Fairytale Forest as a Method for Children's Sociocultural Learning

Marjanen Päivi, Saarinen Laura, Sumentola Henni

(Laurea University of Applied Sciences, Finland)

Abstract: This paper will present the tool created in Finland by Laurea University of Applied Sciences students. The aim of this tool, Fairytale Forest, is to support an emotionally safe environment in the early-childhood years and pre-school age. The process of creation for the Fairytale Forest is based on the sociocultural theory of Vygotsky.

In this paper, we will evaluate how this tool improves children's learning in a sociocultural context. The observation method is based on Verba's (1994) classification of learning. The analysis has built on the following three categories: observation/elaboration, co-construction and guided activity. The evaluation has been done by video observing four to six year old children in a day care centre in six different places in southern Finland autumn 2013. There were six different control points in this tool and a video recording were made from each control point.

Sociocultural learning was seen clearly in part of the video data. It happened in both verbal and non-verbal forms. Children tried to formulate a shared meaning by thinking out loud, looks and motions. Children regarded other children as more interested than a guiding adult. When the adult's role was authoritative and the rules were strict, it complicated interaction and sociocultural learning in children.

This article is part of the FIT-project (Functional Innovative Tools for Learning). The idea is to create a network in the Nordic and Baltic countries and among then the purpose is to create functional, innovative, pedagogical materials — methods and tools — for learning. The partners come from Finland, Estonia, Denmark, Latvia and Lithuania. FIT is funded by Nordplus Horizontal programme.

Key words: early-childhood education, socio-cultural learning, peer group

1. Introduction

This article is based on research done by students at the Laurea University of Applied Sciences. The purpose of the research was to develop a new working method that supports children's peer group learning and strengthens an emotionally safe environment. The result of the developing process was a functional tool, called "Fairytale Forest", for use outdoors in day care and pre-school education. The tool has been tested and evaluated in two countries, Botswana and Finland, during the Matilainen's and Vähäkuopus master thesis project. The secondary evaluation material has been collected as part of the work for this article. This article describes a method for the evaluation process and its theoretical approach, socio-cultural learning.

The theoretical approach for developing work in this method is peer group learning in a sociocultural context.

Corresponding author: Marjanen Päivi, Doctor of Education, Laurea University of Applied Sciences; research areas/interests: early childhood education, sociocultural learning. E-mail: Paivi.Marjanen@laurea.fi.

According to Salmivalli (2005, p. 15), peers mean persons who are about the same level in cognitive, social or emotional development with a child. They are usually about the same age as a child. The importance of peers was a major fact to notice and which had much impact on the developing process of the method. In this article, "peer group" means a group of children, 4 to 6 years of age, with approximately the same cognitive and social skills. The role of playing is also important in this method (Matilainen & Vähäkuopus, 2013, p. 29).

2. Theoretical Background

The aim of the Fairytale Forest method is to offer an emotionally safe environment in early childhood years where peer group learning can happen naturally.

3. Learning Environment in Early Childhood

A good learning environment provides group processes, collaboration, interaction, communication and dialog with children (Kronqvist & Kumpulainen, 2011, p. 50; Manninen, Burman, Koivunen, Kuittinen, Luukannel, Passi & Särkkä, 2007, p. 38). Lourens (2004, pp. 3–5) has defined an emotionally safe classroom place where children can feel able to master things. Children can be themselves and express their feelings without fears. In an emotionally safe environment, children can link to adults and a peer group as a valued and respected member of the team. Common values are an important element of this kind of environment. These values are part of everyday life, and they have been negotiated; then all group members have a common understanding about values. According to Lourens (2004, pp. 7–8), educators have an important role in these learning environments. It is possible to sense this caring atmosphere.

In addition to educators, parents have an important role when an emotionally safe learning environment is being created. Lourens (2004, pp. 7–8) says that home education by parents support other learning environments such as day care centers. The central idea of the Lourens model also includes community. A community shares values, and adults have an important role in modeling their values, as well as a model first child as an individual but also as a valuable member of the community. The model also emphasizes the ability of adults to provide children the feeling that they know things and are valued and appreciate.

4. Community and Children's Peer Groups

The last few years in sociology and developmental psychology have paid attention to children's peer culture. A child is wanted to be seen as a skilled, active actor, perfect in every development zone. Peer culture has been seen as a child's own, it is a result as a children's cooperation and interpretative reproduction not just adult's reproduction. Children's own peer culture includes action, artifacts, and routines, things that children can share with each other and produce (Kronqvist, 2006). In Corsaro's (2003, p. 36) research, it is also mentioned that children wanted to be involved, to participate and be part of the group; playing alone seldom lasted long.

Everybody needs a feeling that they are accepted in their group. At first this means family, but when growing up this means a group in the day care centre. In all these different groups, there are many situations of interaction where a child has an opportunity to expand feeling about that he is approved and can influence progress. The feeling of approval is not passive acceptance, but it is formed in active interaction. Participation is an important basis for community. Community is social health and wellbeing (Mäkelä, 2011, pp. 20–21). As Corsaro (2003, p.

37) wrote, social participation and sharing are the heart of kids' peer culture.

Community and its meaning to the individual and the group are primarily based on the subjective experiences and senses together with appreciation. Communities give a child the experience of fellowship, participation and peer culture (Ikonen, 2006, p. 164). Children get social and emotional pleasure from sharing things and doing things together, especially when it's done on their own, without adult help or guidance. Children want to achieve control of their lives and share a feeling of control with each other. By doing so, they teach each other social skills (Corsaro, 2003, p. ix). The role of community in children's learning cannot be forgotten (Ikonen, 2006, p. 164).

4.1 Sociocultural Learning

In sociocultural theories of a child's development and learning, the cultural and communal bases are highlighted (Rogoff, 2003). Learning is a comprehensive and dynamic process; by learning, an individual becomes part of the culture. Learning means active participation in some community's activities. Learning is understanding the tools of activity and the thinking that are typical for a particular community. The tools that people use are very important in the sociocultural conception of learning. The thinking of human beings is based on using different tools such as books, toys and computers. We can solve different physical and intellectual problems and cross biological boundaries with the help of cultural tools. The behavior of human beings is formed from the collaboration of the structures of mind and "intellectual" tools when we look at that through sociocultural glasses. Play has a huge importance in the sociocultural learning of children (Hyvönen et al., 2007, p. 151; Ikonen, 2006, p. 153; Kronqvist et al., 2011, p. 25; Vygotsky, 1978).

In Kronqvist (2006), the dissertation about "What happens in a child group" peer group got a big role in promoting learning. Children told diverse things about what other children had taught them and about what they had learned by watching, following and copying other children acting. They experienced that learning from adults was mainly instructions, orders and advice. So the role of the adult in children's responses was small and it was the experience about adult being teacher. The adult role is in organizing the learning environment and giving space to children's own thoughts and peer actions. These are important contextual factors in supporting a little child in learning (Kronqvist, 2006). An adult can be helpful, but often children collectively teach each other how to get along, in play for example (Corsaro, 2003, p. 41). But in a child´s world of experience, the meaning of the peer group is more important than adults. Another child works as an announcer, a role model and an ideal but from time to time also causes of arguments and disagreements. But it is also part of the peer culture. The skill to negotiate, settle and solve disagreements is an important developmental task, where children's skills are refined and abilities are strengthened (Kronqvist, 2006).

Playful activities have seven features which are affiliated with sociocultural theory: embodiment, community, creativity, narrative, insight, emotionality and functionality. The concept of playfulness represents thinking that playful activities and processes are meaningful in themselves. The aim of playful activities is not only to lure children to perform tasks which are affiliated to learning. In playful activities, the meaning of the process is highlighted, which means that playing is part of the process but the place and form for that will be accommodated in everyday practices (Hyvönen, Kangas, Kultima & Latva, 2007, p. 149).

4.2 The Role of Playing

The sociocultural learning of young children often happens in the context of play. There is no simple way to define the concept of play. Anyway, there are some features that have been affiliated with play. Smidt (2011, p. 2) defines a few features of action that are characteristic in play. Playing is action that happens in certain contexts,

cultures, families and communities. While playing, children try to solve problems which they have set for themselves. They may also explore and experience something in which they are interested, nervous about, scared of or excited about. Besides that, play is an important context where children can show and deal with their feelings based on their experiences. Playing is not work in a child's life, but it is an important development task (Koivunen, 2009, p. 40). A child progresses physically, mentally and socially through playing. Through playing, a child can also try to understand and experience what is meaningful in their lives and their habitat. This happens by creating another reality and embracing that through comprehensive experiences that we also call playing (Hakkarainen, 2008a, pp. 99–100).

Playing has many roles in the development and learning of a child's personality. Different forms of play the guide action of a child and transform the central nervous system, and through that, it also modifies the abilities and skills of the child. Playing can be seen as a real action in an imaginary situation (Helenius & Lummelahti, 2008, pp. 14–15). On learning in early childhood, the concept of the zone of proximal development has been mentioned. According to Vygotsky, that means the difference between a child's development now and development that which is determined by an adult or further developed friends. It is an important debate about how the person who is further developed can help a child forward in developing (Hakkarainen, 2008b, p. 45; Hännikäinen & Rasku-Puttonen, 2011, pp. 167–168; Kumpulainen, 2004, p. 15).

The quality of social interaction has a connection to the quality of learning, which has been proven by several researchers. Special attention has been paid to those interactive mechanisms and processes that support and challenge the formation of the zone of proximal development in a peer group (Kumpulainen, 2004, pp. 15–16). Peer group in this article means a group of children from 4 to 6 years of age who have approximately the same cognitive and social skills.

4.3 Fairytale Forest

Playing also has a big role in a child´s growth in the sociocultural context. While playing, a child can solve problems. The play elements in Fairytale Forest are different kinds of tasks where children can use their imagination to solve problems to help Fairytale Forest animals, who are bullied by "the wicked lion". In this tool, toys are used for guiding action and driving the story.

Among these theoretical links, the method has been developed with children and special day care teachers by teachers' group interviews. The idea for the game made up of a number of different playing surfaces arose from interviews with educators. The platforms of the game are a variety of tasks that cover, inter alia, emotions, friendship, and adult-child interaction. These issues will be dealt with in drama, sports, fine arts and music.

In addition, a group of children were interviewed by early childhood experts. To support children's interviews were used photographs which children have taken. Children were asked to photograph the nice toys, games and tools by instructing them: "Take pictures of the nice games, toys and tools of the day here at home." The photos were taken on a computer screen one at a time, and the child was describing the image. The children mentioned a lot of toys and equipment, but could not name how they affect their well-being. The general response was that it was a nice toy to play with.

Those needs which the children described were that it is important that this method allows spontaneous play and friends. These were elements that offer good feelings at day care centers. The meaning of one's own small peer group arose also from children's interviewing. It seemed that children were fascinated with adventure and treasure hunts, so students started to think how to link this together with some older ideas.

From adults, the interview aroused experience, drama, and role play. According to the children's interviews, a good toy or method has an important role as an adventure game. From this information arose the idea of an adventure course instead of a game. In an adventure course, it was possible to combine drama, role play, small group activities, music, and experiences, and it could be implemented to make out what would be different when existing materials are designed for indoor use. The aim was that joint operational and problem-solving tasks through the adventure course could support peer and friend relationships, and the creation of a small group of community spirit strengthened.

Cantell (2010, pp. 72–73) notes that by using participatory methods, the adult role as a teacher changes from instructor to supervisor. This means that the adult is not at the centre, but rather like an observer or a supporter. An adult will then have the opportunity to support a variety of children, both quiet and loud. In this case, the group members' responsibility for each other is emphasized. In this research data, it was significant that in children's interviews, the adult role in an emotionally safe environment wasn't so important. More important were peers. The teacher's role in the Fairytale Forest can perhaps be described by observing and guiding, so that children's participation was made possible.

The method is carried out outdoors five times in five weeks. The adventure begins when children get a letter from the friend panda asking if the children could help the Fairytale Forest animals who are being bullied by the wicked lion. There are six different control points; in five of them, the children are helping the animals being bullied by the wicked lion. The control points are the parrot, the bunny, the turtle, the frog and the mouse. One control point is that children are trying to build a trap to catch the wicked lion. At the last moment, the wicked lion is caught, and the panda bear wants to talk to the wicked lion about bullying the animals in the Fairytale Forest. It is found out that the lion is lonely and doesn't know how to make friends. Children teach the lion how to act so he can have friends. Finally the wicked lion isn't wicked anymore.

This was the way how created tasks got more adventure and drama. Drama as a tool was developed in finger puppets that helped follow the instructor presenting the control point task. This was the way experiences were sought to track the task output as interesting and motivating for children. In addition, it was decided to make maps for the kids to help them navigate from one control point to another. It is also possible to collect stickers. After each performance, children look for the treasure, which is a sticker and it will be placed on the map.

5. Research Questions

The purpose of this study is to evaluate how the Fairytale Forest method improves children's learning in a sociocultural context. In this observational study, one researcher in each study group acts as a participating observer while guiding a child group. One researcher in each study group acted as a videographer but did not participate in the action. Acting as a participating observer allows a focus on comprehensively observing the authentic situation (Saaranen-Kauppinen, 2006). In participating as an observer, the researcher is trying to create a rapport with the research subjects. Participating is usually used in qualitative research (Hirsjärvi, Remes & Sajavaara, 2000, pp. 203–204). In participating as an observer, the researcher is actively acting with research informants. Moments of social interaction form an important part of gathering data and have a big role in this data (Tuomi & Sarajärvi, 2009, p. 82).

In a video-recorded research situation, the camera can influence the reliability because cameras often influence the subject's behavior. Especially when researching children, it is hard to estimate how bringing the

video camera to a session affects their act (Saaranen-Kauppinen, 2006). In our data, the video camera had only a small or no influence at the start of the recording. Children acted in the end as they would have done without a video camera at control points.

We analyzed the peer-group learning data using Verba's classification. Verba created her classification because earlier classifications fit poorly to children under school age (Verba, 1994, pp. 125–126). In this research, situations were transcribed on the basis of children's actions and behavior and were classified by socio-cognitive modes.

The first mode is "elaboration of activity" (abbreviated as "E"). This class means participating action inspired by another child, for example, simulating something done by someone else, expanding it, modifying or extending it. The second mode is "sharing" (abbreviated as "S"). This class includes interest towards a friend. The interest can be, for example, a common interest in the actions of the other child and creating a common understanding about a situation. The third socio-cognitive class is "management" (abbreviated as "M"). This is about following and monitoring, asking for help, or giving instructions and controlling one's own actions (Verba, 1994, p. 131).

6. Results

In all gathered data, there were references to Verba's classification on sociocultural learning, although in half of the data the signs of sociocultural learning were not easily seen.

6.1 Children's Communication

Shared meaning is the key term in social interaction. It refers to the common target of participants' interaction and understanding to what everyone is doing. When shared meaning has been reached, it can be acted upon collaboratively (Korkeamäki, 2006, p. 184). Webb and Palincsar (1996) say that shared meaning can be reached through language. It will be clear when they say that another child might be better at explaining facts to another child because their verbal communication is on the same level. But as Verba (1994, p. 126) suggests, this kind of shared meaning can also be reached without words.

In the data, there was seen both non-verbal and verbal communication that indicates socio cultural learning. When children have to change to communicate with each other, they can learn things together and from each other. In many parts of the data, children had chance to communicate with each other. There was one control point where non-verbal communication was the aim of the task and supported sociocultural learning that way. Non-verbal communication can be seen in this data, for example, by looks, gestures, being near to each other and following the example of another child. In this control point, the purpose was to hide and find the treasure. When finding the treasure, children used nonverbal tips to help searchers to find the treasure:

> "Children A, B and D shake their heads (S). Children C, E and F (S) watch the other children. Adult …Those were the signs that… you have to remember watch those signs and what they are showing. Children F, E and C move toward the treasure (M), children A, D and B (A) follow them. Child D (M) nods his head. Child F (M) goes straight to the treasure while child C (A) follows him. Non-verbal tips are followed by children C and E. An adult says to remember to watch the signs. Children C and E (A) turn to look at the tip providers. Child F finds the treasure."

Verbal communication can be seen in this data by following the verbal example of others, and children describe to the others what they are doing. Here is an example of verbal communication. In this control point, the

purpose was to introduce the child standing on your left by saying the child´s name and what he is good at:

> "Child B turns to Child C and says her name and says that she is good at climbing a roof (M & E). Child C turns to Child A and says his name and that he is good at putting a hat over the eyes (E). Child C turns after that to the adult and the adult nods at her (M). Child A turns briskly to child F and says his name and that he is good at climbing to heaven. (M & E) Child F keeps a glove in his mouth and turns to child D, rubs his eyes and says her name and that she is good at climbing a tree. (E)"

6.2 Peer Group

As Kronqvist (2006) says, a peer group has a big role in promoting learning and it's more meaningful to children than the actions of adults. In this study it shows as well that peer actions and what they are saying to each other were more interesting than adults' actions. In this study, it was also seen what Kronqvist says about the adults' role as mainly organizing the learning environment, giving instructions, orders and advice. The last three were partly given by a finger puppet drama but an adult also gave instructions "by himself". How an adult gives space to children's own thoughts and peer action is important, according to Kronqvist. In this data, it was shown that it wasn't always that easy to implement. Perhaps the children's group was too homogeneous or children were in their development still in the egocentric phase. The target to learn skills such social skills and the ability to empathize was seen in the Fairytale Forest adventure course. Lehtinen (2001, p. 81) writes that acting with a coeval is an essential part of children's everyday life and is important in building up a social identity. Through peer relationships, something can also be learned about oneself and other people. With peers, children build a world of their own, bond friendships, negotiate their actions and play together. This kind of peer relationship has an important role in emotional development.

In the day care, children find each other more interesting than an adult. Children learn from each other every day, and in Fairytale Forest there were many good opportunities to learn from others. They also got help from the other children by observing and following what the others were doing. This example is from "the parrot" control point:

> "Adult asks children to introduce the child on his left and tell what he is good at. An adult asks Child F to start. Child F gazes in front of him and doesn't say anything (S). Child A comments, 'It takes a hundred days' (S).The adult reminds Child F about the instructions. The other children wait and stand quietly still and wait for Child F's answer (S & M). Child A moves next to Child F and looks at him (M & S). Child D also waits for Child F's answer and turns towards him (M & S). When the adult asks how they can help Child F in this situation, Child A suggests, 'if someone else will start' (M). The adult asks if that helps Child F. Child D says 'yes'. (M) Child F is also knocking his head (M)".

6.3 Role of Adults

One of the hurdles of sociocultural learning is associated with the authoritarianism of an adult (Koivula, 2010, 150). It would be more impressive in terms of peer group learning if, for example, building a trap would start children's common planning: what kind of trap is needed to be made for a lion and what kind of materials are needed. So children would have a problem which they are going to solve together, but an adult has already partially solved it for them. It would be good if children would have some extra challenge each time. The common functionality would be realized better each time the adventure course is repeated. According to Koivula (2010, pp. 144–145), it is possible to take the initiative and have ideas for activities to get the children to engage in struggling toward a common target.

In a peer group, a child expresses more his opinion more freely than when he is with an adult. In a peer group, it is also not seen as his duty to accept a solution from a guiding adult. Children usually have the same kind of skills and statuses as others in the peer group. In adult guiding teaching situations, an adult is always the authority. By participating and working in a group, a child can use his existing skills and understanding to solve problems. (Verba, 1994, p. 126). In the data, one of the children often took the role of leader or in some kind of way tried to draw other children's attention. When an adult had the authoritarian role and the rules of play were tight, this might have affected the children's interaction and the leader's role in the peer group.

It was seen that when an adult had an authoritative role, it reduced sociocultural learning between children. If there were really strict instructions, it also diminished sociocultural learning among children. When doing things like this, children don't get the opportunity to negotiate with each other about the best way to do things.

> For example, there was a "Save bunny from tree" control point, where children try to save the bunny from the tree by holding hands with each other, and only the outermost children can use their other hand to reach up to the bunny. The purpose is to act together. An adult did give lot of guidance so the children could remember how important it was to collaborate. After the children caught up to the idea of a control point, the adult focused on telling what children were doing and encouraged children to do the task. In the beginning of the task, children did their own things, and when the adult reminded them about the bunny in the tree, one of the children tried to immediately save the bunny all by himself. Other children also tried to solve the problem by themselves. Children held hands just when the adult had reminded them about it several times, and they went to the tree together when the adult was encouraging them.

Children describe to the others what they are doing. When a child does his thinking visibly to other group members, the child not only develops his own thinking, but he also creates shared meaning. As it was earlier mentioned in this article, a kind of shared meaning can be also reached without words. When acting collaboratively on the same thing children also learn from each other (Verba, 1994, pp. 126–127).

Also, metacognitive skills are developed in the same kind of way in the interaction between an adult and a child as in the interaction in a pure peer group. The cognitive and metacognitive skills of children are developed in a different way when a child acts in a peer group than when the child interacts with an adult (Verba, 1994, p. 126). In the data, it can be seen when children describe to others what they are doing. It can be regarded as a child's way of making a self-assessment. At the same time, they formulate shared meaning, and sociocultural learning can be seen as happening.

In the data, children tried to get attention by telling their own actions, seeking in this way a common understanding of the situation. The interaction between children was low from time to time. It was seen that one of children took the role of leader in the interaction. This example is from a control point where children are building a trap to catch the wicked lion. In this control point, the purpose is to continue building the trap where it was left last time. Children had a variety of materials, for example thread, scissors and tape, what they used to build the trap:

> "Child B says that I'm doing to on my knee, I'm doing on my knee these bits, these bits where you can take those improvement bits, on my knee there is improvement bits, these threads on my knee, if you need thread there is it on my knee (M). Child A: 'if Child C doesn't notice the thread on my knee, tell him that.' Child A did you hear me (S)? Child A says yes (S). Child B says what, you aren't deaf, do you know what deaf means (S)? Child A says, 'What'? Child B says that it means that you can't hear (S). To that Child A says so (S). Child B says to Child A that if you were deaf you were, you never hear. To that Child C says that yes and always have to say nothing and then (S). Child B says after that that if you don`t hear, do not you, good that you child C pointed that to child A (S, M)".

7. Conclusions

This research was a compact survey about sociocultural learning in the context of the Fairytale Forest. Research data consisted of only one video from each control point. Every video was also from a different day care centre and different groups of children, and that might have an impact on the results. A suggestion for further research would be videotaping the entire adventure course at one or many day carecentres, and then evaluate how it would work there. An important fact to notice is how children's behavior has changed during the whole Fairytale forest period. Also it would be important to notice the fact that sociocultural learning is not happening only in a guided situation. It can be called the situational approach. It amplifies learning situations that happen outside of actual organized learning situations acting in a community. In the situational approach, the action and practices of the community which are formulated by individuals will be explored (Rogoff, 2003; Säljö, 2001, p. 11). It would also be interesting to observe children after the Fairytale Forest period and see if it would have an impact on their behavior in the peer group.

One fact that might have an impact on the results was the children's ages. In our research, children were from 4 to 6 years old, and many small groups were very homogeneous. According to Vygotky (1978) and his opinion about the zone of proximal development, children learn with a person who is further developed. It would be important that an adult is rather like an observer or supporter of children's actions (Cantell, 2010, p. 72).

At the time it was seen that children didn't understand clearly the rules of play. Partly because of that sociocultural learning wasn't seen so clearly all the time. The Fairytale Forest adventure course would be the best to implement with children of pre-school age who can handle rules better than younger children. It can be said that children start playing by rules in real earnest when they are of preschool age (Helenius & Lummelahti, 2013, p. 157).

Koivula mentions factors that contribute to collaborative learning: social and interpersonal skills, co-operation skills, motivation and commitment to building common action, friendships, community and aspiration to building shared meaning (Koivula, 2010, p. 147). Cooperation was at the time challenging to children. A group was new in part of the videos, and that certainly affected them. Koivula (2010, p. 147) suggests that self-centredness made communal action difficult. The self-centredness of thinking was seen in observing the situation and it affected the children's actions. Cooperation was only developing in part of the videos.

References

Cantell H. (2010). *Ratkaiseva vuorovaikutus: kasvatuksellisia kohtaamisia lasten kanssa*, Jyväskylä: PS-Kustannus.

Corsaro W. A. (2003). *"We're friends, right?": Inside Kids Culture*, Washington D.C. Joseph Henry Press.

Hakkarainen P. (2008a). "Leikki ja leikin ohjaus varhaiskasvatuksessa", in: Helenius A. & Korhonen R. (Eds.), *Pedagogiikan palikat: Johdatus varhaiskasvatukseen — ja kehitykseen*, Helsinki: WSOY Oppimateriaalit Oy, pp. 99–108.

Hakkarainen P. (2008b). "Lähikehityksen vyöhyke", in: Helenius A. & Korhonen R. (Eds.), *Pedagogiikan palikat: Johdatus varhaiskasvatukseen — ja kehitykseen*, Helsinki: WSOY Oppimateriaalit Oy, pp. 45–50.

Helenius and Lummelahti (2013). *Leikin käsikirja*, Jyväskylä: PS-Kustannus.

Hirsjärvi, Remes and Sajavaara (2000). Tutki ja kirjoita, Helsinki: Tammi.

Hyvönen P. (2008). *Affordances of Playful Learning Environment for Tutoring Playing and Learning*, Rovaniemi: Lapin yliopisto.

Hyvönen P., Kangas M., Kultima A. and Latva S. (2007). *Let's play: Tutkimuksia leikillisistä oppimisympäristöistä*, Rovaniemi: Lapin yliopisto.

Ikonen M. (2006). "Lasten vuorovaikutus ja leikki yhteisöllisyyden rakentajana", in: Karila K., Alasuutari M., Hännikäinen M., Nummenmaa A. R. & Rasku-Puttonen H. (Eds.), *Kasvatusvuorovaikutus*, Tampere: Vastapaino, pp. 149–165.

Karila K., Alasuutari M., Hännikäinen M., Nummenmaa A. R. and Rasku-Puttonen H. (Eds.). *Kasvatusvuorovaikutus*, Tampere:

Vastapaino, pp. 166–182.

Koivunen P. L. (2009). *Hyvä päivähoito*, Jyväskylä: PS-kustannus.

Korkeamäki R. L. (2006). "Lapset toistensa opettajina", in: Karila K., Alasuutari M., Hännikäinen M., Nummenmaa A. R. and Rasku-Puttonen H. (Eds.), *Kasvatusvuorovaikutus*, Tam-pere: Vastapaino, pp. 183–197.

Kronqvist E. L. (2006). "Pienten lasten yhteistoiminta ja sen sosiaalinen dynamiikka", available online at: http://cc.oulu.fi/~kronqvis/artikkel/kasvvuoro07.htm.

Kronqvist E. L. and Kumpulainen K. (2011). *Lapsuuden oppimisympäristöt*, Helsinki: WSOYpro.

Kumpulainen K. (2004). "Lapset, yhteistoiminta ja oppiminen vertaisryhmässä", in: Hyvönen P., Lehtonen M. & Rajala R., *Lapset -seminaarin artikkelijulkaisu 2004: Proceedings of LAPSET –seminar 2004*, Rovaniemi: Lapin yliopisto, pp. 12–26.

Manninen J., Burman A., Koivunen A., Kuittinen E., Luukannel S., Passi S. and Särkkä H. (2007). *Oppimista tukevat ympäristöt: Johdatus oppimisympäristöajatteluun*, Helsinki: Opetushallitus.

Matilainen M. and Vähäkuopus K. (2013). "Emotionaalisesti turvallisen ympäristön kehittäminen varhaiskasvatuksessa ja esiopetuksessa", *Laurea University of Applied Sciences*.

Mäkelä J. (2011). "Osallisuuden merkitys lapsen ja nuoren kehitykselle", in: Nurmi S. & Rantala K. (Eds.), Näyn & kuulun: Lapsen etu ja osallisuus, Helsinki: Lasten Keskus Oy, pp. 13–23.

Rogoff B. (2003). *The Cultural Nature of Human Development*, Oxford: Oxford University Press.

Salmivalli C. (2005). *Kaverien kanssa: Vertaissuhteet ja sosiaalinen kehitys*, Jyväskylä: PS-kustannus.

Smidt S. (2011). *Playing to Learn: The Role of Play in the Early Years*, Oxon: Routledge.

Säljö R. (2001). Oppimiskäytännöt: Sosiokulttuurinen näkökulma, Helsinki: WSOY.

Tuomi J. and Sarajärvi A. (2009). *Laadullinen tutkimus ja sisällönanalyysi*, Helsinki: Tammi.

Verba M. (1994). "The beginnings of collaboration in peer interaction", *Human Development*, Vol. 37, pp. 125–139.

Vygotsky L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*, Cambridge MA: Harward University Press.

Webb N. M. and Palincsar A. R. (1996). "Group processes in the classroom", in: D. C. Berliner & R. C. Calfee (Eds.), *Handbook of Educational Psychology*, New York: Macmillan, pp. 841–873.

Lourens B. (2004). "Places of emotional safety: Creating classrooms where 'I can'", available online at: http://www.cyc-net.org/cyc-online/cycol-0304-childrenfirst.html.

Saaranen-Kauppinen A. and Puusniekka A. (2006). "6.4.3 Videotallenteet Tampere: Yhteiskuntatieteellinen tietoarkisto", available online at: http://www.fsd.uta.fi/menetelmaopetus/kvali/L6_4_3.html.

Kronqvist E. L. (2014). "Yhteisöllisen oppimisen alkujuuria etsimässä — pienet lapset toimijoina ryhmissä", available online at: http://cc.oulu.fi/~kronqvis/artikkelit/yhteisoll06.htm.