

Play in the School Context? The Perspectives of Finnish Teachers

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Abstract: Playful learning environments (PLEs) have been constructed in schoolyards in Finland with the aim of increasing learning through play in curriculum-based education. In order to better understand and inform this development, the Hyvönen sets out to ascertain how teachers view and use play in kindergarten and elementary education. Fourteen teachers were interviewed, and the data obtained were analyzed using the grounded theory approach. Eight play types were distinguished, with the teacher having the roles of leader, allowee, and afforder. Play types were found to be either curriculum-driven, or seen as facilitating friendship or integrating play and learning as a process. 'Playful teaching' was characterized in terms of the roles assumed by teachers and students in different play situations, the design of playful learning processes, the emphasis on developing and using children's creativity, and the importance of fun and enjoyment. The Hyvönen concludes that teacher education should develop teachers' pedagogical thinking through the theoretical understanding of play and learning, as well as through discussions and the modeling of play and playful teaching within teacher education programs.

Introduction

Despite an extensive body of research on play and games, few studies have been conducted on teachers' views of play in daily practices within formal kindergarten and elementary education settings. Scholarly discussion of play in teacher education is even more unusual. Increased interest regarding play in education, as well as demand for this research, came from recent developments in Finland, where outdoor technology-enhanced playful learning environments (PLEs) were designed and implemented in schoolyards. PLEs are playground-type constructions designed to offer possibilities for play and learning through the use of the entire body. The basic idea behind playful learning environments and related technologies is to broaden the conception of learning environments and learning activities (such as play) in the school context. One purpose of outdoor learning environments is to increase the amount of play in children's daily routines, since nowadays children stop playing at a much younger age than they previously did (Oksanen, 2005; Sandberg & Pramling-Samuelsson, 2003), and playful methods and learning have almost disappeared from schools (Bergen, 2009; Pui-Wah, 2010).

In an attempt to revitalize play and playful teaching in schools, there is a need for better empirical and theoretical understandings. An important first step is to listen to those in the field to understand how teachers generally consider and use play in their daily practices. The purpose of this study is to identify what play types are practiced in the school context at kindergarten and elementary levels in Finland, to analyse teachers' roles in relation to those play types, and finally to characterise and define 'playful teaching'. Finally, the implications of these findings for teacher education are discussed.

Definition of Play

For the purpose of this study, the definition of play is a broad one, covering a wide category of social games, pretending games, games involving playing with objects, and indoor and outdoor play (Pellegrini, 2005; Wood & Attfield, 2005). Play is generally comprehended as an important and valuable activity, and mature, high-level play is regarded as both fun and developmentally valuable (Bodrova & Leong, 2003a; 2003b). However, play can also appear as an unimportant or even harmful practice (Johnson, Christie & Wardle, 2005; Scarlett, Naudeau, Salonijs-Pasternak & Ponte, 2005; Sutton-Smith, 2001), if teachers lack the necessary pedagogical awareness and expertise. Thus, a more comprehensive understanding of the *quality* of play should be developed in order for teachers to avoid disguising poorly planned activities as games and play (Bergen, 2009; Hujala, Helenius & Hyvönen, 2010; Scarlett et al., 2005) or promoting play that is harmful.

In previous studies, play within learning contexts has been defined in various ways. King (1982; 1986) distinguishes instrumental play, real play, and illicit play. Instrumental play is mainly a teacher-led activity having academic goals. Real play refers to children-directed, voluntary activities that may take place (e.g., play during recess). Illicit play includes verbal and physical activities such as joking and fooling around. While children enjoy all three types of play teachers generally do not appreciate illicit play (King, 1982; 1986).

Morgan and Kennewell (2006) characterize play in terms of four distinct features. First, play is child-led and voluntary, even though adults can design settings to encourage children to play. Secondly, the *process* of playing is more important than the product, and the process is social by its nature. The third feature regards the low risk in play: learners at play are free to observe, investigate, and enjoy small details of their environment without being afraid of failures. The final feature indicates play as having the potential to contribute both procedural and conceptual knowledge (Morgan & Kennewell, 2006).

Moyles (1989) divides play types that are used in schools on the grounds of physicality, sociality/emotionality, and cognitivity. Other researchers define and name play in accordance with certain types of play activity, such as constructive play (e.g., Forman, 2006) and rough and tumble play (Pellegrini, 2006). In pondering learning through play, Kieff and Casberque (2000) define a context for meaningful learning in terms of the following features: play is focused on process; it is intrinsically motivated; it does not necessarily require literal interpretation; it allows for experimentation with rules; and it promotes mental activity.

Frame play as a type of role play is introduced by Broström (1996) whose definition of play is comprised of the idea of a common psychological frame. Children and educators together decide the general theme for the play—that is, they formulate the dimensions for content, figure a plot, and also plan play settings. In addition, rules and roles with characterizations are discussed. Process-like play, as well as children's initiatives and activities, are emphasized (Broström, 1996).

Learning through Playing

Future trends specifically concerning play in education include teachers thinking about the activities that motivate and challenge children in the school context (Veen & Vrakking, 2006). Play and games are significant in promoting learning and fostering development, but teachers' attitudes and policies regarding the use of play in teaching vary greatly (Newman, Brody, & Beauchamp, 1996; Pui-Wah, 2010; Pui-Wah & Stimpson, 2004). The rationale for recommending play lies in its multifaceted educational impact; play educates cognitively, emotionally, socially and physically (Bergen, 2009; Moyles, 1989; Meadows, 1995; Wood & Attfield, 2005). Playing renews culture and children's peer cultures (Corsaro, 2003; 2005) and protects children from worries and destructive thoughts (Oksanen, 2005). In addition, play provides reciprocal learning opportunities

for children and teachers (Moyles, 1989). Optimally, play in educational situations not only provides a real medium for learning, but also enables discerning and knowledgeable adults to learn about children and their needs. In the context of schools, this means that teachers are able to understand where children 'are' in their learning and general development, which in turn gives educators a starting point for promoting new learning in both the cognitive and affective domains (Moyles, 1989).

According to the learning sciences, children's learning shares some commonalities with adult learning (Bransford, Brown, & Cocking, 2000). For instance, self-regulation may appear quite early in child's development. Self-regulation denotes a child's ability to orchestrate his or her learning: He/she plans, monitors success, and corrects his/her behaviour when needed. The ability to reflect, conversely, appears to be late developing, which supports the idea that children should be afforded opportunities to plan their play and learning processes, while adults should be given more support for reflection.

Learning through playing can also be seen through children's ability to learn to use a variety of strategies, such as conceptualizing, reasoning and solving problems (Bransford et al., 2000). Play can provide numerous possibilities for developing such strategies, particularly when children are encouraged to adopt the role of expert. In a role of expert children believe that they are free to act according to their wishes and knowledge and they are likely to be successful in those actions. In fact, researchers note, children appear to seek conceptual understanding of the essentials of appropriate strategies (Hyvönen & Kangas, 2010). Children are both problem solvers and problem generators, and seek novel challenges (Bransford et al., 2000); they likely do so in order to naturally promote learning in play (Hyvönen, 2008b; see also Hyvönen & Kangas, 2007).

Another basis for learning through play lies in embodiment, where the whole body is used in play and in learning processes. Embodiment refers to combining various physical actions with higher cognitive activities like thinking, reasoning, perceiving and reflecting (Price & Rogers, 2004). Physicality, on the whole, is seen as being important for children's wellbeing and academic achievement; for that reason, it is recommended that physical approaches to learning be applied across the curriculum (DuBose et al., 2008). Therefore, learning through play is not merely a cognitive but also a cultural, emotional, social and physical process (Hyvönen, 2008b)

As seen, there is a growing body of evidence supporting the many connections between play and learning & development. Nevertheless, researchers point to a lack of play and playful methods in schools and early childhood education (e.g. Bergen, 2009; Pui-Wah, 2010) - particularly the poor integration of play with the curriculum (Lord & McFarland, 2010). Pramling, Samuelsson and Carlsson (2008) are concerned about insufficient integration, claiming that in preschool the act of learning (how children play) has, so far, been much more the focus than the object of learning (what children learn).

Researchers have also questioned the quality of play (Bergen, 2002; Hujala et al., 2010) and the opportunities for playful learning environments that have been missed (Maynard & Waters, 2007; Price & Rogers, 2004). One reason for both of these issues lies in teachers' epistemologies of play. They often understand play and learning as dichotomous concepts which are difficult to integrate, either in thinking or in practice. Hence, play is often identified as a mechanical and teacher-led activity. Teachers need a new insight for play and learning, as merely increasing play possibilities in the classroom is not adequate for enhancing play and learning (Pui-Wah & Stimpson, 2004). New insight is required to relate teachers' pedagogical knowledge to play-based teaching - something which is currently limited. Teachers' pedagogical views about how they implement play are essential in this study context. Pedagogical thinking refers to the educational decisions that teachers constantly make based on certain criteria within the school environment. Pedagogical thinking affects teaching practices, educational contexts, and curriculums, and hence it has pedagogical aims (Kansanen, 1991; Kansanen, et al., 2000).

Enhancing this knowledge requires a critical approach to teacher education, but also to teachers' work. However, being critical and reflective about one's own work was found to be difficult and uncomfortable to teachers, because they lack adequate pedagogical knowledge for it.

Hence teaching and learning are considered and understood more on the practical level, but less on the critical, reflective level. (Adams, 2005)

To understand the role of play in kindergarten and elementary school, it is important to find out the reality at grassroots, from teachers' perspectives, and to comprehend the ways play is used in the school context: What is the role of play in formal education, and what are teachers' roles when play is used?

Paradoxically, although there have been many studies of children's play, few have specifically focused on play in education. Cheng and Johnson (2010) reviewed four educational and four developmental early childhood journals for 2005–2007. They found that only 57 articles out of over 1,000 included the term 'play' in the title, abstract or key words, and only 16 were primarily focused on play. Just seven articles dealt with play in education. Play was seen in four roles—as a context, as a major role, as a minor role and related to intervention and special children. A lack of educational implications for practitioners was also reported by researchers of education but not the researchers of developmental articles (Cheng & Johnson, 2010).

This study focuses on play, particularly in the educational context, and the implications will be discussed in the light of teacher education. The cultural context of this research is Finland, and the research data comes from within the Finnish educational system.

The Finnish Educational System

For the purposes of this study, the Finnish educational system refers to kindergarten education, elementary school, and teacher education within these school levels. Children in Finland start non-compulsory, curriculum-based kindergarten (pre-primary education) at the age of six. Kindergarten education is provided in connection with school or as part of day care and aims to improve children's capacity for learning by teaching them new knowledge and skills through play. According to the principles of the national core curriculum, learning in kindergarten should be based on playing, exploration, and concrete activities (taking into account children's need for learning through imagination and playing), and on intertwining creativity, knowledge, and experiences with stories or actual occasions (Ministry of Education, 2000).

Continuing on from kindergarten, children start compulsory elementary school (basic school) when they turn seven, and are taught by a classroom teacher who teaches nearly all the subjects. According to national curriculum school practices should facilitate creativity in activities, experiences, and playing; they should inspire learning and support collaborative activities, social flexibility, and responsibility. They should also improve the ability to practice various skills. (Ministry of Education, 2004)

Teachers in Finland are educated at universities, with the formal qualifications for a teaching position requiring a master's degree that includes extensive pedagogical studies and qualifications in specialized subjects (Korpela, 2004; Niemi & Jakku-Sihvonen, 2006; Nyssölä, 2005). The research-based approach to teacher education that is used aims to develop teachers who have the ability to make educational decisions derived from rational argumentation in addition to everyday argumentation (Kansanen, 2003).

Three repeated, successful Programme for International Student Assessment (PISA) results have brought an international focus to the Finnish educational system and teacher education (OECD, 2007). The success is essentially explained as being the result of competent teachers—namely due to their master's degree education, a highly respected profession, high self-esteem, and an independent position in their work (Väljärvi et al., 2003).

But even with a generally successful education system, there still remain low-achieving students who need cognitive and motivational support (Malin, 2005). Another challenge is finding solutions to increase school enjoyment, which has been the focus of the Committee for School Welfare. The committee also released a report stating that learning is not solely an individual and cognitive process; rather, the emphasis should be on participation in collaborative activities

(Ministry of Education, 2005). In this light, it is important to consider daily practices—particularly the role of play in formal education.

Methodology

Research Questions

The aim of this study was to understand teachers' experiences and perspectives of the use of play in the school context by drawing on episodes and descriptions from everyday schoolwork in kindergarten and elementary education in Finland. The study was guided by the following research questions:

- 1) What are teachers' perceptions of the kinds of play that are used in kindergarten and elementary school settings?
- 2) What roles do teachers assume when play is used?
- 3) How do teachers view the role and importance of play in kindergarten and elementary education?

Given the emphasis on teachers' views and perceptions of play, a qualitative rather than quantitative approach was used. Data were collected through in-depth interviews and analysed using the 'Straussian' method of grounded theory (GT) (Charmaz, 1994; Strauss & Corbin, 1998). The strength of the GT approach is clear when the purpose is to identify unfamiliar and concealed meanings, attitudes, values, beliefs and knowledge, because it helps to consider alternative meanings and phenomena (Strauss & Corbin, 1998). Teachers in Finland work mainly behind closed doors, where activities are not seen by others. Hence, by using a qualitative approach and in-depth interviews, the teachers were given the opportunity to express their views about children's peer interaction and about interaction between teachers and children. Another purpose of the in-depth interviews and GT approach was to hear multiple viewpoints, hear about interactional situations and discuss teachers' experiences in more detail. The GT method makes it possible to conduct the interviews with teachers encouraging them to reflect on their experiences and thoughts (Strauss & Corbin, 1998). I acknowledge the important role of the researcher contributing to the research, as s/he takes part in the study by posing questions. The questions that were posed to teachers are not insignificant, because they have an effect on teachers to think about and reflect on their teaching practices (Charmaz, 1994). The aim was to make teachers reflect more deeply on their pedagogical thoughts and practices regarding play.

Participants

The study was carried out at the kindergarten and elementary levels (ages six to ten years) in the cities of Oulu and Rovaniemi in northern Finland. Kindergarten teachers and class teachers, aged from 25 to 53 years and teaching kindergarten through fourth grade (N=14, 4 males and 10 females), were interviewed about their practices and expectations with regard to playing. The teachers' special subjects were music, physical education, special education, kindergarten teaching, art, Finnish, presentation skills, foreign languages, and handicrafts. Teachers were selected to cover grades from kindergarten to the sixth grade and to cover small country schools and bigger schools in urban areas. I contacted schools and asked for volunteer teachers to participate in the study. I continued contacting schools and interviewing teachers until data were saturated.

Procedure

The teachers were told that their views would be used to build a better understanding of play in a learning context, and for designing playful learning for outdoor learning environments, which are titled as 'playful learning environments' (PLE). PLEs refer to future learning being technology-

enriched playgrounds, where curriculum-based learning activities take a form of play and playful activities. (Hyvönen, 2008; Kangas, 2010) After briefly introducing the research context, I asked the teachers about the role of playing and games in their daily teaching practices, and the roles of teachers and children when they used play. The interview followed a thematic plan, in which the main themes included play and games, content in play, and teachers' roles. Teachers were asked questions such as:

- How do you see play in formal education?
- How do you use play in teaching?
- What kind of play do children play in the school?
- What is your role in play episodes? What is the children's role?
- How is play generally planned? and
- What kind of props and playthings are used?

Teachers were asked to give examples and descriptions of such play situations. Each interview took between forty minutes and two hours; the interviews were recorded and transcribed by the Hyvönen. In accordance with the GT approach (Charmaz, 1994; Strauss & Corbin, 1998), data collection and analysis were conducted simultaneously using the process of constant comparison. Constant comparison implies looking for similarities and differences, and is a process where concepts are identified, compared and formulated into a logical, systematic and explanatory scheme. The process is both inductive and deductive, and requires returning to the data for diverse pieces of information. In addition to constant comparison, constant questioning during the process is fundamental to GT methodology. Hence I posed questions such as: "What is this about?" "Why are they doing so?" "Who is acting?" (Strauss & Corbin, 1998).

Categories are saturated when the concepts are understood and there are no gaps remaining. I transcribed the data, and began to read and tentatively code processes once the first part of the data was collected. Collecting continued until no new categories emerged. Meanwhile, I constructed hypotheses from the data and wrote analytical and theoretical memos. Hypotheses, questions and tentative analytical ideas were answered by contacting participants, and this acted as another means of saturation.

The empirical data were coded using NVivo software in accordance with the GT approach (Strauss & Corbin, 1998). GT is useful in organizing, comparing and analysing concepts in data, and is relevant in theory-building as well.

I used three sequential but simultaneous coding processes—open, axial and selective—and sought to ascertain the viewpoints of the teachers. During the open coding, the raw data were broken into manageable pieces, while each chunk was examined closely, and was coded according to its meaning, either under an existing or a new conceptual name. In the first round, I coded ten different play types, but during re-coding I integrated four types into two which were very similar. Finally, open coding resulted in eight different play types, clustered according to the goal or meaning of the play in the teachers' observations. Hence, the first three play types are *curriculum-driven*; the next four illustrate *friendship*; and the last type integrates *play and learning*.

As open coding revealed different play types and their meanings, in axial coding I also started to analyse and code utterances that recount the teacher's role related to the three play types. Open and axial coding goes hand-in-hand; hence, in axial coding broken data were put together again and connections to open coding were looked for. The emphasis was on the teacher's role, which is illuminated in axial coding by the concepts of leader, allower and afforder. These roles do not represent any of the interviewed teachers in particular, but merely refer to the different types found in the data. In other words, a single teacher may represent one, two or all three different roles.

In selective coding, the goal is to define a central category that pulls together other categories and forms an explanatory whole (Strauss & Corbin, 1998). *Playful teaching* was chosen as the core concept for selective coding because teachers considered playfulness and teaching practices in all three forms of play, and the purpose of this study is to analyse play from the perspective of teachers' work. Even though the purpose was to discover how the teachers saw

playing from their own perspectives, the very first thing they considered was the children’s point of view.

Results

The following figure (Figure 1) represents the phases of the coding process, adapted from Strauss and Corbin (1998). Open and axial coding are overlapping processes (Strauss & Corbin, 1998); hence, the concepts of both coding procedures (open = play type, and axial = teacher’s role) are integrated and titled in accordance with the teacher’s role. In the results section, I proceed by integrating open and axial coding, and in each type describe first the role of the teacher, followed by descriptions of related play types, continuing in each horizontal row 1, 2 and 3. The first role is the teacher as a leader when play types relate to the curriculum. The leader’s perspective on play is also analysed.

From the point of view of learning and development, referred to as “afforders”, it is important to notice that teachers and children create, frame and execute play together (Broström, 1996)—and not with the teacher leading.

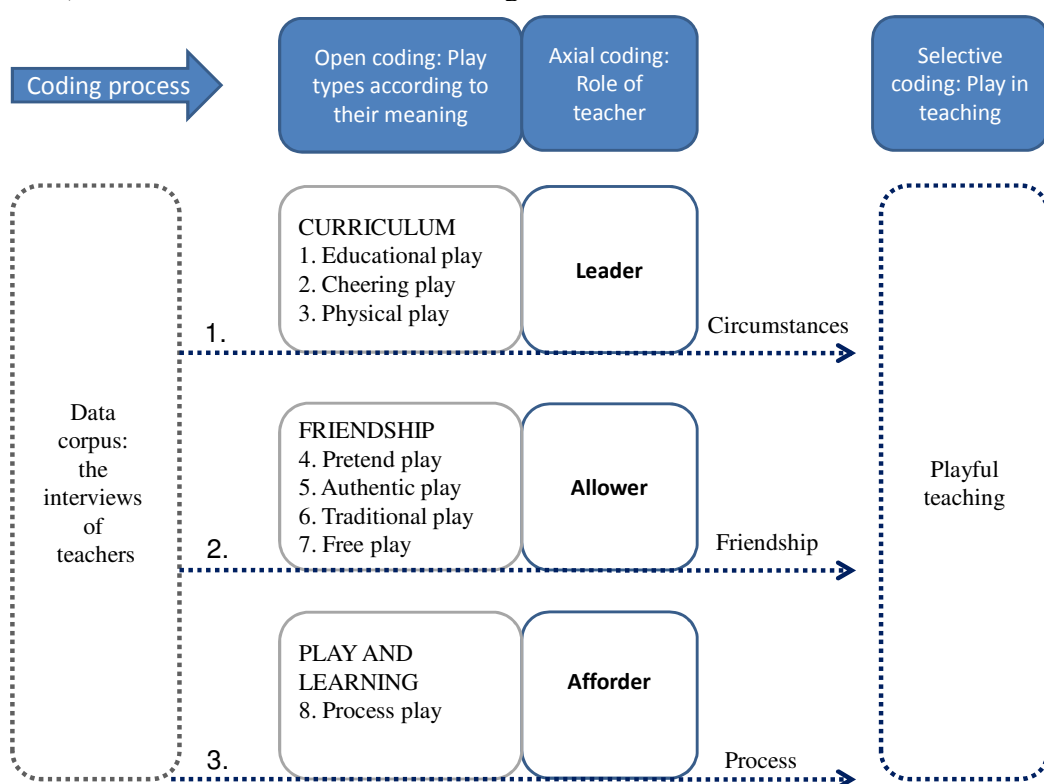


Figure 1. Open, axial, and selective coding processes used in this study.

Teacher’s Role as “Leader” – Curriculum View on Play

Eleven of the fourteen teachers described playing in which the teacher’s role is to lead activities and children are to follow directions. These three types of play: educational, cheering and physical play, are closely related to King’s (1982; 1986) *instrumental play*. A typical aspect of this type of play is that the activities take place in the classroom or gym, and that the teachers are active in both planning and execution (and are thus active in pursuing curricular goals). The children’s role is to follow the teacher’s lead, not to take part in content planning. The leader views and judges play primarily from a cognitive viewpoint, and other perspectives (such as cultural meanings) are interwoven in most of the following play types.

Probably the most common teacher-led play type at school is *educational play*, because it is related to the curriculum and thus considered to be an appropriate way to exploit playing. Educational play takes the form of music, rhymes, songs, memory games, word puzzles, board games, guessing games, math games, and imaginative journeys. A typical example of educational play comes from Pauline, a second-grade teacher, who described how play is integrated into cognitive and curricular goals: “Today we played with music and songs but also played a memory game, because we were discussing human beings, the brain, and memory.” Other teachers also highlighted that games which help children learn logical thinking, language skills, colors, forms, numbers, and symbols are useful in the classroom. Huizinga (1980) also describes “educational play” where the motivation is derived from knowing and thinking logically; his example of this type of play is the verbal game “questions and answers.”

The purpose of *cheering play* is to energize and liven up the environment. Play is used for easing and relaxing the atmosphere in order to motivate children for curriculum-based learning tasks. Usually cheering play takes no longer than just a few moments. Lisa, a second-grade teacher, revealed that, in this type of play, “We often begin or end lessons by playing something, to cheer ourselves up.”

Physical play is commonly used for warming up, for energizing the class, and for physical exercise. This type of play is often linked to the curriculum and physical education, where play not only develops motor skills, but also provides cognitive, social, and emotional competencies for children. This play type seems to enrich the local play culture (Corsaro, 2005) as well, because teachers and children have created games that are typical of their particular school but are unknown in others. For example Liv, a first-grade teacher, described “the slimy fairy,” while Lisa, a second-grade teacher, and Kim, a third-grade teacher, talked about “ambulance tag” in their school. Both of these games have simple plots and are popular among the children. In the following extract, Kim briefly describes ambulance tag:

Sicknesses are chosen for two children, who are then “it.” Avian influenza has been popular. They may shout, “Yippee! I’m going to spread the bird flu or strep throat!” New “patients” lie down on the floor, thrashing around and shouting for help. Paramedics grab them by the legs and arms and bring them to the hospital. The paramedics have to alert others by imitating the sound of an ambulance. Children always learn something when playing, such as rules and how to take events and persons into account. There is a lot of running and also situations where collaboration is needed. The purpose is not just to run a mile but to save patients.

“Leaders” View Play as Important, but Criticize Circumstances

Where teacher-led activities were concerned, teachers were critical of circumstances that inhibit playing. These basically concerned the learning environment and the curriculum, which were seen more as restrictive and coercive elements than as facilitating resources.

Kim, a third-grade teacher, regretted that curricular goals take up all of the class time: “We have no other choice but to hurry through mathematical topics like practicing multiplication, which usually takes place by teacher-led methods—chalk and talk.” Apparently, some teachers find themselves between a rock and a hard place here because they experience the curriculum as a set of demands that “force” them to adopt teacher-led practices. The teachers find the burden of the curriculum to be so heavy that they have no choice but to carry on with teacher-led lessons in the classroom in order to meet curricular requirements.

The goals of instruction and the core curriculum are the same nationwide, but local Hyvönenities and schools draw up their own local curriculums on that basis, and thus the problems lie at the local level. The ultimate goal of teacher education in Finland is to develop autonomous teachers (Kansanen, 2003; Kansanen et al., 2000), which in turn is important in organizing teaching and interpreting the curriculum. The difficulties are likely due to finding a balance between autonomy and responsibility concerning children’s learning.

Some teachers feel that there is a gap between the goals of the curriculum and the positive impacts of playing. As Lisa, a second-grade teacher, stated: "I know that there should be playing at school, but I'm worried whether playing can meet the goals of the curriculum." However, Kieff and Casberque (2000) point out different types of learning that take place during play and playful activities and find, accordingly, that teachers should model their curriculums to meet and support prescribed, spontaneous, and incidental learning. Prescribed learning refers to the goals and objectives of the curriculum. Spontaneous learning happens unexpectedly during activities and is very contextual in nature. Different environments, situations, and interactions offer possibilities for spontaneous learning. Incidental learning takes place as a "by-product" of other learning activities (Kieff & Casberque, 2000).

Teachers, to some extent, regret teacher-led learning, because when teachers lead play activities and games in their classrooms, children's ideas, imaginations, and inventions remain hidden. Ann, a fourth-grade teacher, confirmed this observation: "Children are much more creative than we [teachers] are and should be given help to realize their creativity. Creative activities and creativity become flat and diminish if led by the teacher." When reflecting on teaching, some of the teachers blamed themselves for a lack of imagination and creativity, and some faulted themselves for incorrect attitudes. Kim, a third-grade teacher, thought that the overall scheme of things should be changed: "Learning can take place in other ways [than teacher-led approaches], and one should be confident that more meaningful ways are efficient." He confessed that teacher-led methods are also very boring.

A second problem that the teachers mentioned was that classrooms as learning environments are not designed for activities other than sitting still, which restricts playing, games, and physical activities. The classroom is not an environment that sufficiently facilitates bodily experiences or children's activities. Some of the teachers further argued that learning activities in the classroom requires a lot of concentration, which is too demanding for some children.

In addition, the classroom environment was criticized for its effect on children's self-esteem. As Kate, a first-grade teacher, reflected, "The children are not confident with their own desires and thoughts; instead they think about what others expect from them." In other words, children try their best to behave in accordance with the assumed expectations of their teachers and peers. Kate stated that this phenomenon takes place in the classroom, and not while playing outdoors in the schoolyard. It is interesting that children are more confident outside the classroom and when playing. Playing itself probably makes them feel confident, because it is an activity familiar to them. In this light, it is understandable that some teachers find the classroom to be a closed space that imposes control on children. This notion underscores the importance of outdoor environments and outdoor learning, which has recently received moderate academic attention (Clements, 2004; Dillon et al., 2006; Perry & Branum, 2009).

Teacher's Role as "Allower" – Social View on Play

The second role of the teacher is as an allower, which indicates chiefly social views. The teacher's role as allower in pretend, authentic, traditional, and free play includes an awareness of where the children are, what are they doing, and if they need the teacher or not. The teacher is an observer who ensures safety but also lets the children be active and inventive while helping them to realize their own aims. Teachers do not present learning demands in this kind of playing. The teacher's role is not related directly to the curriculum as it is by leader; instead the goal and significance of the activity lie in the play and togetherness itself. For instance, this form of playing affords possibilities to negotiate rules and peer relationships, and to construct, reinforce, and break gender boundaries. Many of these activities involve conflicts, disputes, and even teasing (Corsaro, 2003; Dunn, 2004). The following four play types afford social relationships, and they are also correlated to *real play* introduced by King (1982; 1986).

The purpose of *pretend play* is to imagine and act in different roles, which teachers consider valuable in terms of creativity, collaboration, and teamwork with peers. Lisa, a second-grade teacher who pointed out the significance of team-formation processes, said that the girls suggested and, after getting permission, independently and collaboratively performed a puppet show with the handicrafts they had made at school. In addition, domestic roles and different professions from the adult world (such as hairdresser, shopkeeper, and doctor) were practiced and acted out using role play (Hyvönen, 2008a). Pretend play (or role play) was highly appreciated among the teachers. It is indeed a significant facilitator in establishing perspective and is important in learning and development (Bergen, 2002; 2009; Bodrova & Leong, 2003a).

Authentic play is seen as more genuine than other types of play because it is totally child-initiated and nothing else is needed but imagination and creativity. No commercial products are required; children find the "equipment" they require (such as stones, bricks, sticks, pine cones, and snow) in their surroundings. Children enjoy playing in thickets, dark nooks, and under staircases. The goal of authentic play is to invent play opportunities and to have fun together, as second-grade teachers Pauline and Alice jointly described: "I hope that children never lose their enthusiasm for seeing snow outdoors and so on... Children play with stones and pieces of wood, sticks, broken soccer balls; they are clever in coming up with activities without any sophisticated technical equipment...they have fun and want to go to recess, and come back with rosy cheeks and happy feelings."

Teachers who highlighted the value of authentic play felt that playing should be kept as plain and natural as possible, without any technical appliances or sophisticated equipment. Related to this view is a desire for an ideal, authentic childhood where the sources of imagination are not technical and commercial, but natural and simple materials—creativity and joy. These preferences are understandable against the trend towards an ever-shorter childhood, which is reflected in children's worries about appearance and their aggressive behavior, insecurities, and feelings of not being loved (Oksanen, 2005). Teachers would like to provide the children with a childhood where they are allowed to be children, not products of a technological and commercial society.

Traditional play is related to traditional outdoor games and is thus characterized by physical activity and fun. Examples of traditional outdoor games that seem to be popular among children are soccer, ten sticks on the board, dodge ball, cops and robbers, and different types of tag. These games are mainly recess activities and are popular among boys and girls (Hyvönen, 2008a).

Free play is an unstructured child-initiated activity where the focus is on emotional and social relevance, as well as on relaxing and enjoying oneself with one's peers and re-gaining energy levels. Playing may take place indoors or outdoors, and it is not specifically related to the curriculum. Ann, a fourth-grade teacher, emphasized that, "[Education] can't be just a matter of going through and completing the curriculum. Going to school should also be enjoyable and relaxing—then children are able to beaver away as well. To my mind, school should also afford cozy activities and easy interaction with friends."

“Allowers” View Play as Important in Enhancing Friendship

In pretend, authentic, traditional, and free play, children can be active and teachers allow the activities. The activity itself is not perceived primarily as a way of learning; rather, it carries other values. Playing covers a broad range of mainly outdoor activities where the goal is valued as having emotional, social, and physical relevance. Play is seen as important in enhancing *practicing friendship and togetherness*. As Gary, a second-grade teacher, explained: “After the lesson, they want to go with their friends and be left alone, without anyone else around. I think that they need to find a peace and quiet of their own.” He also said that children both play and fight together. Friendship is central in children’s lives, but it is not just about mutual understanding and pleasure; it also involves conflicts, betrayals, jealousies, and tangled intrigues. Friendship is a key to children’s quality of life (Dunn, 2004). It seems that recess is very important for practicing friendship and for being together in harmony, even though children need a lot of activities as well. Generally, the elementary schools in Finland offer 45-minute class periods separated by ten- to fifteen-minute recesses throughout the day. However, some schools have minimized time for recess.

All the teachers interviewed used playing in which the teachers are allowers of children’s playing, but only five of the fourteen described playing where the teacher was the afforder and the children were the active participants during the playful learning process (PLP), which will be described next.

Teacher’s Role as “Afforder” – Cognitive and Affective View on Play

The third role of the teacher is to be the *afforder*. Hence, the teachers in this study disclosed that a teacher’s role is to afford learning through play. In affording play, the teacher (as indicated by participating teachers) is facilitator, tutor, shepherd, advisor, motivator, protector, prodder, observer, activator, challenger, and encourager who gives feedback, provides examples, poses questions, is interested, and ensures safety. In addition to these qualities, the teacher as an afforder designs play processes, which include playing, elaborating, and assessing. In this respect, it is important for teachers to know and understand children, because it is the basis for pedagogical thinking (McCaughy, 2005). They need to know which children’s experiences form good foundations for the process (Broström, 1996).

The data provided examples of teacher-afforded *process play*, where the goal is focused on playing and learning as a whole through what is known as a playful learning process, where the teacher provides the basic idea for a playful activity and modifies it with the children, and then the children take the main role in it. Process play is understood as a learning activity carried out as a process with distinct phases of orientation, playing, and elaboration. The teacher prepares an idea of a process plan that supports the goals of education and mature play (Bodrova & Leong, 2003a, 2003b; Hujala et al., 2010; Hyvönen, 2008b) and carries it out by helping the children to be active and creative designers, explorers, and creators during the process. Although the afforder covers all views of learning, cognitive and emotional views are the most apparent. Process play includes the four features that are introduced by Morgan and Kennewell (2006). Firstly, play is a child-led activity and it is voluntary. Secondly, process is considered more important than product. Thirdly, play proceeds at the pace set by the learner. Play is low risk and reduces the pressure of successful completion of tasks, in other words, there is no risk of failure. In this way play is also considered to be highly engaging. Fourthly, playing provides possibilities to increase knowledge and understanding, both conceptual and procedural.

Playing is used daily as a real approach to learning and development, with play integrated seamlessly into the curriculum. The following extracts from interviews with Jane and Rita (both kindergarten teachers) illustrate the three phases of the process (i.e., orientation, playing, and elaboration):

In the first (orientation) phase, we discussed what kinds of dangerous situations there are and what first-aid is; then we examined the contents of the first-aid kit and what everything in it is used for. In the second (playing) phase, we used image cards to work out the procedure when visiting a doctor, with the children acting out all the ideas they have about getting sick or injured. In the end (elaboration phase), we went on to discuss the process and continued playing with the image cards. In this way, the teachers found out what the children had learned and how well they had understood the topics.

Process play is closely related to ideas of frame play (Broström, 1996), with a central theme, negotiation of plot, roles and rules, and shared planning. Process play covers activities such as adventure-type collaborative playing with maps, codes, routes, secrets, cards, and clues (in other words, navigating, hiding, and seeking). Because kindergarten teachers have reasonable autonomy in what they teach, they also find many enjoyable aspects of it. As Mark, a kindergarten teacher, recounted: “We are able to plan and freely carry out daily educational practices as we choose. Once we teachers are free to choose the way in which playing is framed or organized, we also have fun with the children and enjoy our work.” Extensive play forms an entire process that combines the cognitive, emotional, social, and physical spheres.

“Afforders” View Play Processes as Significant in Learning and Enjoyment

The data indicate that teachers have several opportunities to intervene in the play processes in order to challenge behavior or attitudes and to encourage children to make efforts that are within their limits. Various forms of play are used during the process; for example, Sally, a kindergarten teacher, noted that constructing different kinds of stores and selling and buying are favorable activities for children in that they promote diverse learning and cognitive, social, and emotional abilities.

From the point of view of learning and development, referred to “afforders”, it is important to notice that teachers and children create, frame, and execute play together (Broström, 1996)—and not with the teacher leading. Designing, negotiating, and ideating is a significant learning process for children, and they are respected as active participants. The child’s role is to be an active actor who suggests ideas, plans the content for playing and games, creates an environment, makes comparisons, finds explanations, solves problems, and practices negotiating. These activities require creativity and generate fun, as the teachers recounted. Child-initiated activities require flexibility from teachers in planning processes (Wood & Attfield, 2005).

Kate, a first-grade teacher, thought that the teacher must take responsibility for sustaining the entire process in which playing induces learning and development—and not just offer a brief “snack” along the way. The teacher’s role is primarily to *properly design the basis* for a playful process so that it is motivating for the children. Secondly, the teacher makes sure that the imaginary world—the world of ideas—is shared by the group and that the environment becomes something new. Kate, a first-grade teacher, commented on this: “Even though we have three lessons, one after the other, playing in the same environment, albeit with something different offered in each lesson, children should always see it as a novel environment; it is important. The teacher handles the situations even when we are pretending to dive deep to the bottom of the sea.”

Playful Teaching

Using the grounded theory approach (Strauss & Corbin, 1998), the central category –playful teaching – represents the main theme of this research. It also unites other categories (Strauss & Corbin, 1998), such as types of play and the role of the teacher. According to Dunn (2004), playful teachers are creative and innovative when adapting technological innovations into their work. But what does playful mean in teaching? On the basis of this data, the following features explain playful teaching.

1. *Teacher's role.* Playful teaching refers to the teacher in different situations either leading, allowing, or affording play. The roles of teachers and children are complementary and dependent on each other: the more the teacher is leading the play or play process, the less possibilities children have to be active. The three roles of the teacher highlight a rich and comprehensive developmental view for learning.

2. *Playful learning process.* The aim of playful teaching is to integrate play and curriculum by designing playful learning processes of orientation, play, and elaboration where various learning environments are used and school subjects are integrated. Teachers shared the view that it would be positive if teachers and children together designed playful learning processes, which are expected to be enjoyable and foster learning and development.

3. *Drawing on children's creativity.* The teachers interviewed in this study rely on the children's creativity and capabilities. They agreed that children find ways to invent play and have knowledge and experience of using play environments and technological devices; hence they can be of assistance to peers and teachers. Sally, a kindergarten teacher, related one episode as an example: "The children were playing store and I forgot to bring both a cash register and a calculator. However, there was an absolutely ancient telephone which they did not know how to use. So they took the handset and used it as a bar code reader and calculated the prices with that. It would never have occurred to me to use it that way." However, "today's kids" are not a homogenous group; individual differences have to be taken into account in order to estimate the capacity to play, as not every child is automatically skilful at playing.

4. *Fun and enjoyment.* The final criterion comes from fun and enjoyment that teachers and children can share, as evidenced in this study: each teacher interviewed in this study related play to fun, enjoyment, creativity, collaborative activities, physicality, and friendship. Sutton-Smith (2001) argues that educators have seen play as being primarily about development rather than enjoyment. Both views came out in the present data. At its best, playing fosters creativity and provides fun and sociality. Fun means affirmative feelings to do something together, and it is also important that the activity feels real, true, and as genuine as possible. As Liv, a first-grade teacher, stated: "They [the children] are very interested in everything that is real, that is related to real life, what engineers really do—like every kind of gauge and instrument—and they learn how to use them. It is surely very nice."

Conclusions

The purpose of this study is to define play types that are observed played in the school context, to analyze teachers' roles in play situations and teachers' views of play in kindergarten and elementary education, and to indicate features of playful teaching.

Eight different play types were distinguished according to their meaning. This study shows that the teachers interviewed use various play types in educational settings. Seven of the fourteen teachers use play as a daily routine, while the others use it somewhat frequently.

Three roles were distinguished for teachers involved in educational play; each of them highlights different views on learning and development. The role of leader is associated with being more heavily tied by curriculum and more cognitive than in other views, and play is considered as important, but explained as being restricted by hindrances. The role of allower is associated mostly

with a social view, and play is comprehended as important for friendship. The role of afforder relates more to cognitive and emotional views, but includes social and physical views as well. Play is then used as a process to foster learning and enjoyment.

The teachers shared the view that play is generally enjoyable and it is possible—and even easy—to integrate it into any school subject. Suitable content comes from subjects such as music, history, mathematics, the mother tongue, and the natural sciences, but in play diverse content can become integrated. However, on the basis of this study, elementary school teachers rarely use process play, which integrates play and learning, suggesting that teacher education in Finland does not adequately prepare teachers to analyze the basis for pedagogical thinking in regards to playful teaching. However, they help student teachers to realize that immediate solutions (c.f. Nelson & Harper, 2006), such as occasional play or games without integrating play with various subject matters, are not that beneficial. Occasional play and games might be called “play in curriculum,” but they ignore a major feature of play—play as a developmental process (Moyles, 1989). The goal for deeper learning provided by proactive engagement with authentic learning experiences (in this case, student teachers designing, executing, and studying playful learning processes with children and in-service teachers) provides a better understanding of the nature of learning (Nelson & Harper, 2006) and the role of play and children’s activities in the process (Hyvönen, 2008b). In playful teaching, attention has to be paid to the teacher’s role in order to design playful learning processes, to encourage children as active participants, and finally to promote fun, enjoyment, and creativity.

Implications for Teacher Education

Just knowing the importance of play for learning and development is not sufficient for student teachers to holistically integrate play (e.g., pretend play) with the learning processes. This was apparent in this study in two ways: first, only one-third of the interviewed teachers use play holistically while providing children’s activities in their learning process; and second, in a role of leader, teachers were particularly unsatisfied with themselves and the results of their teaching. For instance, Kim, a third-grade teacher, questioned daily practices: why do teachers use the same routines, when there are so many ways to teach? Answers to these questions will be acknowledged through the following sections: 1) understanding play and children’s learning; 2) discussion; and 3) bringing playful teaching into teacher education programs.

Understanding Children’s Learning and Play

Teacher education programs should incorporate the latest research on learning and play, and also practice integrating them as adaptation of the process play. This is due to two reasons, first, as evidenced recently by Lord and McFarland (2010), integrating play and learning is challenging. The basis for designing any learning is to deeply understand, theoretically, how people (in this case, children) learn. What activities stimulate learning processes? What kinds of environments promote learning? What kind of collaboration enhances shared knowledge construction? And how can self-regulated learning and building learning strategies be fostered? Teacher educators should acknowledge that teachers of the future will need to have a deep understanding of the theoretical principles and latest knowledge about how children learn (Sawyer, 2006).

Another issue is the need to understand what is essential in play and playfulness and how children can be active actors in play processes. Sustainable solutions in teacher education are based on scientific knowledge (Bereiter & Scardamalia, 2008). Research-based teacher education aims to develop teachers that are capable of using research and research-driven competencies in their ongoing teaching and decision making (Westbury, Hansen, Kansanen & Björkvist, 2005). In that aim, it should take into account research of play as well.

Discussions with Students during Teacher Education

Pedagogical thinking should also be guided by authentic discussions (Bereiter & Scardamalia, 2008) with students teachers and teacher educators, while the purpose is to reflect rationally on both the descriptive and normative sides of pedagogical thinking and to reveal the foundations underlying it (Kansanen, 1991). The present study suggests that teachers who typically take a 'leader' role in promoting play would benefit most from the discussions because they want to expand their teaching and increase the significance of play. Basically it is a question of how teachers can fulfill "good teaching." In the situations where teachers identified themselves as leaders, they were dissatisfied with the available learning environments—specifically, classrooms—and with the dilemmas they face in attempting to integrate curriculum with play. The complaints posed by them relate to teaching as a technical act (Moje & Wade, 1997), or as a "traditional" or academic-oriented process, including dominant behavior such as consistent routines, pre-planned curriculums, and teacher-directed learning (McMullen et al., 2006).

It would be enlightening for student teachers to take another viewpoint and realize how children see learning. A study conducted in a London elementary school showed that children see learning principally as teacher-centered cognitive activities (sums, drawings, and writing); sometimes the child is even missing (Lodge, 2007). Consequently, discussions are needed regarding teachers' roles and reflections on children's roles. The role of "leader" is associated with a behavioristic view of learning, where children are rather passive and teachers' activities are guided by curriculums and circumstantial textbooks with ready-made teaching materials (Kansanen, 1991). Ready-made materials help teachers in their work, but they also necessitate lesser thinking. Less reliance on textbooks is important, because it leads to finding other supportive resources, and further leads to effectively integrating curriculums (Arredondo, 1998), which is one main idea in the playful learning process (Hyvönen, 2008).

The ability to develop and improve curriculums and learning environments is one of the core abilities of teachers (Niemi & Jakku-Sihvonen, 2006). Consequently, discussion should extend to various playful learning environments, where school topics can be practiced and learned by using the whole body. Playful learning environments, which provide play, games, and physical activity, are important during recess (Pellegrini, 2005), but also useful in meeting various curricular demands. Teacher education programs should be specifically designed to take into account various learning environments, to acknowledge technological tools that can be utilized outdoors, to exploit playing and games as activities for learning and development, and, ultimately, to understand the values of the curriculum.

Play in Teacher Education

In kindergarten and schools, play is valued and implemented in many ways throughout the school day, however play as a real learning activity or as a tool for learning is realised in kindergarten education more genuinely than in elementary school. This fact needs critical thinking regarding teacher education in elementary schools, with the question being "is play and its educational and developmental roles too poorly treated in teacher education?" One respondent, Lisa, a young teacher in her second year as a class teacher, pointed out the problem of play being seen as a side activity, causing her to wonder if learning eventually takes place without paper and pencil. Other class teachers appreciated the importance of play and use play in different ways; however, they admit its role in learning is insufficient. Kindergarten teachers in this study see that learning *does not need paper and pencil*. Instead, learning processes should be designed as playful activities where children's thinking, questioning, reasoning and explaining are naturally involved in play.

This study suggests that play in its many forms is significant, but particularly process play should be a part of teacher education, so that new teachers will be competent in designing playful learning processes, in other words, integrating play and learning in a way that provides understanding, learning and enjoyment. This also requires teacher educators to design courses and modules so that play or playfulness is a natural part of education to boost creativity and enjoyment.

Conclusion

To conclude, the present study has fulfilled its stated purpose highlighting how Finnish teachers working with pupils from six to ten years of age view play, and how they perceive its use within the school context. The study and the results will increase the understanding of teachers' pedagogical thinking regarding play as a learning medium, which is important in order to encourage teachers and teacher educators to put more emphasis on understanding theoretical and practical bases for learning and forms of playing. In addition, the study encourages considering outdoor learning environments as potential contexts for playing and learning, since they increase the potential for diverse play types and are significant for pupils. Particularly process play, physical play and play types that are seen as important in fostering friendship (pretend, authentic, traditional and free play) are conducive to outdoors.

There are some limitations in this study which should be noted. The first limitation is that the data are based on self-reports. This study elicited teachers' views and perceptions about play through in-depth interviews rather than using more objective measures, such as classroom observations. So, further studies in authentic settings are necessary, where multiple data collection methods are included. Another limitation is that the results represent Finnish teachers in Northern Finland; hence, generalization to wider cultural contexts should be made cautiously.

References

- Adams, S. (2005). Practitioners and play: Reflecting in a different way. In J. R. Moyles (Ed.), *Excellence of play* (pp. 213–227). Maidenhead: Open University Press.
- Arredondo, D. E. (1998). Principal perceptions and beliefs about integrated curriculum use. *Journal of Administration*, 36(3), 286–298.
- Bereiter, C., & Scardamalia, M. (2008). Toward research-based innovation. In D. Grandrieux & V. Shadoian (Eds.), *Innovating to learn, learning to innovate* (pp. 67–91). OECD. Retrieved May 5, 2010 from http://net-1.bmukk.gv.at/images/Arbeitsmappe/742/jan09_oecd.pdf
- Bergen, D. (2002). The role of pretend play in children's cognitive development. *Early Childhood Research and Practice*, 4(1). Retrieved June 6, 2010, from <http://ecrp.uiuc.edu/v4n1/bergen.html>
- Bergen, D. (2009). Play as the learning medium for future scientists, mathematicians, and engineers. *American Journal of Play*, Spring, 413–428.
- Bodrova, E. & Leong, D. J. (2003a). The importance of being playful. *Educational Leadership*, 60(7), 50–54.
- Bodrova, E. & Leong, D. J. (2003b). Chopsticks and counter chips: Do play and foundational skills need to compete for the teacher's attention in an early childhood classroom? *Young Children*, 58(3), 10–17.
- Bransford, J. D., Brown, A. L. & Cocking, R. R. (Eds.) (2000). *How people learn: Brain, mind, and school*. Washington: National Academy Press
- Broström, S. (1996). Frame play with 6-year-old children. *European Early Childhood Research Journal*, 4(1), 89–101.

- Charmaz, K. (1994). The grounded theory method: An explication and interpretation. In B. G. Glaser (Ed.), *More grounded theory methodology: A reader* (pp. 95–115). Mill Valley, Ca: Sociology Press.
- Cheng, M-F & Johnson, J. E. (2010). Research on children's play: Analysis of developmental and early education journals from 2005 to 2007. *Early Childhood Educational Journal*, 37, 249–259.
- Clements, R. (2004). An investigation of the status of outdoor play. *Contemporary Issues in Early Childhood*, 5(1), 68–80.
- Corsaro, W. A. (2003). *"We're friends, right?": Inside kids' cultures*. Washington, D. C: Joseph Henry Press.
- Corsaro, W. A. (2005/1997). *The Sociology of childhood*. Thousand Oaks, California: Pine Forge Press.
- Dillon, J., Rickinson, M., Teamey, K., Morris, M., Choi, M. Y., Sanders, D. & Benefield, P. (2006). The value of outdoor learning: Evidence from research in the UK and elsewhere. *School Science Review*, 87(320), 107–111.
- DuBose, K. D, Mayo, M. S., Gibson, C. A., Greed, J, L., Hill, J. O. Jacobsen, D. J. et al. (2008). Physical activity across curriculum (PAAC): Rationale and design. *Contemporary Clinical Trials*, 29, 83–93.
- Dunn, J. (2004). *Children's friendships. The beginnings of intimacy*. Malden: Blackwell.
- Forman, G. (2006). Constructive play. In D. Pronin Fromberg & D. Bergen (Eds.), *Play from birth to twelve: Contexts, perspectives, and meanings* (pp. 103–110).
- Huizinga, J. (1980/1949). *Homo ludens: A study of the play-element in culture*. London: Routledge & Kegan Paul.
- Hujala, E., Helenius, A. & Hyvönen, P. (2010). Play for learning and transition to school. In M. Ebbeck & M. Waniganayake (Eds.), *Children's play in early childhood education: Facilitating learning in diverse contexts* (pp. 89–102). Australia: Oxford University Press.
- Hyvönen, P. (2008a). Boys' and girls' shared activities in the school context: Towards a theory of collaborative play. *Teachers and Teaching: Theory and Practice*, 391–409.
- Hyvönen, P. (2008b). *Affordances of playful learning environment for tutoring playing and learning*. Doctoral dissertation. Acta Universitatis Lappeensis 152. University of Lapland, Faculty of education, Finland. Rovaniemi: University of Lapland Printing Centre.
- Hyvönen, P. & Kangas, M. (2007). From bogey mountains to funny houses: Children's desires for play environment. *Australian Journal of Early Childhood (AJEC)*, 32(3), 39–47
- Hyvönen, P. & Kangas, M. (2010). Children as experts in designing play environment. In E-L Kronqvist & P. Hyvönen (Eds.), *Insights and outlouds: Childhood research in the North*, 143–170. Acta Universitatis Ouluensis E 107. Oulu: Oulu University Press.
- Johnson, E. J., Christie, J. F. & Wardle, F. (2005). *Play, development, and early education*. Boston: Pearson.
- Kangas, M. (2010). *The school of the future: Theoretical and pedagogical approaches for creative and playful learning environments*. Doctoral dissertation. Acta Universitatis Lapponiensis 188. University of Lapland, Faculty of Education, Finland. Rovaniemi: University of Lapland Printing Centre.
- Kansanen, P. (1991). Pedagogical thinking: The basic problem of teacher education. *European Journal of Education*, 26(3), 251–260.
- Kansanen, P. (2003). Teacher education in Finland: Current models and new developments. In B. Moon, L. Vl sceanu, & C. Barrows (Eds.) *Institutional approaches to teacher education within higher education in Europe: Current models and new developments* (pp. 85–108). Bucharest: Unesco – Cepas. Retrieved February 6, 2008, from <http://www.helsinki.fi/~pkansane/Cepas.pdf>
- Kansanen, P., Tirri, K., Meri, M., Krokfors, L., Husu, J. & Jyrhämä, R. (2000). *Teachers' pedagogical thinking: Theoretical landscapes, practical challenges*. New York: Lang.

- Kieff, J. E. & Casberque, R. M. (2000). *Playful learning and teaching. Integrating play into preschool and primary programs*. Boston: Allyn and Bacon.
- King, N. R. (1982). Children's play as a form of resistance in the classroom. *Journal of Education*, 164(2), 320–329.
- King, N. R. (1986). When educators study play in schools. *Journal of Curriculum and Supervision*, 1(3), 233–246.
- Korpela, S. (2004). Free schooling for all. The Finnish school system supports lifelong learning. Virtual Finland. Ministry for Foreign Affairs of Finland. Retrieved January 2, 2010, from <http://virtual.finland.fi/netcomm/news/showarticle.asp?intNWSAID=41557>
- Lodge, C. (2007). Regarding learning: Children's drawings of learning in the classroom. *Learning Environ Res*, 10, 145–156.
- Lord, A. & McFarland, L. (2010). Pre-service primary teachers' perceptions of early childhood philosophy and pedagogy: A case study examination. *Australian Journal of Teacher Education*, 35(3), 1–113.
- Malin, A. (2005). *School differences and inequities in educational outcomes. PISA2000 results of reading literacy in Finland*. Jyväskylä: Jyväskylä University Press.
- Maynard, T. & Waters, J. (2007). Learning in the outdoor environment: A missed opportunity. *Early Years*, 27(3), 255–265.
- McCaughy, N. (2005). Elaborating pedagogical content knowledge: What it means to know students and think about teaching. *Teachers and Teaching: Theory and Practice*, 11(4), 379–395.
- McMullen, M. B., Elicker, J., Goetze, G., Huang, H-H, Lee, M. & Mathers, C. et al. (2006). Using collaborative assessment to examine the relationship between self-reported beliefs and the documentable practices of preschool teachers. *Early Childhood Education Journal*, 81–91.
- Meadows, S. (1995/1986). *Understanding child development*. London: Routledge.
- Ministry of Education (2000). *Core curriculum for pre-school education in Finland 2000*. National Board of Education.
- Ministry of Education (2004). *National core curriculum for basic education 2004*. Retrieved October 2, 2006, from http://www.oph.fi/info/ops/pops_englanti_index/index.pdf
- Ministry of Education (2005). Report of the committee for school welfare. Retrieved January 8, 2010, from http://www.minedu.fi/OPM/Julkaisut/2005/kouluhyvinvointityoryhman_muistio?lang=en
- Morgan, A.E. & Kennewell, S.E. (2006). Initial teacher education student's views of play as a medium for learning—divergence of personal philosophy and practice. *Technology, Pedagogy and Education*, 15(3), 307–320.
- Moje, E. B. & Wade, S. E. (1997). What case discussions reveal about teacher thinking. *Teaching and Teacher Education*, 13(7), 691–712.
- Moyles, J. R. (1989). *Just Playing? The role and status of play in early childhood education*. Milton Keynes: Open University Press.
- Nelson, C. & Harper, V. (2006). A Pedagogy of difficulty: Preparing teachers to understand and integrate complexity in teaching and learning. *Teacher Education Quarterly*, 33(2). Retrieved September 6, 2007, from http://findarticles.com/p/articles/mi_qa3960/is_200604/ai_n17183805/print
- Newman, J., Brody, P. J. & Beauchamp, H. M. (1996). Teachers' attitudes and policies regarding play in elementary schools. *Psychology in the Schools*, 33, 61–69.
- Niemi, H. & Jakku-Sihvonen, R. (2006). Research-based teacher education. In R. Jakku-Sihvonen & H. Niemi (Eds.), *Research-based teacher education in Finland* (pp. 31–50). Turku: Painosalama Oy.
- Nyysölä, K. (Ed.) (2005). *Schooling for tomorrow. Analysing and understanding the "demand for schooling."* Country report Finland. National Board of Education. Retrieved September 6, 2009, from

<http://www.oecd.org/dataoecd/38/38/33707810.pdf#search=%22nyyss%C3%B6l%C3%A4%20schooling%20for%20tomorrow%22>

- OECD (2007). PISA 2006: Science competencies for tomorrow's world executive summary. Retrieved January 2, 2010, from <http://www.pisa.oecd.org/dataoecd/15/13/39725224.pdf>
- Oksanen, A. (2005). Bodies in chains: Consumer culture as black pedagogy and body dissatisfaction among Finnish, Swedish and Norwegian children. In T. Hoikkala, P. Hakkarainen & S. Laine (Eds.) *Beyond health literacy - youth cultures, prevention and policy* (pp. 63–88). Helsinki: Finnish Youth Research Society.
- Pellegrini, A. D. (2005). *Recess. Its role in education and development*. Mahwah NJ: Lawrence Erlbaum.
- Pellegrini, A. D. (2006). Rough-and-tumble play from childhood through adolescence: Differing perspectives. In D. Pronin Fromberg & D. Bergen (Eds.), *Play from birth to twelve: Contexts, perspectives, and meanings* (pp. 111–118).
- Perry, J. P. & Branum, L. (2009). "Sometimes I pounce on twigs because I'm a meat eater" Supporting physically active play and outdoor learning. *American Journal of Play*, 2, 195–214.
- Pramling Samuelsson, I. & Asplund, M. C. (2008). The playing learning child: Towards a pedagogy of early childhood. *Scandinavian Journal of Educational Research*, 52(6), 623–641.
- Price, S. & Rogers, Y. (2004). Let's get physical: The learning benefits of interacting in digitally augmented physical spaces. *Computers & Education*, 43(1–2), 137–151.
- Pui-Wah, D. (2010). Exploring the tactfulness of implementing play in the classroom: A Hong Kong experience. *Asia-Pacific Journal of Teacher Education*, 38(1), 69–82.
- Pui-Wah, D. C. & Stimpson, P. (2004). Articulating contrasts in kindergarten teachers' implicit knowledge on play-based learning. *International Journal of Educational Research*, 41, 339–352.
- Sandberg, A. & Pramling-Samuelsson, I. (2003). Preschool teachers' play experiences then and now. *Early Childhood Research & Practice*, 5(1). Retrieved September 13, 2009, from <http://ecrp.uiuc.edu/v5n1/sandberg.html>
- Sawyer, R. K. (2006). The school of the future. In R. K. Sawyer, (Ed.), *The Cambridge handbook of the learning sciences* (pp. 567–580). NY: Cambridge University Press.
- Scarlett, W. G., Naudeau, S., Saloni-Pasternak, D., & Ponte, I. (2005). *Children's play*. Thousand Oaks, CA: Sage.
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research*. Newbury Park, CA: Sage Publications.
- Sutton-Smith, B. (2001/1997). *The ambiguity of play*. Cambridge MA: Harvard University Press.
- Veen, W. & Vrakking, B. (2006). *Homo zappiens: Growing up in a digital Age*. London: Network Continuum Education.
- Väljjarvi, J., Kupari, P., Linnakylä, P., Reinikainen, P., Sulkunen, S. Törnroos, J. & Arffman, I. (2003). The Finnish success in PISA – and some reasons behind it 2. PISA 2003. Retrieved September 10, 2010, from http://ktl.jyu.fi/img/portal/8317/PISA_2003_print.pdf
- Westbury, I., Hansen, S-E., Kansanen, P. & Björkvist, O. (2005). Teacher education for research-based practice in expanded roles: Finland's experience. *Scandinavian Journal of Educational Research*, 49(5), 475–485.
- Wood, E. & Attfield, E. (2005/1993). *Play, learning and early childhood curriculum*. London: Sage Publications.