

SUMMARY

The changing meanings of learning
– expressed by pre-school teachers in further education

INTRODUCTION AND AIM

Through the years, the content of activities in the pre-school, after-school recreation centres and the school has been changed and affected in several ways by current research theories and curricula as well as political decisions. A study of current research on children's learning shows that a paradigmatic shift in the view of learning has taken place. The view of children's learning has moved away from a maturity-based view, where children's prerequisites of learning follow a natural and biological development, and towards a perspective of social and cultural experience (Pramling 1994a, 1994b; Stern, 1991; Sommer, 1997, 1998, 2003; Säljö, 2000; Vallberg-Roth, 2002; Valsiner, 1991). In 1998, the pre-school was incorporated into the education system and, as a result, was assigned a clearer pedagogical social task (Ministry of Education and Cultural Affairs, 1998a, 1998b; SOU 1997:157). Researchers who have had, and still have, a significant influence on the development of the pre-school include Doverborg and Pramling Samuelsson (1995, 1999), Halldén (2003), Johansson (1999), Kärrby (1971, 1992a, 1992b, 1997), Pramling (1983, 1994a), Pramling and Mårdsjö (1994, 1997), Pramling and Sheridan (1999, 2003), Lindahl (1996), Williams (2001) and Dahlberg and Lenz Taguchi (1996). Their research shows that the view of children and their learning as well as the view of the pre-school's activities have changed and this, in turn, has consequences for teachers in their professional practice.

This, together with the changed demands made by society on the pre-school's activities, has resulted in many local councils offering their teachers further pedagogical education (Board of Education, 2004). Universities and

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colleges also provide different types of further education at a variety of levels, with the result that many pedagogues are attending further education programs. Teachers are showing an active interest in continuing their education and increasing their professional knowledge of pedagogy. An example of these education programs is the Program in education – orientation towards early childhood education (PEF, 40 p).

The main aim of this study is to investigate the ways in which professionally active pedagogues in further education conceive that they are creating meaning in their own learning and how they view their participation in children's learning. In order to be able to study whether there is any relation between these two questions, I have chosen to focus on the following three questions:

- How do teachers conceive of their own learning¹?
- How do teachers view their participation in children's learning?
- Are their conceptions altered as a result of their own learning and/or their conceptions of participation in children's learning during the course of the further education program and if so, how?

In an evaluation, Balkar (2001:1) claims that the structure of the content of an education program influences the way in which the students understand what they are learning. The influence of the structure of education programs on how students conceive of the content has also been shown in an external evaluation (Worcester College of Higher Education, 1994) of the advanced study program in question. In this evaluation, a study was made of what aims were present in different pedagogical education programs. The evaluation describes the PEF program as one of the education programs that offers students a coherent structure and guidance.

THEORETICAL STARTING-POINTS AND EARLIER RESEARCH

In this study, variation theory is applied in order to understand how pedagogues attending a further education program understand their learning. The variation theory was developed from a phenomenographic research approach into a theory

¹ When the pedagogues conceive of their learning, they create meaning in their learning about how children learn.

of awareness later called variation theory (Marton & Pang, 1999). I employ this theory in order to analyse and understand what is taking place in the pedagogues' awareness when they create meaning in their learning. With the help of this theory, it is possible to shed light on what emerges as figure in the awareness and what is background in their creation of meaning.

Three theoretical concepts, which are central in the variation theory (Runesson, 1999a, 1999b; Pramling Samuelsson & Asplund Carlsson, 2003), are discernment, simultaneity and variation (Marton & Booth, 2000; Marton & Pang, 1999). These three concepts mean that a person separates different things simultaneously in his awareness, where structure and meaning are tied to each other (Marton & Booth, 2000, p. 134). The variations in experiencing one and the same phenomenon are described by, among others, Marton and Pang (1999, p. 10-11), Runesson (1999a, 1999b) and Rovio-Johansson (1999).

The three theoretical concepts discernment, variation and simultaneity are tied to each other and are thus each other's prerequisites. Marton and Booth (2000) claim that there must be a background and a figure in a person's awareness. A prerequisite of being able to distinguish one content aspect from another is that there exists a simultaneity in the person's awareness, that is, the person reflects on several things on the same occasion. However, we are not able to keep track of several content aspects simultaneously for more than a short period of time; instead, certain things in the world around us emerge and form the figure in our awareness while others form the background (Gurwitsch, 1964, 1985; Marton & Booth, 2000).

Learning's object

Marton and Booth (2000) have described how learning can be analysed (p. 115-116) with the help of theoretical concepts. To be able to describe theoretically the pedagogues' participation in children's learning, I employ what Carlgren and Marton (2000) call the learning object. As regards the learning object, Carlgren and Marton (2000) claim that teachers first and foremost have focused on the "how" question in their teaching, that is, how they should teach to enable children and pupils to learn and develop in a certain direction. The authors claim that "what" questions have more or less been taken for granted by the pedagogues (op. cit.). Accordingly, it would seem important that pedagogues reflect upon what it means to learn different things and to thus coordinate the how and what questions. Problematising the what and how aspects of learning means, according to Carlgren and Marton, that the teacher must ask herself:

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What should the pupil learn and how are we working towards this? In this way, the teacher develops her own abilities, insights and approaches, which s/he is expected to employ when s/he contributes to children/pupils developing their understanding of something (Carlgren & Marton, 2000, p. 25-28).

My interpretation of the what and how aspects is that in the what aspect, both the learner's and the teacher's attention in the learning situation is focused on a specific content, which can be described as a direct object. Additionally, the pedagogue must be aware of the indirect object, which can be described as how the person who is learning should understand the content. In other words, a teacher must be aware of what the child/pupil should develop and how s/he should understand the content.

The relation between the teacher or pedagogue's object, the object of learning, the indirect object and the direct object is described in a model based on Marton and Booth's analysis of learning (Marton & Booth, 2000, p. 115-116, see figure 1).

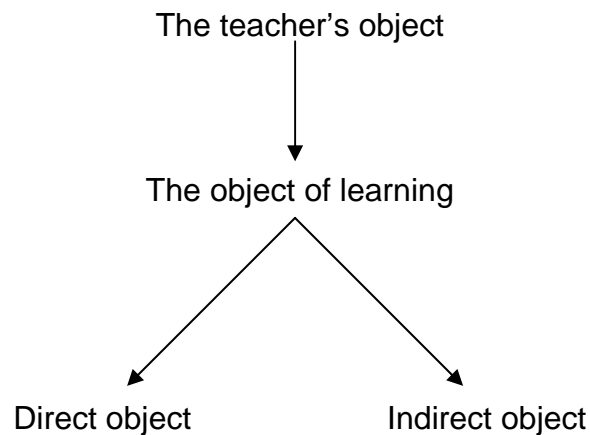


Figure 1.

WHAT CHARACTERISES THE SWEDISH PRE-SCHOOL?

A basic definition of pre-school pedagogy is the teaching and fostering of children that take place within the framework of the pre-school's² activities. The view of the activities in pre-school and the pedagogues' participation in

² The term pre-school is used irrespective of what era I describe, the only exception being when I describe Kärby's comparative study of part-time pre-school and day-care centres.

children's learning has changed over the years, parallel with changes in society's view of knowledge and learning.

A person who has exerted an influence on pre-school activities was Friedrich Fröbel who, in the mid-19th century, laid the foundations of the pedagogy, traces of which can still be found in today's pre-school. Fröbel's pedagogical ideas were based on mathematics and ethics and Johansson (1994, 2004) claims that Fröbel's pedagogy and outlook on life were intertwined since he regarded God as the centre of the world³. The next major trend in the development of pre-school came to be linked to developmental psychology. Here, Gesell's (1880-1961) research played an important part. Both Fröbel's and Gesell's theories on learning are based on an active child, although their theories on learning do differ in some respects.

Developmental psychology was based on the child's maturity. The view of children's learning was based on theories of developmental psychology where the pedagogical task consisted of teaching based on children's "natural" prerequisites. Gesell's theories became normative for (Simonsson-Christensson, 1977) the development of all children, and if a child did not follow this developmental process, it was sometimes considered to be abnormal. Another theorist of developmental psychology, who exerted an influence on pre-school activities, was Piaget (1896-1980, 1962, 1976).

Learning in today's pre-school

Today's pre-school is characterised by the pedagogues having a relational perspective of learning (Johansson & Pramling Samuelsson, 2003). Communication, interaction, teamwork and the child's perspective have become central dimensions in the pre-school's practice (Dahlberg, Moss & Pence, 1999; Nordin-Hultman, 2004). Today's perspective of learning in pre-school makes it impossible to distinguish between learning and development (Pramling, 1994). From a relational perspective of how children learn, learning is dependent on environment, interaction and children's experiences.

What is central in the view of children's learning in today's pre-school is that children are encouraged to be creative by both finding and solving problems. Creativity means that hypotheses are proposed rather than finding solutions to problems. A child who is creative learns to think about its own

³ For a more detailed description of the pre-school and its history, see Johansson (1992) and SOU (1997:157).

thinking but is also able to transfer what it learns to a different content (Next Generation Forum, 1999). Pramling Samuelsson and Asplund Carlsson claim that creativity and learning are two intertwined phenomena (2003, p. 209).

One way of understanding what it means to relate to children and their learning is that there is a concordance between the pedagogue's thoughts, language and actions. This requires the ability to see the whole picture and to challenge children in routine, everyday and planned situations. Developmental pedagogy has emerged from the phenomenographic approach⁴ and what characterises a developmental pedagogy perspective is that learning has a direction (Pramling Samuelsson & Asplund Carlsson, 2003). Developmental pedagogy has become a pre-school pedagogy for younger children. Pramling Samuelsson and Asplund Carlsson (op. cit.) write that the phenomenographic approach sheds light on people's subjective world and their ways of creating understanding of the world around them. Utilising and creating opportunities for understanding how children perceive something in order to challenge their understanding of the content are fundamental in developmental pedagogy theory. What characterises a developmental pedagogy approach to children and their learning is that the pedagogue provides children with prerequisites that enable them to become aware of the world around them and their own learning. Another factor characterising developmental pedagogy theory is that variation is important for learning. Diversity transforms children's different thoughts and reflections into a content in the activity when the pedagogue bases his/her teaching on a developmental pedagogy theory. The approach to children and their learning based on a developmental pedagogy theory is characterised by the "what" and "how" questions being linked, which means that learning is always tied to a content.

Variation theory and developmental pedagogy

The variation theory and developmental pedagogy can be described as theories on learning that have emerged from empirical research generated via the phenomenographic research approach in questions concerning teaching and learning (Hasselgren & Beach, 1997; Emanuelsson, 2001). In variation theory as well as in developmental pedagogy, the starting-point for the teacher/pedagogue is the pupil's/child's thoughts about a content. Despite the fact that both

⁴ Marton and Booth (1997) claim that the phenomenographic approach "involves first and foremost understanding it as a way of identifying and asking research questions about certain pedagogical phenomena".

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developmental pedagogy and variation theory are learning theories and have many similarities, they cannot be compared with each other.

Variation theory focuses primarily on teachers' teaching (Runesson, 1999a) and their teaching practices (Emanuelsson, 2001). It is also a theory of learning with consequences for teaching. Variation theory has to do with people's experiences (Marton & Booth, 2000). The development pedagogy theory focuses on children's learning, but also has consequences for the teacher's actions (Johansson, 1999; Pramling Samuelsson & Asplund Carlsson, 1994). Marton and Pang (1999) claim that phenomenography describes variation in the way of understanding a phenomenon in two dimensions. The first dimension consists of different ways of understanding the same phenomenon, and can be regarded as "classical phenomenography". The second dimension, according to Marton and Pang (op. cit.) involves regarding the variation from a theoretical perspective with the help of the concepts discernment, simultaneity and variation. These concepts are used to describe both teaching and pupils' learning (Emanuelsson, 2001).

In developmental pedagogy, variation plays a central role, but it also includes other theoretical dimensions. Developmental pedagogy is a pre-school pedagogy, which has borrowed aspects and dimensions from other theories and where variation is one aspect. A central aim of the developmental pedagogy theory is to utilise children's intentions and perspectives in order to capture and challenge their world with the help of variation. Pramling Samuelsson & Asplund Carlsson (2003) describe different theoretical dimensions where (op. cit., p. 26) children's ways of experiencing the world begin with a single phenomenon, which is gradually differentiated in order to be integrated into new understanding. Developmental pedagogy has its roots in the pre-school and the youngest children's learning, while the researched carried out from the perspective of variation theory has concerned older children and adults' learning. Young children are active by "nature" and thus make other demands on the ability of the pedagogues to "blend into" their world and games. Consequently, learning is different when it comes to young children while the object of learning remains the same from the perspectives of both variation theory and developmental pedagogy (Pramling Samuelsson & Asplund Carlsson, 2003).

METHOD AND PROCEDURE

The phenomenographic research approach constitutes one methodological base of the present study – a perspective of people’s learning and knowledge formation that is holistic and non-dualistic. A person’s understanding of the world around him cannot be separated from the world he lives in.

This means that the pedagogues⁵ in this investigation relate their knowledge to previous knowledge and experience in their professional practice. Another way of understanding the approach in this study is that it involves the participants including their previous knowledge and experience when they create meaning in their learning in the education program. A fundamental element of the phenomenographic approach is that it also lays claim to describing how people experience, imagine, conceive of and understand a specific phenomenon (Marton, 1992, 1997, 1999). A person’s understanding of the world around him is incorporated into his way of experiencing⁶ the phenomenon and thus becomes a part of himself, with each new experience and insight changing his way of experiencing and conceiving of the world. Marton (1992, p. 30) states that it is not possible to separate subject and object from each other. Instead, he claims that there is a relation between subject and object, which is formed according to how a person experiences the world around him. The phenomenographic approach sheds light on people’s subjective world and their ways of creating understanding of the world around them.

A core task in the phenomenographic approach is to describe a phenomenon as somebody conceptualises it. This presupposes, in this study, that I as a researcher strive to adopt the perspective of the participants when the data corpus is analysed in order to be able to understand how the pedagogues experience that they are creating meaning in their learning and how they understand their participation in children’s learning. The participants take part in teaching, which becomes part of a content (learning’s object). Employing phenomenography to study an object means that as a researcher, I describe how

⁵ In the text, the words pedagogues and participants are used synonymously and refer to the pedagogues participating in the study and attending the PEF program.

⁶ In the text, the words conceive and experience are used synonymously. I am aware that there is a slight difference in meaning between the two words, where conceive focuses on thinking while experience has a broader meaning since it includes perception and experiences, according to e-mail correspondence with Marton, 2000. I have chosen to use the words synonymously in the text because the aim of the study is to investigate how the participants think about their own learning and participation in children’s learning.

the phenomenon appears to another person in the sense of how that individual conceives of the phenomenon.

Over the years, however, phenomenography has been criticised for its lack of theory (Beach & Hasselgren, 1996, 1997; Richardsson, 1999). Richardsson's criticism takes the form of his view that phenomenography cannot be used to study changed conceptions (1999). Phenomenography has, however, developed towards becoming a theory of awareness and his criticism is thus misleading. Phenomenography has also been criticised for its lack of discussion about the importance of language (Säljö, 2000). This criticism can be answered by the fact that phenomenography sheds light on conceptions. Language is, however, implicitly important for learning since the conceptions expressed are carriers of the learner's thoughts and are given shape via language (Marton & Booth, 2000; Marton & Tsui, 2004). This is also illustrated by Pramling Samuelsson and Asplund Carlsson when they write that "thoughts arise or are constituted in language" (2003, p. 60). Criticism has also been levelled at the phenomenographic research approach because it does not include the researcher's reflection on methodology (Dall'Alba & Hasselgren, 1996; Beach & Hasselgren, 1997). This criticism can, however, be met by noting that the qualitative research procedure is a process, which assumes that the researcher reflects on both the content of the statements and his own way of conceiving of the meaning (Alexandersson, 1994b; Hesslefors Arktoft, 1996; Marton, Beauty, Dall'Alba, 1993; Uljens, 1989; Runesson, 1999a; Emanuelsson, 2001).

Sample and research group in the study

Eight of the 15 persons participating in the study joined the education program in the spring and seven in the autumn. This means that eight of the 15 persons had completed one term when the study was initiated while seven began at the same time as the study was started up. The participants were thus at different stages in the program throughout the study. Here, the eight pedagogues, who began in the spring, are referred to as the spring group and the seven, who began in the autumn, as the autumn group. Three of the 15 persons participating in the study have a foreign background and a degree in education from their native country. All 15 have worked professionally in Swedish pre-schools. One of them holds a managerial position at a pre-school while the other 14 pedagogues work with pre-school groups.

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The participating pedagogues had been accepted for a 2-year supplementary study program for pedagogues at pre-school and after-school recreation centres (Program in education – orientation towards early childhood education, 40 points).

Data collection

I have used three methods in the study to collect data on the pedagogues' conceptions of their own learning and their participation in children's learning. These methods are:

- Interviews
- The pedagogues' own descriptions when viewing a film sequence
- Written reflections on their own learning

As regards the three data collections, the interviews form the main basis of the results. The pedagogues' descriptions when watching the film should be regarded as complementing the interview answers. The written reflections produced by the pedagogues at the end of the education program should be seen as a validity variable for my interpretation of the pedagogues' changed conceptions of their own learning and participation in children's learning. These conceptions are used in the individual descriptions presented in chapter 8. The credibility in the text is increased by means of a comparison between my conclusions concerning the change in the pedagogues' conceptions and how they conceive of this change.

CONCEPTIONS OF ONE'S OWN LEARNING

The critical content aspects, which have been distinguished in the conceptions of the pedagogues' own learning, have been divided into the following three qualitatively different categories:

- Creating meaning via communication (category 1)
- Creating meaning via professional practice (category 2)
- Creating meaning via reflection on one's own learning (category 3)

The same pedagogue may express one or more conceptions at the same interview.

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Categories 1-3 have an internal relation, which consists of the pedagogues indicating in their conceptions that they create meaning in what they learn by achieving variation in their way of thinking about what they learn. In other words, the internal relation between the three conceptions consists of the pedagogues themselves trying to create a varied way of thinking about their learning in each concept with the help of communication, professional practice and reflection on their own learning. I cannot say whether this is a conscious or unconscious attempt by the pedagogues to generate different ways of understanding what they learn. I can, however, deduce from the statements that the pedagogues use variation in order to contrast different ways of thinking about their learning, irrespective of conception. This implies that the pedagogues' ability to create variation and learn and understand how others think and reason about the same phenomenon is fundamental when it comes to how they themselves create meaning in their learning. My interpretation, however, is that the participants employ communication in their own professional practice and reflection on their own learning as different tools for generating variation. In other words, variation is fundamental in learning. Meaning is created and becomes clear to the pedagogues when they themselves elucidate the same content in a varied way.

Variation as it is expressed in communication

The conception in this category is characterised by the participants creating meaning in their learning by communicating about theories concerning children's learning in the light of their previous knowledge and theories. This means that the conception is communicative in nature and it is via communication that the pedagogues vary their way of creating understanding. In their statements, the pedagogues describe how communication enables them to talk about theories about how children learn, and they employ words and concepts to make visible different ways of understanding something.

The variation that becomes visible via communication is theoretical in the sense that the pedagogues discuss with each other how theories should be construed in the light of their previous knowledge and experience.

Variation as it is expressed in professional practice

Understanding their own professional practice means that the pedagogues in the study create meaning in what they learn in the study program via their own professional practice. In Gurwitsch's (1964, 1985) view, there is a certain

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structure in people's awareness – an inner structure or pattern that is expressed by focusing on a theme, a thematic field or a margin. The results from my study reinforce Gurwitsch's (op. cit.) reasoning since it becomes clear that figure in the pedagogues' awareness is that they should transfer their learning to a different context where they will understand it afresh. It is their theoretical understanding that is the background of their actions.

The variation the pedagogues produce in their own professional practice is both theoretical and practical in nature. It is theoretical because the pedagogues transform their understanding acquired in the study program so as to be able to understand in their professional practice (Mezeriow, 1994a, 1994b; Cranton, 1994). In this way, the pedagogues are carriers of a theoretical understanding, which they will attempt to transform in their own professional practice. This requires reflection. When the pedagogues transform their understanding of what they learn in their own professional practice, it becomes visible in their own actions and they are able to reflect on which of the different ways of using what they have learned has functioned in their group of children. From the perspective of variation theory, learning takes place in the relation between how the person who learns experiences the world around him or her. Learning is thus constituted in a relation between the subject and the object towards which the learner directs his attention (Svensson, 1976).

The pedagogues' statements imply that they understand what they are learning when they can express it in words and re-examine their knowledge in dialogue with others as well as transforming and testing their learning and understanding in their own professional practice. This implies that when the pedagogues are simultaneously able to discern a variation in different ways of thinking about their theoretical learning and understand their learning in their professional practice, they create meaning in what they learn. This is supported by Sandberg and Targama (1998), who claim that the learner's understanding of his own practice determines how s/he will be able to understand the content of knowledge. Sandberg and Targama (op. cit.) also describe how an understanding of the situation is important for learning, which I show when the pedagogues in my study draw conclusions about how their learning becomes meaningful in their pre-school group.

Variation as it is expressed in reflection on one's own learning

This conception has a meta-cognitive character, which means that the pedagogues reflect on how they think about their learning. This conception is also characterised by the pedagogues questioning, examining and analysing their way of thinking about how they participate in children's learning.

When the pedagogues reflect on their own learning, this can be described in the form of two aspects. The pedagogues partly reflect on different theories that describe children and their learning and partly they reflect on how their theoretical understanding has affected the way in which they participate in children's learning. This means that the pedagogues can discern critical aspects in their way of thinking about theory and practice in their awareness. This conception has points of similarity with meta-theoretical learning described by Kansanen (1997a, 1997b), where the teacher can both question his practical actions and analyse and reflect on them. The teacher's ambition is not only to initiate teaching but also to reflect on what happens in the pre-school group and analyse her participation in children's learning in relation to planning, implementation and evaluation (Rosenqvist, 2000, 2002).

CONCEPTIONS OF CHILDREN'S LEARNING

In this chapter, an account is given of how the participants understand their participation in children's learning, i.e. their conceptions of how they put their knowledge into practice when working with children. When the pedagogues express their conceptions of how they experience their participation in children's learning, the results are based on their answers given in the first, second and third interview together with the notes made in conjunction with the first and second film presentation.

In the interview answers, the pedagogues give their own examples of how they conceive of their participation in children's learning. In their notes written during the film presentations, the pedagogues describe their participation in children's learning in a given situation. The results show that the pedagogues hold the conception that they participate in children's learning in two qualitatively different ways. It has been possible to distinguish the following critical aspects of the pedagogues' conception of how they experience their

participation in children's learning. Categories A and B are hierarchically ordered and they have the following headings⁷:

- Being sensitive to the children and the world around them (category A)
- Challenging the children in their learning (category B)

A pedagogue could express one or both conceptions during the same interview and/or during the film presentation.

Being sensitive to the children and world around them (category A)

What characterises the conception in category A is that the pedagogues experience that they participate in children's learning by being sensitive to their interests, questions, comments and so on. They support the children's interests and talk with them about the content aspect on which the children's attention is focused. As a result, the pedagogues feel that they are supporting the children's interest in an activity or an area of interest that is important for them in the situation in question.

In the study, it emerges that the pedagogues often feel that they are being sensitive to the children and what their attention is focused on. This also shows that the pedagogues have the ability to be flexible and adapt their own behaviour and content of the activity in which the children are interested.

The pedagogues also hold the conception that one of their tasks as pedagogues in relation to children's learning is to be attentive by utilising everyday events initiated by the children and dealing with them on their terms. In other words, the pedagogue holds the conception that her participation in children's learning is characterised by being sensitive to the signals children give when their attention is directed towards a specific phenomenon. Category A is also characterised by the pedagogue's intention to treat children on the basis of their basic knowledge and skills. The pedagogue may have a specific reason for the activity, but she adapts it to what is happening in the situation in question. The pedagogues point out that it is the spontaneous questions that are reflected on in the activity.

⁷ In order to be able to differentiate between the categories in their respective outcome spaces (i.e. in category system one and two), the categories dealing with the pedagogues' conceptions of their own learning were assigned figures. Categories describing conceptions of how the participants experience their contribution to children's learning are assigned letters.

Challenging the children in their learning (category B)

The difference between the conceptions in category A and B is that in category B, the pedagogue challenges the children's thoughts and what their attention is directed towards. This conception is characterised by the pedagogues saying that they challenge the children in their learning based on what they know and understand about how children think and reason. The aim of problematising the content for the children is that the children should change their way of thinking, they should understand how to do something. The conception in category A thus becomes a prerequisite of the pedagogues' ability to challenge the children in their learning.

This conception is characterised by the encounter between pedagogue and child acquiring a completely different dimension as a result of the pedagogue challenging the child's thoughts and skills in a specific direction. The pedagogue has a notion about what the child should develop and in order to achieve this, she challenges the child's way of experiencing something. What characterises the pedagogue's participation in the child's learning is that she deliberately problematises for the child what it means to learn different things and, as a consequence, coordinates the how and what questions in her teaching (Carlgren & Marton, 2000).

Differences between category A and B

Figure 6 illustrates the what and how aspect as it is expressed in the pedagogues' participation in children's learning, depending on whether their participation is characterised by the pedagogue *being sensitive to the children and the world around them* or *challenging the children in their learning*. In both conceptions, the what aspect means that the pedagogues become acquainted with the children's thoughts, questions and skills.

The difference between the two conceptions is that the conception *being sensitive to the children and the world around them* is child-centred while the conception *challenging the children in their learning* is relational. This means that the pedagogues who are *sensitive to the children and the world around them* become acquainted with their thoughts, questions and skills in order to be able to interpret and support their needs. The pedagogues do this by (being sensitive to the children's interest and curiosity) talking with the children, answering their questions and allowing them to gain their own experience of the phenomenon on which their attention is focused. The relation between children and adults is characterised by children making contact with adults, who support them as well

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as their interests. My interpretation is that the children's experiences become figure in the pedagogues' participation in the children's learning, however, there is a risk that the pedagogues take for granted what developing this understanding means for the children.

Participating in children's learning	What aspect	How aspect
Being sensitive to the children and their learning	Becoming acquainted with the children's thoughts, questions and skills in order to interpret their needs. The content of the pedagogical activities is child-centred.	Being sensitive to the children's interests and curiosity, talking with them, answering their questions, letting them gain their own experience of the phenomenon on which their attention is focused. The relation between children and adults is characterised by children making contact with adults, who support the children. Child → Adult-centred
Challenging the children in their learning	Becoming acquainted with the children's thoughts, questions and skills in order to challenge them in their learning. A characteristic of the content of the pedagogical activities is that they are relational.	Problemise, draw attention to and use the variation the children themselves create in order to challenge their thoughts, knowledge and skills. The relation between children and adults is characterised by mutual contact. Child ↔ Adult-centred

Figure 6. The what and how aspect in the participation the children's learning.

The pedagogues who say that *they challenge the children in their learning* problemise, draw attention to and use the variation, which the children themselves create, to challenge their thoughts, knowledge and skills. The relation between children and adults is characterised by mutual contact and the pedagogues having a relational perspective of learning.

CHANGES

The results show that the pedagogues change in that they begin to reflect on their own learning and that they challenge the children in their learning. However, there are slight differences in the way the pedagogues change during the course of the education program.

Changes in the pedagogues' own learning

The pedagogues change their way of creating meaning in their learning in three qualitatively different ways during the course of the education program. They change their way of understanding their own learning and express a new conception: Reflecting on their own learning (a.).⁸ The second change is characterised by the pedagogues describing their own learning in a way that does not change over time (b.). The reason for this could be that the pedagogues express the conception (reflecting on one's own learning) when they are interviewed. In other words, there is no scope for them to develop a new conception. The third change is characterised by the pedagogues revising their way of thinking about how they create meaning in their own learning so that they no longer reflect on their own learning (c.).

Changes in participating in children's learning

The pedagogues' conceptions of participating in children's learning also change in three ways. One of these changes is characterised by the pedagogues developing so that they challenge the children in their learning (d.). The second change is characterised by the pedagogues stating that their way of participating in children's learning remains unchanged in their professional practice. The third change is characterised by the pedagogues experiencing that they revise their way of participating in children's learning by becoming sensitive to the children and the world around them (e.). This means that earlier during the education program, the pedagogues had expressed the conception that they challenge the children in their learning (f.), but that by the end of the program, they no longer did so.

⁸ See table 10.




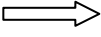
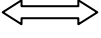
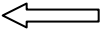
The relation between the pedagogues' own learning and their participation in children's learning

Table 10 shows that the relation between the pedagogues' own learning (theory) and their participation in children's learning (practice) differs in seven ways. The results show that nearly half of the participants change both their way of experiencing their own learning and their participation in children's learning in a specific direction. These pedagogues are Agda, Amanda, Andrea, Asta, Astrid, Josefine and Jeanette.

Two pedagogues, Alice and Jane, describe how they change their way of creating meaning in their own learning towards reflecting on this during the course of the education program. At the same time, they say that their participation in children's learning has not changed in their professional practice. The relation between experiencing one's own learning and participation in children's learning can also change in another direction as in the case of Julie and Jessica, who say that their own learning has not changed and their conceptions of how they participate in children's learning are changing towards challenging the children in their learning. Two of the 15 pedagogues, Jannike and Johanna, experience that their way of creating meaning in their learning has not changed during the course of the education program. Both these pedagogues also say that their way of contributing to children's learning has not changed. Angelika is one of the 15 participants who says that her conceptions of her own learning have been revised during the course of the education program, which means that her way of thinking about what she is learning has been simplified. When it comes to her way of conceiving of her participation in children's learning, Angelika says at all three interviews that she contributes to their learning by being sensitive to them and the world around them. Judith is a pedagogue who expresses an unchanged way of creating meaning in her own learning. She has changed her way of contributing to children's learning from having challenged the children in their learning and being sensitive to the children and the world around them to contributing to children's learning by being sensitive to them and the world around them.

Summary

Table 10. The relation between conceptions of ways of experiencing one's own learning (categories 1-3) and participation in children's learning (categories A-B).

	d. The conception changes to one of challenging the children. 	e. Unchanged conception of participation in children's learning. ⁹ 	f. The conception of participation in children's learning is revised. 
a. The conception changes to one of reflexing on one's own learning. 	(a-d) Agda Amanda Andrea Asta Astrid Josefine Jeanette	(a-e) Alice Jane	
b. Conception of one's own learning is unchanged. 	(b-d) Jessica Julia	(b-a) Jannike Johanna	(b-f) Judith
c. Conceptions of one's own learning are revised. 		(c-e) Angelika	

THE RELATION BETWEEN CHANGED CONCEPTIONS

From the perspective of variation theory, it is in the nature of things that people experience and apply their understanding in different ways. In this section, an account is given of the relation between ways the pedagogues' experience their own learning (theory) and ways they conceive of their participation in the children's learning (practice) in terms of conceptions that change over time during the course of the education program. In the case of the relation between

⁹ There may be several reasons for the conception remaining unchanged. One reason could be that the pedagogue had reflected on her own learning as early as during the first interview.

these phenomena, the results are based on my interpretation of the pedagogues' conceptions. The relation between theory and practice is expressed in seven different ways. Figure 7 illustrates the relations between the pedagogues' changed ways of conceiving of their own learning and their participation in the children's learning.

The first relation (1. a-d)¹⁰ in figure 7 shows that seven of the pedagogues have moved towards *reflecting on their own learning* and *challenging the children in their learning*. Almost half the participants have thus changed both their way of creating meaning in their own learning and their participation in children's learning in a specific direction. The same relation illustrates a way of changing during the course of the education program that could be regarded as being more successful than the other five relations between theory and practice since the pedagogues change both their way of conceiving of what they learn and their way of participating in their professional practice. One reason for the direction of this change could be that these pedagogues have learnt and understood the content of the teaching and have been able to put their theoretical understanding into practice in their own professional practice. On the other hand, these pedagogues could have changed because they reflected new or deeper knowledge, which influences the direction of the change.

The other five relations in my study show that the relation between the pedagogues' own learning and their participation in children's learning could be considered contradictory. This can, for example, be seen in the second relation (2. a-e), which is characterised by the pedagogues *reflecting on their own learning* at the same time as their description of their participation in children's learning remains unchanged. Two of the pedagogues express this relation. This could mean that these two pedagogues have changed in that they compare different ways of thinking about theories and how they contribute to children's learning while in their professional practice, their participation remains unchanged. This can be explained in part by the fact that one of these two pedagogues indicates that *she challenges the children in their learning* when she is interviewed. The second pedagogue, on the other hand, indicates that she is *sensitive to the children and the world around them* when she is interviewed, which could mean that she concentrates on understanding her own learning.

¹⁰ The numeral indicates the relation. The letters a-c show the direction in which the pedagogues' learning has changed. The letters d-f show the direction in which the pedagogues' participation in children's learning has changed.

Summary

1. Reflecting on one's own learning Challenging the children's learning (a-d)	7 pedagogues
2. Reflecting on one's own learning Unchanged participation in children's learning (a-e)	2 pedagogues
3. Unchanged own learning Challenging children's learning (b-d)	2 pedagogues
4. Unchanged own learning Unchanged participation in children's learning (b-e)	2 pedagogues
5. Unchanged own learning Revised participation in children's learning (b-f)	1 pedagogue
6. Own learning revised Unchanged participation in children's learning (c-e)	1 pedagogue

Figure 7. The relation between the pedagogues' own learning and participation in children's learning.

The third relation (3. b-d) shows that the two pedagogues have not changed their way of understanding what they learn but that they have changed over time towards *challenging the children in their learning*. This change could be the result of these two pedagogues having changed their conceptions of how they understand their learning at the very beginning of the education program. Both these pedagogues began studying in the spring and the content of the courses in the program is related to the pedagogues' professional practice. Once again, this could indicate that the content and/or the internal order of the courses in the program impact on the pedagogues' understanding of what they learn.

The fourth relation (4. b-e) is characterised by two of the pedagogues indicating that creating meaning in their own learning and participating in children's learning have not changed over time. Both these pedagogues belong to the spring group and one of them indicates that she *challenges the children in their learning*, while the other describes being *sensitive to the children and the world around them*.

The fifth relation (5. b-f) is characterised by one of the pedagogues describing an unchanged way of understanding her own learning while her

Summary

participation in the children's learning is revised to become less and less complex. This pedagogue has thus changed her participation in children's learning from having given examples of *how she challenges children in their learning* to giving examples from her professional practice, which show that she is *sensitive to the children and the world around them*. A provocative thought is that the education program perhaps results in the pedagogue having a less complex practice. However, this pedagogue may also have concentrated on her own learning, which has resulted in her own practice becoming less complex. Another possible explanation could be that this pedagogue does not build on her previous knowledge and experience because she is not sure that she has worked in an adequate way in her professional practice.

The sixth and last relation (6. c-e) between the way of conceiving of one's own teaching and participation in children's learning is characterised by one of the pedagogues indicating that her own learning is being revised by becoming less and less complex. This pedagogue experiences her participation in the children's learning as not changing as a result of the education program, i.e. by *being sensitive to the children and the world around them*. The relation between the pedagogues' own learning and their participation in children's learning could, in my study, indicate either that the pedagogue in question is critical of, and questions, her own learning or that she experiences the content of the teaching as "correct" and, for this reason, does not want to build on her previous knowledge and experience.

CASE DESCRIPTIONS

I have studied the conceptions expressed by the pedagogues and have found a pattern where the relation between theory and practice is shaped in six different ways in the pedagogues. In order to study the relation between theory and practice from a perspective of change, I have chosen first to determine how the respective conceptions have changed over time. I have then compared the pedagogues' changed way of conceiving of their own learning with their changed conceptions of their participation in children's learning over time. After having studied and compared these changes, the relation between theory and practice has emerged. These relations are illustrated in case studies, which describe different ways of conceiving of one's own learning and participation in children's learning.

DISCUSSION

The study's basic ontological assumption about how a person construes the world around him (Marton, Dahlgren, Svensson & Säljö, 1977; Marton, 1981, Marton, Hounsell, Entwistle, 1984; Marton, 1992; Marton & Booth, 2000) is manifested when 15 pedagogues describe how they experience creating meaning in their own learning and how they experience their participation in children's learning. The results from this study show that:

- The pedagogues express three qualitatively different ways of creating meaning in their own learning.
- The pedagogues use these conceptions as a didactic tool to develop their competence.
- The pedagogues strive to create variation in their way of understanding in each conception.
- The pedagogues reconsider their way of understanding theory and practice.
- The pedagogues express two qualitatively different ways of participating in children's learning.
- The pedagogues' conceptions of their own learning are transformed towards reflection on their own learning.
- The pedagogues' conceptions of their participation in children's learning are transformed towards challenging them in their learning.
- The relation between theory and practice is expressed in six different ways.

The pedagogues create variation in each conception

When I processed the data material, I expected the pedagogues to express their conceptions. Thus it became an additional experience for me when I discovered that the pedagogues mentioned in their interviews that they strive to create variation in each conception (categories 1-3) in order to create meaning in their own learning. Pramling Samuelsson and Lindahl (2002) have shown that young children spontaneously vary an action or activity in order to learn. Earlier, other researchers – Marton, Wen and Wong (in press), Runesson (manuscript), Marton and Tsui, (2004), Pramling Samuelsson (1988, 1994), Emanuelsson, (2001) – have described how studying a phenomenon in different ways enhances the ability to learn. My contribution to the variation theory is: *The learner*

Summary

him/herself strives to create variation in order to understand the meaning of his/her own learning.

In view of the results from this study, I have reconsidered what it means to “learn through variation”. On the basis of the results from this study, I would claim that the shifting meaning of learning can take many shapes such as knowledge and the ability to think in abstract terms as well as skills and so on. My conclusion is that the conceptions described in categories 1-3 do not determine how the pedagogues understand what they learn in the study program. Learning through variation involves, instead, an ambition to discern several critical aspects simultaneously, irrespective of whether it is a question of understanding or doing something. This implies that the pedagogues’ ability to discern critical aspects determines how they understand what they learn.

In my study, the three concepts discernment, simultaneity and variation mean that the pedagogues discern different things simultaneously in their awareness, where structure and meaning are intertwined (Marton & Booth, 2000, p. 134, Runesson, 1999a, 1999b, Marton & Pang, 1999). The variations in their ways of experiencing one and the same phenomenon are described by, among others, Marton and Pang (1999, p. 10-11), Runesson (1999a, 1999b) and Rovio-Johansson (1999). It is the variation in the way of understanding and thinking about the same content that is the starting-point for multifaceted and dynamic learning (Bowden, 1994).

The pedagogues in the study discern different ways of understanding what they learn in the education program by communicating with each other. As they discern critical aspects of understanding the same content, they experience that their learning becomes meaningful to them. This implies that teaching about different theories does not determine whether the pedagogues understand what they are learning; instead, their different ways of thinking about and understanding the same theories contribute to them reconsidering their understanding. In other words, it is in relation to the world around us that we conceive of and understand something (Marton, Hounsell & Entwistle, 1984, 1989; Marton, Dahlgren, Svensson & Säljö, 1977). We can thus assume that children in pre-school activities and pedagogues in the study think and draw conclusions about what emerges in encounters with other persons and on the basis of these experiences, both children and pedagogues reconsider their way of understanding the world around them and their learning. It is their ability to discern critical aspects that determines how they create meaning and content in their own learning.

REFERENSER

- Ahlberg, A. (1992). *Att möta barn med matematiska problem. En belysning av barns lärande*. Göteborg Studies in Educational Sciences. Göteborg: Acta Universitatis Gothoburgensis.
- Alerby, E., Kansanen, P. & Kroksmark, T. (2000). *Lära om lärande*. Studentlitteratur: Lund.
- Alexandersson, M. (1994). *Metod och medvetande*. Göteborg Studies in Educational Sciences. Göteborg 96: Acta Universitatis Gothoburgensis.
- Alexandersson, M. (1995). Profession och reflektion. I *Lärarprofessionalism – om professionella lärare*, s. 32-43. Stockholm: Lärarförbundet.
- Alexandersson, M. (1996). Att lära av undervisning. I Brusling, C. och Strömqvist, G. (red.) *I reflektion och praktik i läraryrket*, s. 143-159. Lund: Studentlitteratur.
- Balke, G. (2001:1). *Vad tycker du om dina studier? Utvärdering av programutbildningarna vid Göteborgs universitet*. STUG-projektet: Studerande vid Göteborgs universitet. Avdelningen för omvärldsanalys, planering och uppföljning. Göteborg: Göteborgs universitet.
- Bengtsson, J. (1996). Vad är reflektion? Om reflektion i läraryrket och lärarutbildning, s. 67-79. Brusling, C. & Strömqvist, G. (red). *Reflektion och praktik i läraryrket*. Lund: Studentlitteratur.
- Bengtsson, J (1993). Theory and practice. Two fundamental categories in the philosophy of Education. *Educational review*. 45: p. 205-211.
- Bengtsson, J. (1995a). What is reflection? On reflection in teaching profession and teachers education. *Teachers and Teaching: theory and practice*, 1, (1).
- Bengtsson, J. (1995b). Självreflektionens möjligheter och gränser i läraryrket. *Nordisk pedagogik*, 15 (2), s. 72-87.
- Björneloo, I., Mårdsjö, A.C. & Pramling Samuelsson, I. (2004). *Kommunikation som akt och objekt – ett didaktiskt utvecklingsprojekt i flerspråkiga klasser*. Nr 2004:02. Göteborgs Universitet: Institutionen för pedagogik och didaktik.
- Bond, H. (2000). *The development of students' experiences of learning in higher education. The school of Curriculum, Teaching and Learning of Education*. Australia: Griffith University.

Summary

- Boulton-Lewis, G.M., Marton, F., Lewis, D. & Wilss, A.L. (2000). Learning in a formal and informal contexts: conceptions and strategies of Aboriginal and Torres Strait Islander university students. *Learning and Instruction*. Vol 10. nr. 5, s. 393-414.
- Bowden, J. & Marton, F. (1998). *The university of learning*. Göteborg. Sweden.
- Bowden, J. (1994). The nature of phenomenographic research. In *Phenomenographic Research: Variations Method*, pp. 1-16. The Warburton Symposium. Ed. Bowden, J. A. Walsh, E.
- Bruner, J. (1980). *Under five in Britain*. Grant McIntyre, London
- Bruce, T. (1990). *Tradition och förnyelse i förskolepedagogiken*. Stockholm: Utbildningsförlaget.
- Brusling, C. (1996). Konstruktion och rekonstruktion av praktiskt tänkande. I Brusling, C. & Strömqvist, G. (red.). *Reflektion och praktik i läraryrket*, s. 93-105. Lund: Studentlitteratur.
- Carlgren, I. (1999a). Pedagogiska verksamheter för lärande. Carlgren (red.). I *Miljöer för lärande*. Lund: Studentlitteratur.
- Carlgren, I. (1999b). Pedagogy and teachers work. I *Nordisk pedagogik. Journal of Nordic Educational research*, Nr 4, Vol. 19, p. 223-234.
- Carlgren, I. & Marton, F. (2000). *Lärare av i morgon*. Stockholm: Lärarförbundets förlag.
- Cranton, P. (1994). *Understanding and Promoting Transformative Learning. A Guide for Educators of Adults*. San. Francisco: Jossey-Bass Publishers.
- Claesson, S. (1999). *Hur tänker du då? Empiriska studier om relationen mellan forskning om elevuppfattningar och lärares undervisning*. Göteborg: Acta Universitatis Gothoburgensis.
- Dall'Alba, G. (1993). Reflections on phenomenography: Introduction to Part II. *Nordisk Pedagogik*. Nr 3. s.130-133.
- Dall'Alba, G. & Hasselgren, B. (eds.) (1996). *Reflections in Fenomenography. Toward a Methodology?* Göteborg: Acta Universitatis Gothoburgensis.
- Dahlberg, G. & Lenz Taguchi, H. (1996). *Förskola och skola – om två skilda traditioner och om visonen om en mötesplats*. Stockholm: HLS förlag.
- Dahlberg, G., Moss, P. & Pence, A. (1999). *Beyond Quality in Early Childhood Education and Care – Postmodern Perspectives*. Falmer Press. Taylor & Francis Inc. USA.
- Dewey, J.A. (1991). *How we think*. New York: Prometheus Books. (Originally published: Lexington, MA : D. C. Heath, 1910).

Summary

- Dewey, J. A. (1999). *Demokrati och utbildning*. Översättning: Nils Sjödén. Göteborg: Daidalos AB.
- Doverborg, E. & Pramling Samuelsson, I. (1995). *Mångfaldens pedagogiska möjligheter*. Stockholm: Utbildningsförlaget.
- Doverborg, E. & Pramling Samuelsson, I. (1999). *Förskolebarn i matematikens värld*. Stockholm: Liber.
- Doverborg, E. & Anstett, S. (2003). Rita och berätta. I I. Pramling och E. Johansson (red.), *Förskolan – barns första skola*. Lund: Studentlitteratur.
- Ellström, P. E. (1996). Rutin och reflektion. Förutsättningar och hinder för lärande i dagligt arbete. I Ellström, P-E., Gustavsson, B., Larsson, S. (red.) (1996). *Livslångt lärande*, s. 142-179. Lund: Studentlitteratur.
- Emanuelsson, J. (2001). *En fråga om frågor. Hur lärares frågor i klassrummet gör det möjligt att få reda på elevernas sätt att förstå det som undervisningen behandlar i matematik och naturkunskap*. Göteborg: Acta Universitatis Gothoburgensis.
- Eriksson, I. (1999). *Lärares pedagogiska handlingar. En studie av lärares uppfattningar av att vara pedagogisk i klassrums arbetet*. Uppsala: Acta Universitatis Upsaliensis. Uppsala Studies in Education 82.
- Folkesson, L. (1998). *Erfarenhet och lärande. En studie om hur lärare ser på sitt eget lärande*. Småskrifter från institutionen för metodik. Göteborg: Göteborgs Universitet, Nr. 22.
- Forslund, K. (1993). *Professionell kompetens. Fyra essäer om inläring och utveckling för professionalitet*. Linköping: Universitetet i Linköping. Institutionen för pedagogik och psykologi. LiU-PEK-R-168.
- Forslund, K. & Jacobsen, M. (2000). *Professionell kompetens hos pedagoger inom förskolan*. En studie av kompetens i en arbetsgrupp som arbetar med gruppintegration av funktionshindrade barn. Institutionen för beteendevetenskap. Linköping: Linköpings universitet.
- Gesell, A. & Ilg, F. (1961). *Barnens värld och vår*. Stockholm: Natur och kultur.
- Ghaye, A. & Ghaye, K. (1998). *Teaching and Learning through Critical Reflective Practice*. London: David Fulton Publishers.
- Gurwitsch, A. (1964). *The field of consciousness*. Pittsburg: Duquesne University Press.
- Gurwitsch, A. (Press cop. 1985). *Marginal consciness*. I Embre, L., Ohio university press. (Eds.) Athens, Ohio, London.
- Griffith, M. & Tann, S. (1992). *Using Reflective Practise to Link Personal and Public Theories*. Journal of Education, 18 (1), p. 69-84.

Summary

- Halldén, G. (2003). Barnperspektiv som ideologiskt och/eller metodologiskt begrepp. *Pedagogisk forskning i Sverige*. Årg. 8. Nr. 1-2. 2003. s. 12-23.
- Hansen, M. (1996:15). *Att öka kompetens genom utbildning, Utvärdering av påbyggnadsutbildning i pedagogik*. Göteborg: Institutionen för pedagogik, Göteborgs Universitet.
- Hansen, M. (1999). *Yrkeskulturer i möte. Läraren, fritidsspedagogen och samverkan*. Göteborg studies in educational sciences 131. Göteborg: Acta Universitatis Gothoburgensis.
- Hasselgren, B. (1981). *Ways of apprehending children at play*. Göteborg: Acta Universitatis Gothoburgensis.
- Hasselgren, B. & Beach, D. (1997). Phenomenography-a “good-for-nothing brother” of phenomenology? Outline of an analysis? *Higer Education Research & Development, Vol. 16, No 2*.
- Hesselfors Arktoft, E. (1996). *I ord och handling. Innebörder av “att anknyta till elevers erfarenhet”, uttryckta av lärare*. Göteborg: Acta Universitatis Gothoburgensis.
- Henckel, B. (1990). *Förskollärare i tanke och handling. En studie kring begreppen arbete, lek och inläring*. Umeå: Pedagogiska institutionen, Umeå universitet.
- Hundeide, C. (1999). *From early interaction to class-room communication*. University of Oslo. Draft 17/6.
- Hundeide, C: (2002). The mind between Us. *Nordisk psykologi*, 54 (1), s. 69-90.
- Hwang, P. & Nilsson, B. (1995). *Utvecklingspsykologi, från foster till vuxen*. Stockholm: Natur och Kultur.
- Johansson, E. (1999). *Etik i små barns värld. Om värden och normer bland de yngsta barnen i förskolan*. Göteborg: Acta Universitatis Gothoburgensis.
- Johansson, E. (2003). *Möten för lärande. Pedagogisk verksamhet för de yngsta barnen i förskolan*. (Skolverket, Forskning i fokus, nr 6). Stockholm: Fritzes.
- Johansson, E. & Pramling Samuelsson, I. (2003). *Barns första skola*. Lund. Studentlitteratur.
- Johansson, J.E. (1992). *Medodikämnet i förskollärarytbildningen*. Göteborg: Acta Universitatis Gothoburgensis.
- Kansanen, P. (1997a). Getting to know teachers’ pedagogical thinking – Linking various approaches. *Discussions on some educational issues VI*. Helsinki: Departement of Teacher Education, University of Helsinki.

Summary

- Kansanen, P. (1997b). *Discussions on some educational issues VII*. Research report/ Helsinki: Departement of Teacher Education, University of Helsinki.
- Kernell, L.Å. (2002). *Att finna balanser – en bok om undervisningsyrket*. Lund: Studentlitteratur.
- Kolb, D. (1984). *Experiential Learning. Experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice-Hall Inc.
- Krokmark, T. (1987). *Fenomenografisk didaktik*. Göteborg studies in educational sciences. Göteborg: Acta Universitatis Gothoburgensis.
- Kihlström, S. (1995). *Att vara förskollärare. Om yrkets pedagogiska innebörder*. Göteborg: Acta Universitatis Gothoburgensis.
- Klerfelt, A. (2002). *Var ligger forskningsfronten? – 67 avhandlingar i barnpedagogik under två decennier, 180-1999*. Stockholm: Skolverket.
- Kvale, S. (1997). *Den kvalitativa forskningsintervjun*. Lund: Studentlitteratur.
- Kärrby, G. (1971). *Child rearing and the development of moral structure*. Stockholm. Almqvist & Wiksell.
- Kärrby, G. (1986:09). *22.000 minuter i förskolan. 5-6 åriga barns aktiviteter, språk och gruppmonster i förskolan*. Göteborg: Institutionen för pedagogik. Göteborgs universitet.
- Kärrby, G. (1992a). *Effektivitet och kvalitet i barnomsorgen*. Göteborg: Rapporter från institutionen för pedagogik. Göteborgs universitet.
- Kärrby, G. (1992b). *Kvalitet i pedagogiskt arbete med barn*. Socialstyrelsen. Stockholm: Allmänna Förlaget.
- Kärrby, G. (1997). *Bedömning av pedagogisk kvalitet – Förskolan i fokus. Pedagogisk forskning i Sverige, 2 (1)*.
- Larsson, S. (1993). *Kvalitet i kvalitativa studier. Nordisk pedagogik, 4, s. 194-211*.
- Larsson, S. (1996). *Vardagslärande och vuxenstudier*. I Ellström, P-E., Gustavsson, B., Larsson, S. (red). (1996). *Livslångt lärande, s. 9-28*. Lund: Studentlitteratur.
- Lindahl, M. (1996). *Inläring och erfärande. Ettåringars möte med förskolans värld*. Göteborg Studies in Educational Sciences 103. Göteborg: Acta Universitatis Gothoburgensis.
- Lybeck, L. (1981). *Arkimedes i klassen*. Göteborg: Acta Universitatis Gothoburgensis.
- Löfdahl, A. (2002:28). *Förskolebarns lek. En arena för kulturellt och socialt meningsskapande*. Karlstad: Karlstad University Studies.

Summary

- Marton, F., Dahlgren, L. O., Svensson, L. & Säljö, R. (1977). *Inläring och omvärldsuppfattning*. Stockholm: Almqvist och Wiksell.
- Marton, F. (1981). Phenomenography – describing conceptions of the world around us. *Instructional Science*, 10, p. 177-200.
- Marton, F., Hounsell, D. & Entwistle, N. (eds.) (1984). *The experience of learning*. Edinburg: Scottish Academic Press.
- Marton, F., Hounsell, D. & Entwistle, N. (1989). *Hur vi lär*. Kristianstad: Rabén och Sjögren.
- Marton, F. (1992). På spaning efter medvetandets pedagogik. *Forskning om utbildning*, 4, (s. 28-40).
- Marton, F., Beaty, E. & Dall’Alba, G. (1993). Conceptions of learning. *International Journal of Educational Reserch*, 19, p. 277-300.
- Marton, F. & Booth, S. (1997). *Learning and Awareness*. New Jersey, U.S.A.: Lawrence Erlbaum Associates.
- Marton, F. & Pang, M.F. (1999). *Two faces of variation*. Paper presented at 8th European Conferences for Learning and Instruction, August 24-28, 1999, University, Göteborg, Sweden.
- Marton, F. & Booth, S. (2000, svensk version av originalutgåvan 1997). *Om lärande*. Lund: Studentlitteratur.
- Marton, F. & Tsui, A. B. M. (2004). *Classroom Discourse and the Space of Learning*. Lawrence Erlbaum Associates. London: New Jersey.
- Marton, F., Runesson, U. & Tsui, M. (2004). The space of learning. I Marton, F., Runesson, U. & Tsui, M. *Classroom Discourse and the Space of Learning*. Lawrence Erlbaum Associates, Publishers. London: New Jersey.
- Marton, F., Wen, Q. & Wong, C.K. (in press). *Read hundred times and the meaning will appear...Changes in chinese university students’ views of the temporal structure of learning*. Gothenborg University, Nanjing University and the University of Honkong.
- Mezirow, J. (1994a). Understanding Transformation Theory. *Adult Education Quarterly*. Vol. 44. Nr 4. s. 222-232.
- Mezirow, J. (1994b). Understanding Transformation Theory. *In Adult Education Quarterly*, 44(4), p. 222-235.
- Molander, B. (1996). *Kunskap i handling*. Daidalos. Göteborg.
- Moxnes, P. (1990). *Att lära och utvecklas i arbetsmiljön*. Stockholm: Natur och Kultur.
- Mårdsjö, A.C. (1993). *Barn och trafik. Ett utvecklingsarbete på lågstadium och i förskola*. Göteborg: Acta Universitatis Gothoburgensis.

Summary

- Mårdsjö, A.C. (1998). *Att utveckla pedagogers kompetens*. Rapporter från institutionen för pedagogik. Göteborg: Rapport nr. 1998:02. Göteborgs universitet.
- Mårdsjö, A.C. (2004:11). *Kvalité I förskolan – relaterat till strukturella förutsättningar*. Linköping: Linköpings kommun.
- Neuman, D. (1987). *The origin of arithmetic skills. A phenomenographic approach*. Göteborg: Acta Universitatis Gothoburgensis.
- Next Generation Forum. (1999). *Toward the Creative Society. Next Generation Annual Report 1999*. Köpenhamn: <http://www.nextgenerationforum.org>
- Nordin-Hultman, E. (2004). *Pedagogiska miljöer och barns subjektskapande*. Stockholm: Liber, 2004.
- Ong, W. (1982). *Orality and literacy: the technologizing of the word*. London: Methuen: Routledge.
- Orlenius, K. (1999). *Förståelsens paradox. Yrkeserfarenhetens betydelse när förskollärare blir grundskollärare*. Göteborg: Acta universitatis Gothoburgensis.
- Perry, W.G. (1970). *Forms of intellectual and ethical development in college years: a scheme*. New York: Holt, Rinehart och Winston.
- Pong, W.Y. & Marton, F. (1999). *The dynamic of awareness*. Paper presented at 8th European Conference for Learning and Instruction, August 24-28. Göteborg: Göteborgs Universitet.
- Pramling, I. (1983). *The child's conception of learning*. Göteborg: Acta Universitatis Gothoburgensis.
- Pramling, I. (1994a). *Kunnandets grunder. Prövning av en fenomenografisk ansats till att utveckla barns sätt att uppfatta sin omvärld*. Göteborg: Acta Universitatis Gothoburgensis.
- Pramling, I. (1994b). Fenomenografi och praktisk pedagogik. *Nordisk Pedagogik*. Nr 4. s. 227-239.
- Pramling, I. & Mårdsjö, A. C. (1994). *Att utveckla kunnandets grunder. Illustration av ett arbetssätt*. Göteborg: Acta Universitatis Gothoburgensis.
- Pramling Samuelsson, I. & Mårdsjö, A. C. (1997). *Grundläggande färdigheter – och färdigheters grundläggande*. Lund: Studentlitteratur.
- Pramling Samuelsson, I. & Sheridan, S. (1999). *Lärandets grogrund*. Lund: Studentlitteratur.
- Pramling Samuelsson, I. & Lindholm. M. (1999). *Att förstå det lilla barnets värld – med videons hjälp*. Stockholm: Liber.

Summary

- Pramling Samuelsson, I. & Sheridan, S. (2003). Delaktighet som värdering och pedagogik. *Pedagogisk forskning i Sverige*. Årg. 8. Nr. 1-2. 2003. s. 70-84.
- Pramling Samuelsson, I. & Asplund Carlsson, M. (2003). *Det lekande lärande barnet – i en utvecklingspedagogisk teori*. Stockholm: Liber.
- Piaget, J. (1962). *Play, dreams and imitation in childhood*. London: W.W. Norton & Company.
- Piaget, J. (1976). *The child's conception of the world*. New Jersey: Litterfield, Adams & Co.
- Report of a Peer review of Masters Programme. (1994). *Undertaken for the department of education and educational research*. Report of a Peer Review undertaken by Panel from Worcester College of Higher Education, 23-25th February 1994. Review of masters programme for department of education and educational research. University of Gothenburg.
- Richardson, J.T.E. (1999). The Concepts and Methods of Phenomenographic Research. *Review of Educational Research*. Vol. 69, No 1. pp. 53-82.
- Roos, G. (1994). *Kommunerna och det pedagogiska utvecklingsarbetet inom barnomsorgen, omfattning, inriktning och villkor*. Nr, 85. Uppsala: Acta Universitatis Upsaliensis.
- Rosenqvist, M.M. (2000). *Undervisning i förskolan? En studie av förskollärarstuderandes föreställningar*. HLS Förlag. Institutionen för undervisningsprocesser, kommunikation och lärande. Stockholm: Lärarhögskolan i Stockholm. Studies in Educational Sciences 27.
- Rosenqvist, M.M. (2002). *Mellan praktik och teori; tio didaktiska berättelser om undervisning i förskola, skola, fritidshem och lärarutbildning*. ISBN 91-7656-539-4; s. 24-35.
- Rovio-Johansson, A. (1999). *Being good at teaching. Exploring Different Ways of Handling the Same Subject in Higher Education*. Göteborg: Acta Universitatis Gothoburgensis.
- Runesson, U. (1999a). *Variationens pedagogik. Skilda sätt att behandla ett matematiskt innehåll*. Göteborg: Acta Universitatis Gothoburgensis.
- Runesson, U. (1999b). *Teaching as constituting a space of variation*. Paper presented at the 8th EARLI-conference, Göteborg, Sweden. August. 24-28, 1999. Department of Education, Göteborg University, Sweden.
- Runesson, U. (Manus). *Bortom fenomenografin. Från beskrivning av variation i sätt att uppfatta, till beskrivning av variation som lärandets nödvändiga villkor*.

Summary

- Rönnerman, K. (1993). *Lärarinnor utvecklar sin praktik. En studie av åtta utvecklingsarbeten på lågstadiet*. Umeå: Umeå universitet, Pedagogiska institutionen.
- Rönnerman, K. (2000). *Att växa som pedagog: utvärdering av ett aktionsforskningsprojekt i förskolan*. Göteborg: Institutionen för pedagogik och didaktik. Göteborgs universitet.
- Sandberg, J. (1994). *Human competence at work. An interpretative approach*. Göteborg: BAS.
- Sandberg, J. & Targama, A. (1998). *Ledning och förståelse. Ett kompetensperspektiv på organisationer*. Lund: Studentlitteratur.
- Svensson, L. (1976). *Study skills and learning*. Göteborg: Acta Universitatis Gothoburgensis.
- Schön, D.A. (1991). *The Reflective Practitioner. How Professionals Think in Action*. New York: Basic Books.
- Schön, D.A. (1990). *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass Publishers.
- Sheridan, S. (2001). *Pedagogical Quality in Preeschool. An issue of perspectives*. Göteborg: Acta Universitatis Gothoburgensis.
- Skolverket. (2004). *Förskola i brytningstid. Nationell utvärdering av förskolan. Rapport 239*. Stockholm: Skolverket.
- Sommer, D. (1997). *Barndompsykologi. Utveckling i en förändrad värld*. Stockholm: Runa förlag.
- Sommer, D. (1998). The reconstruction of childhood – implications for theory and practice. *European Journal of Social Work, Vol, 1, No 3*, p. 311-326.
- Sommer, D. (2003). *Børnesyn i utvecklingspsykologin: Er ett børneperspektiv muligt?* Pedagogisk forskning i Sverige. Årg. 8. Nr 1-2. s. 101-113.
- SOU (1972:26) *Förskolan. Del, Betänkande utgivet av 1968 års barnstugeutredning*. Stockholm: Socialdepartementet.
- SOU (1992:94). *Skola för bildning. Huvudbetänkande av Läroplanskommittén*. Stockholm: Utbildningsdepartementet.
- SOU (1997:108). *Att lämna skolan med rak rygg*. Stockholm: Fritzes.
- SOU (1997:157). Utbildningsdepartementet, (1998). *Att erövra omvärlden. Förslag till läroplan för förskolan. Slutbetänkande av barnomsorg och skola kommittén*. Stockholm: Fritzes.
- Stern, D.N. (1991). *Spädbarnets interpersonella värld ur psykoanalytiskt och utvecklingspsykologiskt perspektiv* (M. Faxen, övers.). Stockholm: Natur och kultur.

Summary

- Sylva, K., Roy, C. & Painter, M. (1980). *Childwatching at playgroup and nursery school. I am 2*. Oxford preschool research project. London: Grant McIntyre.
- Säljö, R. (1979). *Learning in the learner's perspective. Some common-sense conceptions*. Reports from The Institute Education University of Göteborg. No. 76.
- Säljö, R. (1982). *Learning and understanding. A Study of Differences in constructing Meaning from a Text*. Göteborg: Acta Universitatis Gothoburgensis.
- Säljö, R. (2000). *Lärande i praktiken. Ett sociokulturellt perspektiv*. Stockholm: Prisma.
- Søndenå, K. (2002). *Tradisjon og Trancendens – ein fenomenologisk studie av refleksjon i norsk forskulelærutdanning*. Acta Universitatis Gothoburgensis.
- Tang, T.K.W. (2001). *Conceptions of Learning and Teaching amongst Teachers Studying In-service Degrees. Part one, part two*. Honkong: University Honkong.
- Tannen, D. (1990). *Det var inte så jag menade! Hur tal och uttryckssätt påverkar våra relationer med andra*. Stockholm: Wahlström och Widstrand.
- Theman, J. (1983). *Uppfattningar av politisk makt*. (Göteborg Studies In Educational Sciences 45). Göteborg: Acta Universitatis Gothoburgensis.
- Tiller, T. (1998). *Lärande i vardagen*. Stockholm: Förlagshuset Gothia.
- Tiller, T. (1999). *Det didaktiska mötet*. Lund: Studentlitteratur.
- Törnvall, M.L. & Forslund, K. (1995): *Lärares professionella utveckling. Teorigrund, metodiska ansatser och utvecklingsprocesser*. Linköping: Linköpings Universitet. Institutionen för pedagogik och psykologi. LiU-PEK-R-187.
- Utbildningsdepartementet (1998a). *Läroplan för förskolan*. Stockholm: Fritzes förlag.
- Utbildningsdepartementet (1998b). *Läroplan för det obligatoriska skolväsendet, förskoleklassen och fritidshemmet. Lpo 94 – anpassad till att också omfatta förskoleklassen och fritidshemmet*. Stockhom: Fritzes.
- Uljens, M. (1989). *Fenomenografi – forskning om uppfattningar*. Lund: Studentlitteratur.
- Uljens, M. (1993). *The essence and existence of phenomenography*. Nordisk Pedagogik. Nr 3. p. 143-147.

Summary

- Utbildningsplan och kursplan (1997). Program med inriktning mot förskola och fritidshemsverksamhet. 40/50 poäng. Göteborgs universitet.
- Vallberg-Roth, A.C. (2002). *De yngre barnens läroplanshistoria*. Lund: Studentlitteratur.
- Valsiner, J. (1990). *Culture and Development of Childrens Action*. New York: John Wiley & Sons.
- Vetenskapsrådet. (2004). *Vetenskapsrådets författningssamling*. Stockholm: Vetenskapsrådet.
- Vygotskij, L.S. (1999). *Tänkande och språk*. Göteborg: Daidalos.
- Williams, P. (2001) *Barn lär av varandra*. Göteborg: Göteborgs studies in educational sciences. 163. Acta universitatis Gothoburgensis.
- Williams, P., Sheridan. S. & Pramling Samuelsson, I. (2001). *Barns samlärande*. Stockholm: Liber.
- Wood, K. (1995). *Learning to Teach. A Phenomenographic Perspective*. London: University of London. University of London Institute of Education.