who graduated between 1980-1989 ranked creative activities¹, circle time and play where children and adults participate together more highly. Those who were educated most recently (2000 or later) were more likely to give a high ranking to situations which build on children's own initiatives. It may be that the view of the preschool teachers who graduated in the 1980s is influenced by the 1970s view on education i.e. dialogue and focus on developmental perspective. Active interaction between children and adults are preferred by those who were educated in the 1980s. Children's independence and own initiative is most important for those with most recent education.

Unlike in Sweden, there is no appreciable difference between the Danish preschool teachers who were educated in each of the four mentioned periods.

Comparisons of Sweden and Denmark correlations between rankings of situations that characterize learning

A comparison of correlation analyses between rankings of situations that characterise learning for the two countries shows some similarities. For example, between rankings of free play and rankings of conflicts in everyday situations which children try to solve on their own. Analyses for the Danish sample showed that free play and situations that build on children's self initiative are closely correlated with learning to solve conflicts by themselves (based on preschool teachers' interpretation). The results from the Swedish survey showed significant relationships between teacher rankings of creative activities such as painting, music and situations which contribute to children's social development. Goal-oriented activities with a focus on reading and writing were correlated to learning in creative situations that support development of social competences. This may mean that preschool teachers who work with reading and writing integrate these activities in creative activities where children's social competences can develop. Those who believed that learning first of all happens in situations where children solve problems by themselves in everyday life were more likely to also rank learning in activities which build on children's own initiative as most important.

¹ In the questionnaire the term creative activity was exemplified as painting, music etc.

How do children learn?

From Table 2 it can be seen that playing with other children was most frequently ranked as a most important circumstance for children's learning in preschool in both countries. While seeing what other children do and say was ranked as a most important circumstance for learning by 64% of teachers in both Sweden and Denmark, a slightly higher percentage (67%) of Danish teachers ranked the child being absorbed in something as a most important circumstance. From Table 2 it can be seen that the order of the frequency of rankings of 'most important' also varied for a number of other circumstances: seeing what adults do and say; participating in activities with adults, and; the child becoming absorbed in something. The child being left in peace and quiet, and adults explaining and showing children received the least rankings of 'most important' in both countries.

Table 2: Percentages of Swedish and Danish preschool teachers' rankings of most important circumstances for children's learning in preschool.

<i>Children learn by...</i>	Sweden	Denmark
	<i>Rank 1</i>	<i>Rank 1</i>
Playing together with other children	85	73
Seeing what other children do and say	64	64
Seeing what adult do and say	58	49
Taking initiatives to activities	55	52
Participating in activities together with adults	53	41
Participating in different activities in everyday life of preschool	51	49
Being challenged by the adults	45	47
Becoming absorbed in something	44	67
Being allowed to be in peace and quiet	32	28
The adults' instruction (explain and show)	28	26

A possible explanation for why Danish preschool teachers focus more on children's absorption (67%) might be that the term 'absorption' has been used in the Danish curriculum from 2004. A review of a number of Danish preschool curricula shows, that the term absorption is used very frequently, but not in the Swedish curriculum documents.

Differentiation of rankings of circumstances that support children's learning in preschool by decade when teachers completed their education

Rankings for circumstances that support children's learning in preschool were differentiated according to the decade teachers completed their education. Results for Swedish teachers suggested those who completed their professional education before the 1980s were more likely to rank the statement: children learn when they are allowed to be in peace and quiet as

most important. Those educated during the 1980s more frequently believed that participating in different activities, situations which build on children's initiatives and when adults explain and show were most important circumstances for learning. The preschool teachers who graduated in 2000 or later were more likely to rank seeing what adults do and say, playing together with other children, being challenged by the adults, the child becoming absorbed in something and participating in activities together with adults as most important circumstances for learning.

The notion that children learn most effectively when they are allowed to be in peace and quiet might be related to a focus on theories of maturation which were a central part of the preschool teacher education prior to the 1980s. However, during the 1980s the active interaction between children and adults became the ideal. Teachers who were educated more recently have other values. This can be interpreted as a more developed interest on the active role of preschool teachers in children's learning.

Regardless of the period when they completed their education, Danish preschool teachers consistently ranked playing together with other children and the child becoming absorbed in something as most important circumstances for learning. Preschool teachers educated in the 1990s also emphasized creative activities. Similar to teachers responses to situations that characterise learning, rankings of items involving adults and children (being challenged by the adults, participating in activities together with adults, and seeing what adults do and say) were ranked much lower by the most recently educated ranking preschool teachers ranking. Thus we see with the Danish teachers, a movement away from an emphasis on child-adult relations. This might be a result of changes in legislation, changes in education and in educational practice.

Comparisons of Sweden and Denmark correlations between circumstances that is important for children's learning in preschool

A comparison of correlation analyses between the two countries revealed some differences. While there was a relationship between rankings of children being absorbed in something and seeing what adults do and say for Swedish preschool teachers, this was not the case for the Danish preschool teachers – for whom there was a significant relationship between rankings of children taking initiative and participating in activities with adults mean the space for

children’s own initiative in the company of adults, who challenge the children through active participation.

The Swedish survey shows a correlation between being challenged by adults and children’s own initiative. To be in peace and quiet is connected with being absorbed in something and also to see what adults say and do.

What are the optimal conditions for children’s learning in preschool?

In comparing responses of teachers for items related to optimal conditions for children’s learning summarised in Table 3, it can be seen that while the order is inconsistent, the four conditions most frequently ranked highly are consistent across countries, as are the three conditions least frequently ranked as most important.

We see a similar pattern of responses among Danish preschool teachers as in previous questions, with Danish teachers appearing to place more importance compared with Swedish teachers, on conditions involving adults and in this case: experiencing respect and security from adults, and preschool teachers creating conditions for children’s well-being. However, while Swedish preschool teachers tended (more than Danish preschool teachers) to emphasize the importance of children meeting challenges adjusted to their level of development they also recognised the role of the preschool teachers in providing respect and security, interacting with children and creating conditions for their well-being.

Table 3: Percentages of Swedish and Danish preschool teachers’ rankings of most important conditions for children’s learning.

	Sweden	Denmark
<i>Important preconditions for learning</i>	<i>Rank 1</i>	<i>Rank 1</i>
The children meet challenges adjusted to their level of development	80	65
Children experience respect and security from adults	76	85
Preschool teachers interact with children and support them	70	60
Preschool teachers create conditions for children’s well-being	67	71
Good collaboration with parents	42	33
Children’s own choices without adult intervention	34	15
Children get many experiences	32	34

In differentiating rankings of optimal conditions by the decade teachers completed their education Swedish teachers who were educated in the 1980s emphasized the importance of children meeting challenges adjusted to their level of development, and preschool teachers interacting with children and supporting them. Those teachers educated from 2000 onwards emphasized children experiencing, respect and security from adults, preschool teachers creating conditions for children's well-being, and children's own choices without adult intervention as conditions for learning. For Danish preschool teachers there was no appreciable difference in the responses of teachers who completed their education in different decades. They generally emphasised that most important conditions for learning occur when children experience respect and security from adults, when preschool teachers create conditions for children's well-being, and children meet challenges adjusted to their level of development.

Comparisons of correlations between optimal conditions for children's learning in preschool
Correlations between rankings of items that provide optimal conditions for children's learning for the Swedish sample showed significant relationships between children's own choice of activities without adult intervention is teachers creating conditions for children's well-being and children experiencing respect and security from adults. Other significant relationships were revealed between rankings of good collaboration with parents and teachers creating conditions for children's well-being, and also between children meeting challenges adjusted to their development and children having many experiences.

In relation to the rankings of items by Danish teachers there was a significant relationship between preschool teachers interacting with children and supporting them and teachers creating conditions for children's well-being. Furthermore, a significant relationship, similar to that for the Swedish sample, was found between children experiencing respect and security from adults and good collaboration with parents. The latter condition was also associated with children experiencing choice without adult interference and having many experiences.

Interpretations of participation

Teachers' interpretations of the word participation in relation to preschool education were similar between the two groups of participants as can be seen from Table 4². The only

² The items (concepts) listed in Table 4 are theoretical reflected in the part 'Theoretical background'.

variation in the frequency of items ranked most important involved the first two, with preschool teachers allowing children to make independent choices ranked most important by a greater percentage of Swedish preschool teachers, and, to be part of a group being ranked most important by a greater percentage of Danish teachers.

While the first three items listed in Table 4 were ranked highly by a similar percentage of Swedish teachers (between 71% and 78%), there was a notable difference in the percentage of responses for the first (81%) and following two items (66%) for Danish teachers. Percentage response rates were similar between the two samples for the final four items in the table.

Table 4: *Percentages of Swedish and Danish preschool teachers' interpretation of the word participation*

<i>Participation means</i>	Sweden	Denmark
	<i>Rank1</i>	<i>Rank1</i>
The preschool teachers allow children to make independent choices	78	66
To be a part of a group	74	81
That the preschool teachers listen to children and understand their way of thinking	71	66
That the preschool teachers encourage children to make their own decisions	58	55
To have influence on what happens	52	51
To be involved in current activities	43	45
To listen	34	37

In differentiating interpretations of the word ‘participation’ based on when teachers completed their education, there were notable differences for Swedish teachers. Those who completed their education prior to 1980 were more likely to rank ‘to be involved in current activities’, the preschool teachers encourages children to make their own decisions, and the preschool teachers allows children to make independent choices as most important definitions. Preschool teachers who were educated in the 1980s were more likely to rank to listen to children and to understand their thoughts as a most important definition. For those teachers educated in the 2000s participation was more frequently emphasised as to be a part of a group and to have influence on what happens. Again, the decade of completion of education did not differentiate the interpretations by Danish preschool teachers’ of participation. They most frequently emphasised its definition based on three aspects: to be a part of a group; that the preschool teachers listen to children and understand their thoughts, and: the preschool teachers allow children to make independent choices.

Comparisons of Sweden and Denmark correlations between interpretations of participation

A comparison of correlation analyses between rankings of definitions related to participation for the two countries showed some differences. The Swedish analysis showed that a high ranking of listening to children was associated with the definition to have an influence on what happens. For the Danish teachers, there was a significant association between preschool teachers listen to the children and understand their way of thinking and preschool teachers encourage children to make their own decisions.

Conclusion

Preschool teachers' evaluation in relation to time of graduation

The group of participating preschool teachers completed their education at different times. Some graduated in the 1970s, when the 'dialogue education'³ was very popular in Sweden. New preschool acts were introduced in Denmark in 1998 and 2004 and new Curriculum for preschool in Sweden 1998, 2006 and 2010, and the term 'learning' came to the force. The curriculum is inspired of Vygotsky's theory. The meaning given of preschool teachers in Sweden and Denmark about how children learn and the conditions that support learning can therefore be related to Vygotsky's theory. This means that the goals and principles for the work in preschool very much focuses on the activities and stimulation formed in interactions. These changes in preschool teacher training and the pedagogical content of the profession can, be related to continuous socio-political changes and partly explain these differences in preschool teachers' attitude to learning and participation. Even in a study by Sheridan et al. (2011) shown that these changes influence preschool practice, conditions for teachers' pedagogical work and children's learning.

Learning in a preschool teachers' perspective

Free play and children's self-directed activities are vital parts of the children's learning process. In both preschool and the surrounding world, learning is connected to the ability to handle tricky situations in the social network and to develop the competence to solve conflicts. Learning increases the child's independence. Learning is among other things

³ 'Dialogue education' is a dialogue between Jean Piaget's cognitive approach and Erik Erikson's psychoanalytic approach plus a subject-subject relation between child and preschool teacher inspired by Paulo Freire's 'dialogue' concept.

facilitated by role models in the surrounding world. Learning is also situated and thus depended on the content and nature of the situation where learning takes place and where the knowledge is applied (Lave and Wenger 2005). According to Norwegian preschool researchers such a view is in general accepted among Norwegian preschool teachers (Bae 2009; Østrem 2008).

The similarities between Danish and Swedish preschool teachers' responses are striking. This suggests a similarity in preschool pedagogy and practice between the two countries.

However, some differences are present. In Sweden, preschool teachers tend to consider the adult's role in children's learning very important. This is in accordance with Johansson and Sandberg's study from 2010, in which both Swedish preschool teachers and preschool student teacher reported that the preschool teachers should actively lead processes that encourage learning. Swedish preschool teachers place *put* greater emphasis on vertical relations than their Danish counterparts, and more emphasis on the importance of the child-adult relationship. Danish preschool teachers focus more the horizontal relationships, i.e. the relationships between children. 'Vertical relationships' (Hartup 1989) are relationships where one part has more power, knowledge and responsibility than the other. In horizontal relationships parties are more or less equal in terms of power, knowledge and responsibility. In Denmark, the learning dimension was introduced by Curriculum Act of 2004. Before the act was passed, and even in the years afore preschool teachers expressed a negative view on the concept 'learning' (Broström 2004). Though preschool teachers' interpretation of learning is now much more positive, this earlier opposition still might influence their actual view.

How do children learn?

Children's learning is connected to their social interaction and development. Learning is generated by children's active involvement in practice. Teachers and friends play significant roles in children's learning. Children learn and develop social skills when they interact with other children. Thus shared play between children is essential (Sandberg and Ärlemalm-Hagser 2011). Danish preschool teachers put great stock in children's opportunity to be involved in their own learning process. This can be a consequence of the 'self-teaching' and 'self-governing' from the 1990s. In this decade, a new discourse of 'self' was in vogue. 69% of Danish preschool teachers was educated in the 1990s and the first decade of the new millennium.

The importance of participation for children's learning

The responses of preschool teachers in both countries indicated that learning and participation are closely connected. To participate is to be active and participation facilitates learning. From this study, it is also of interests to note that preschool teachers from both Sweden and Denmark perceived free play as a potential learning situation for children to learn to solve conflicts by themselves. In this study, analyses of the response of Swedish teachers indicated a relationship between high rankings of the importance of conflict-solving and social competence (see text related to table 1). The study showed that there are similarities between how Danish and Swedish preschool teachers interpret pedagogical processes. This supports the assumption about the existence of a special Nordic Model, which unites education and care.

However, there are also some differences of interest. Swedish preschool teachers consider the interaction between adult and child important for learning. Do Swedish preschool teachers insist on a professional profile similar to that of the school teacher? The increased emphasis on schools' traditionally basic competences, reading and math, which also is seen in the brand new (August 2010) Swedish Education Act and the reformed curriculum, would seem to indicate that they do. This study was based on Danish and Swedish preschool teachers' evaluation of some key concepts, which have been formulated in public policy, among other in the curricula. Results from the study have implication for praxis and theory both in Denmark, Sweden and other countries, as they increase our knowledge of learning in preschool. Data from this study is theoretically significant in that it reveals the different ways in which the participants interpret children's learning. In relation to pedagogy, the findings can hopefully serve as a foundation for the continuous day-to-day work with children's learning in preschool. These findings may form a starting point for continued and deepened discussions in the field.. However, one might ask how the preschool teachers themselves feel about the findings and how is this connected with practice. These are important questions which future studies might address and develop – and hopefully not only at a Nordic level, but also between a number of European countries.

References

Bae, B. 2009. Å se barn som subjekter – noen konsekvenser for oppvekstarbeid. [Seeing children as subjects]. In *Inspirasjon og kvalitet i praksis – med hjerte for*

- barnehagefeltet*, eds. S. Mørreaunet, V. Glaser, O.F. Lillemyr and K. H. Moen, 18-39. Oslo: Pedagogisk forum.
- Bakhtin, M. M. 1981. *The Dialogic Imagination: Four essays*, ed. M. Holquist, Austin and London: University of Texas Press.
- Björg, K., C. Nørgaard, and N. Jensen. 2003. *Sølvguiden* [The Silver guide]. København: Socialministeriet. www.kidlld.dk
- Björklid, P. 2005. *Lärande och fysisk miljö* [Learning and physical environment]. Stockholm: Myndigheten för skolutveckling.
- Bruner, J. 1985. Vygotsky: A historical and conceptual perspective. In *Culture, communication and cognition, Vygotskian perspectives*, ed. J. Wertsch, 21-34. London: Cambridge University Press.
- Broström, S. 2004. Modstand mod læring [Resistance against learning]. *Asterisk* 8, 18-19.
- Choen, L., L. Manin, and K. Morison. 2000. *Research Methods in education*. London: Routledge Falmer.
- Cole, M., and P. Griffin. 1984. Current Activity for the Future: The Zo-ped. In *Children's Learning in the Zone of Proximal Development*, eds. B. Rogoff and J.V. Wertsch, 45-63. San Francisco, CA: Jossey-Bass
- Dewey, J. 1960. *Democracy and Education. An introduction to the philosophy of education*. New York: MacMillian.
- Engeström, Y. 1987. *Learning by Expanding. An Activity-Theoretical Approach to Development Research*. Helsinki: Orienta-Konsultit.
- Hartup, W.W. 2001. Social relationships and their developmental significance. *American Psychologist* 44, no. 2: 120-126.
- Herskind, M., M.N. Jensen, B. Kjær, C. Nørgaard, and A. Windfeldt. 2005. *Guldguiden* [The Gold guide]. Copenhagen: Ministry of Social Affairs.
- Holzman, L. 1997. *Schools for Growth: Radical Alternatives to Current Educational Models*. London: Lawrence Erlbaum.
- Humanistic Social Science Research Council, HSFR. 2002. Research ethics principles in humanistic social science research. <http://codex.vr.se/en/texts/HSFR.pdf>
- Johansson, I., and A. Sandberg. 2010. Learning and Participation – Two Interrelated Key-concepts in the Preschool. *European Early Childhood Education Research Journal* 18, no. 2: 229-242.
- Krejcie, R. and D.W. Morgan. 1970. Determining sample size for research activities. *Educational and Psychological Measurement* 30, 607-610.

- Lave, J. and E. Wenger. 2005. *Situated learning*. Cambridge: Cambridge University Press.
- Leontiev, A.N. 1978. *Activity, consciousness, and personality*. Englewood Cliffs, NJ: Prentice-Hall.
- Ministry of Education and Science. 2010. *Curriculum for the preschool Lpfö 98*. [Läroplan för förskolan, Lpfö 98]. Stockholm: Fritzez.
- Ministry for Social Affairs. 2004. *Lov om pædagogiske læreplaner*. [Act on Curriculum]. Copenhagen: Ministry for Social Affairs.
- National Agency for Education. 2010. *Perspektiv på barndom och barns lärande. En kunskapsöversikt om lärande i förskolan och grundskolans tidigare år*. [Perspectives on childhood and children's learning]. A research review on learning in preschool and primary education]. Stockholm, Sweden: Fritzez
- Nørgaard, C., N.E. Jensen, and B. Kjær. 2003. *Sølvguiden*. [Silver guide]. Copenhagen: Ministry for Social Affairs.
- Rogoff, B. 1990. *Apprenticeship in Thinking*. New York: Oxford University Press.
- Rogoff, B. 1993. Children's Guided Participation and Participatory Appropriation in Sociocultural Activity. In *Development in Context. Acting and Thinking in Specific Environments*, eds. R. H. Wozniak and K.V. Fischer., 121-153. New Jersey and London: Lawrence Erlbaum Associates, Publishers.
- Pramling Samuelsson, I., D. Sommer, and K. Hundeide. 2011. *Barnperspektiv och barnens perspektiv i teori och praktik* [Child perspectives and children's perspectives in theory and practice]. Stockholm: Liber.
- Sandberg, A., and A. Eriksson. 2010. Children's participation in the pre-school– on the conditions of the adults? Pre-school teachers' concepts of children's participation in pre-schools everyday life. *Early Child Development and Care* 180, no. 5: 619-631.
- Sandberg, A., and E. Ärlemalm-Hagsér. 2011. The Swedish National Curriculum - Play and Learning with the fundamental values in focus. *Australiasian Journal of Early Childhood* 36, no. 1: 44-50.
- Sheridan, S., and I. Pramling Samuelsson. 2001. Children's conceptions of participation and influence in preschool. A perspective on pedagogical quality. *Contemporary Issues in Early Childhood* 2, no. 2: 169-194.
- Sheridan, S., P. Williams, A. Sandberg, and T. Vuorinen. 2011. Preschool teaching in Sweden – a profession in change. *Educational Research* 53, No. 4: 415-437.
- Statens Samfundsvidenskabelige Forskningsråd. [Danish Research Council for the Social Sciences]. 2002. *Vejledende Retningslinier for Forskningsetik i*

- Samfundsvidenskaberne*. [Guidelines for research ethics]. København: SSF.
www.forskraad.dk/publ/ssf-etik.html
- Stetsenko, A.P. 1999. Social interaction, cultural tools and the zone of proximal development: In search of a synthesis. In *Activity theory and social practice: Cultural-Historical approaches*, eds. S. Chaiklin, M. Hedegaard and U. Juul Jensen., 235-253. Aarhus: Aarhus University Press.
- Vygotsky, L.S. 1978. *Mind in society. The development of higher psychological processes*. Cambridge, Massachusetts: Harvard University Press.
- Wertsch, J. V. 1985. *Vygotsky and the social formation of the mind*. Cambridge and Massachusetts: Harvard University Press.
- Wertsch, J.W. 1998. *Mind in action*. New York: Oxford University Press.
- Williams, P. 2001. *Barn lär av varandra*. [*Children learn from each other*]. (Göteborg Studies in Educational Sciences 189). Göteborg: Acta Universitatis Gothoburgensis.
- Østrem, S. 2008. *Barns subjektivitet og likeverd. Et bidrag til diskusjon om barnehagens pedagogiske innhold og etiske forankring*. [*Children's subjectivity and equality*]. Oslo: Teologisk fakultet, Universitetet i Oslo.