MOBILE LEARNING AND THE PLAYING CHILD
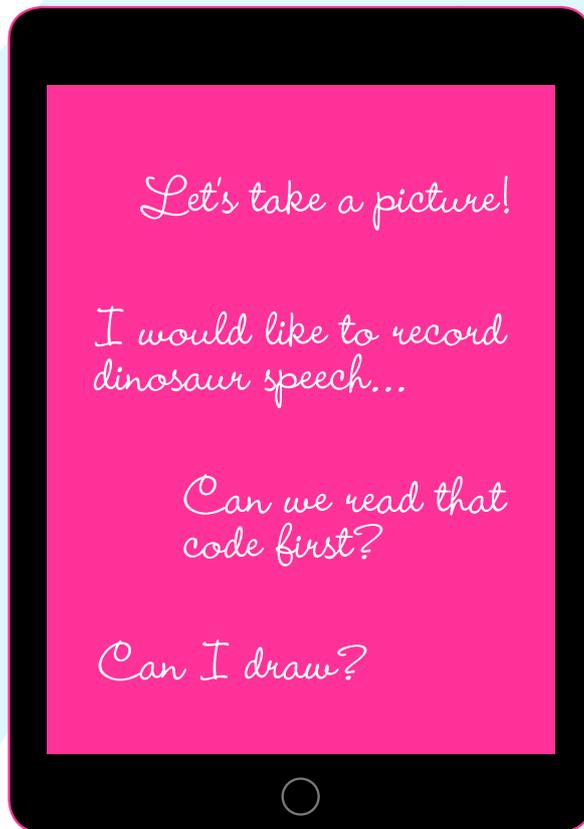
Let's take a picture!

I would like to record dinosaur speech...

Can we read that code first?

Can I draw?

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Lasse Lipponen

PLAYFUL LEARNING CENTER

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Preface

In this paper, we present the great ideas and realizations brought forward by the participants of this training.

Preface

This paper emerged from the need to develop and share knowledge about mobile learning and mobile pedagogy in the field of early childhood and preschool education. It is based on an in-service training program called "Mobile learning and the Playing Child." This program was conducted in 2014-2015 as a joint venture between Helsinki University Department of Teacher Education and Palmenia Centre for Continuing Education. It was funded by the Finnish National board of Education.

This paper is written mainly for early childhood educators, but it will surely inspire others as well. Its foremost aim is to spark and encourage!

We are thankful to Mr. Jukka Koivisto from Palmenia for the training partnership, and to Ms. Heidi Sairanen and Mr. Antti Koskinen from the Playful Learning Centre (PLC). We would also like to thank Mr. Olavi Mertanen and all the participants of the training courses.

"In the future, I hope I can make someone from my work community inspired about this subject. There is still some resistance towards change."
(Online course participant)

May 8 2015 in Helsinki, Finland
Sara Sintonen, Olli Ohls,
Kristiina Kumpulainen, and Lasse Lipponen

1. Introduction

Mobile learning remains an unknown and challenging field for many professional educators. It raises doubts and questions: "Why should education of small children have to contain anything digital? Isn't it enough that they are constantly playing games in their free time?" Understanding of learning with mobile devices and knowledge about their pedagogical possibilities remains limited.
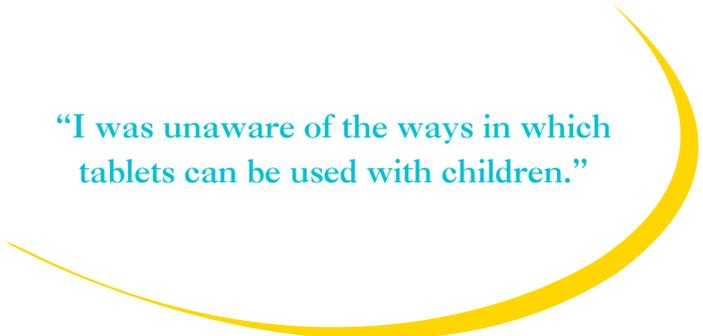
> "I was unaware of the ways in which tablets can be used with children."

Many participants of the training concluded that keeping an open mind towards new learning opportunities is worth it.
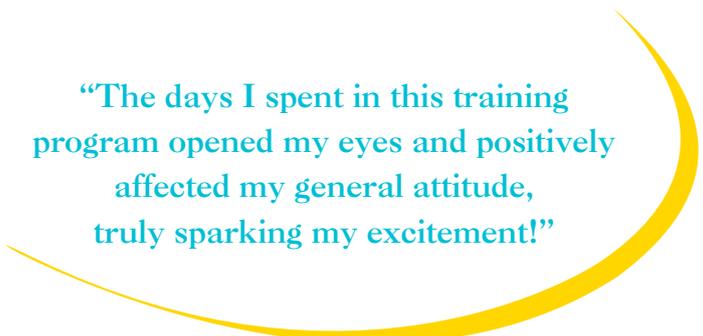
> "The days I spent in this training program opened my eyes and positively affected my general attitude, truly sparking my excitement!"

Mobile devices (tablets, smartphones, and other devices) can be used in many ways, and it is for you to decide how much you want to benefit from their use in your work as an educator. During the training sessions, we perceived in a concrete way that learning new things is both challenging and exciting. Excitement is a contagious phenomenon. Excitement creates new excitement.

"I'm so excited! Learning new things with mobile devices creates a feeling of excitement I want to share with my colleagues!"

The training of teachers and professional educators is especially rewarding when the trainees seem to find a new drive towards their work. Mobile Learning and the Playing Child, a training program, has changed participants by toppling old stereotypes gently. Mobile learning is not as hard as it may seem!

The participant teachers and educators were tasked with planning a lesson with the theme of mobile learning and play for their respective groups. Many great ideas were generated, and we were once again reminded of the capabilities of Finnish professional educators in terms of developing high-level pedagogical solutions. The ideas contained many approaches to teaching and working with children. Some of the main themes represented were peer learning, virtual environments, environmental awareness, storytelling, and physical engagement.

Peer learning could be seen in solutions where skills and knowledge were imparted to peers using media devices. Sometimes, children took on the roles of specialists and were eager to share their knowledge with others. Even though new working methods were used, it can be said that generally, children are quite familiar with the logic of mobile devices. Furthermore, many types of virtual environments can be used to support learning in new creative ways. In these environments, one can accomplish tasks, solve problems, or simply examine things. Impossibilities in real-world environments can become possibilities in virtual worlds. One participant developed a lesson in which students "traveled" to London using Earth 3D, a software application. The ever more frequent use of media devices among children raises concerns for children's physical health, especially when viewing working with media devices as a task done sedentarily. Participants responded to these concerns by creating many kinds of physical activities combining movement and device use, e.g., activity tracks with QR-codes and image-based orienteering. Activities related to awareness of children's surroundings, whether school or day-care centre, were brought up as well.

Regardless of the general theme of this training, we noticed that the theme of play could not be found in many lesson plans—one of the main reasons we decided to write this paper. We feel it is necessary to highlight elements of play and playfulness in conjunction with the theme of mobile learning in the field of early childhood education.
We view playfulness as a shared activity supporting inquiry, experimentation, and creativity—an activity in which everyone can engage in based on their personal interests.

2. Mobile learning and children's volitional media production

Mobile learning supports children's activeness and agency. It does not constrict the child, but instead, it facilitates creative and active learning. In this type of learning, children can work volitionally, i.e., in a way that can be perceived as their own.

Mobile devices have caught the attention of children for many reasons. Through various activities such as gaming, children have gotten quite used to handling mobile devices. Gaming is a very common activity among Finnish children. According to a recent study[1] (2014), nearly all children aged more than 5 years and two-thirds of the children aged 3-4 years play digital games. However, in this paper, we will not focus on gaming, gaming culture, or serious games.

During the past 20 years, children's agency and participation have been discussed more widely in child-focused studies. Agency and participation are the central themes of this paper. We emphasize children's agency, especially the creative type, in relation to different media devices and mobile technology. Furthermore, we introduce the idea of child participation in digital culture. To this end, we focus on the importance of children's volitional production of content, as well as their possibilities as content producers. By volitional content production, we mean the opportunity for children to produce (media) content about themes they have chosen using methods that they find most suitable.

"I think of mobile learning as the possibility to move in places and spaces, cross 'boundaries' and learn everywhere."
Lasse Lipponen

"Children find creative media production especially exciting with mobile devices."
Sara Sintonen

1   Suoninen, A. (2014). Lasten media-barometri 2013. 0 - 8 -vuotiaiden mediankäyttö ja sen muutokset vuodesta 2010. Nuorisotutkimusseura, verkkojulkaisuja 75.

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Rita Saares: If I were an alien

"The children worked in an autonomous and experimental manner. They experimented with different options and consulted one another and me for advice. A playful attitude could be witnessed in their activities: the joy of testing different possible ways to alter the image. The final products contained many kinds of creative and innovative ideas and solutions that I couldn't have come up with as an adult. The children were quick to learn the basic functions of the software. Mouse movement was trained through the use of paintbrush tools.

After editing their picture, the children saved their work using a made up name for their alien. We also created forms containing information about our alien characters: where they live, what they eat, what they can do, etc. The children hoped that they could present their creations to their classmates. We were able to display our final products using a digital picture frame so that everybody could see each other's work.

The equipment we used worked well, but it took a longer than I expected because some of the children ended up editing their picture for over 45 minutes. It would be good if we had more computers at our disposal. As a software program, 'Paint' is fairly straightforward to use, even though I think there might be a better option available somewhere with more functionality."

Media production is about making it possible for kindergarten and school students to get hold of media devices. These devices should not be kept apart from children. Given the high cost of media devices, it is worthwhile to go through proper ways of handling media devices. Many professional educators have realized that children are used to working with media devices and that they need not be taught about basic usability. Despite many children being competent users, there are commonly a few individuals with no experience whatsoever.

To us, mobile learning means situations and actions where mobile devices can be used to work on a shared cause or subject. It can be about learning with or from mobile devices. Viewing mobile learning through a wider scope allows us to see it as learning that crosses boundaries and engages to move. Volitional media production by children is in sync with our view that given the chance, children can be very skilled media content producers.
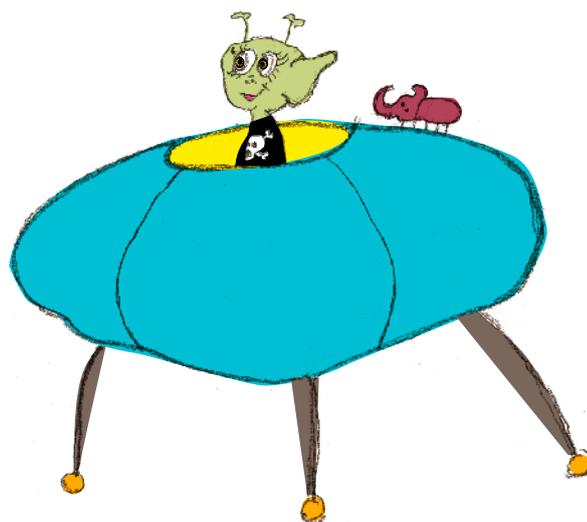
We link volitional production to learning by doing and the process of inquiry learning (observation, imagination, documentation). A successful run where children produce (media) content volitionally will leave traces and shared content, which can be accessed repeatedly. Content created in a group can be especially inspiring for others.

Sanna Toiviainen: Space tales on the iPad

"We worked with space-themed storybooks for 3 days. The children were divided into pairs. Each pair was balanced so that the shier kids were paired with a more courageous one; this also helped combine the skills of two types of storytellers. The children became very excited about tablets and Book Creator after I demonstrated the possibilities of what could be done. The use of tablets was somewhat familiar for them.

The topic of 'Space' had been the children's wish, which made them very excited. The children's stories combined creativity and acquired knowledge of the subject. They were born with ease. At first, I was not sure how I would manage to guide three pairs in creating books with Book Creator app, having learned the use of it recently myself. The children were very motivated in acquiring new skills, and I was surprised how well they paid attention to instructions and memorized them. It was also nice to observe how collaboratively they worked in pairs guiding one another. Two of the groups made the decision to use their finger to draw straight into the book, which resulted in drawings not being so clear. Once they finished drawing a picture, I continued reading the story and they came up with what to draw for the next scene. The group members respected each other's drawings. The only discussion was about drawing something more in the picture. One of the groups wanted to draw more precisely, so they used paper to draw the pictures for their story. After that, they documented their work and added the images to the pages of their book. The most exciting part was adding self-made sounds to their book. We realized that our own voices didn't sound at all like we thought.

I had planned that we would watch all the stories in a group after they were ready, but the hype was so big that they couldn't wait for it, so we watched them one by one straight after they were finished. The faces of the bookmakers showed feelings of pride, even though one child had to watch it with her eyes closed because she was that thrilled. These books have inspired others to create their own storybooks and we have another set well on the way."

When children are given the opportunity to display and share self-learnt knowledge, the learning progress become clearer for the individual and community. This supports the early development of learning skills. Discussion of self-observed and self-learnt things creates a basis for active production of knowledge, which becomes an important skill in later academic life.

3. The playing child

Play is a natural activity for both humans and animals. Even though different scientific traditions describe play differently, it can be said that play has a positive effect on our well-being. Psychologist Lev Vygotsky[2] states that for play to be play, it needs to contain the following elements: children create an imaginary setting, take on roles, follow rules and norms related to those roles, and assign to objects and tools new features that do not exist outside play. The topics and tools used in play range from natural substances to mobile devices, and they change constantly as culture and society evolve.

"Generally children learn whilst playing, not play to learn"
Lasse Lipponen

According to Friedrich Fröbel (1782-1852), an ideologist of early childhood pedagogy, children's spontaneous play opens up a view into the future. "Play contains the cotyledons of the child's future." If these are destroyed, the development of the child is stalled. Play is an activity owned by children. It is based on their initiatives, and they define how it proceeds. It is a collective, creative activity that presents them with zones of proximal development.

2   Vygotsky, L. (1966). Play and its role in the mental development of the child. Voprosy psikhologii, 12(6), 62-76.

Tuija Peuhkuri: A learning environment supporting play

"...and this reminds me of the story of a worm called Pelkonen (from a songbook). The worm had many problems living 6 feet underground, but he faced even larger dangers on the ground (e.g., the crow in the yard, fishermen). Therefore, we decided to disguise the worm (handicraft) along with a mat, because lying on ground created cramps in the worm's ladder-like nervous system. Pelkonen was a lonely fellow so we decided to make him a friend (a frog). Next, Pelkonen will move into a single-room apartment (shoebox), which already contains a few pieces of dusted and painted furniture. The apartment will also be set with wall tapestry (maybe an effect wall). The story continues. In my previous class, we continued the story for 4 years! Then I decided that it was time for Pelkonen to go. We built hot air balloons and said our goodbyes. When my old students arrived in class they shouted 'Worm Pelkonen is back! :)' I'm not sure if this kind of activity develops children's playing skills, but it certainly is OUR THING!"

From a distance, it might seem that play is arbitrary and without rules. However, this is not the case. Play always has rules. When the interactions occurring in play are observed closely, the rules start to become visible. During play, these rules are the object of active negotiation as participants present others with affordances and accept or decline affordances presented to them by others. Affordances are verbal and nonverbal proposals that appear in play and influence the direction in which play activity progresses.

Nobody can be forced to play. Play is always voluntary, and the players involved can end it at any time by quitting or leaving the play. We can influence play by creating environments that include play-supporting elements. It is the responsibility of qualified adults to ensure that children's play environments contain the basic ingredients for play: time, space, security, freedom, peace, and purposeful tools. Furthermore, the delicate guidance of an adult is also meaningful in the context of children's play. The voluntary nature of play raises questions about how it can be used as a learning method.

Children's spontaneous play does not fully reveal the full developmental potential of play. An adult can support the development of children's play by discussing roles and causal relationships related to behaviors in play (Bodrova, 2008[3]). Drama plays based on children's tales have been studied by Gunilla Lindqvist, who has worked on social games involving children and adults (Lindqvist[4], 1998; Rainio[5], 2010). She defines adult participation in games as a pedagogical action. The adult guides and welcomes the children into a world of stories and tales. Play emerges from a shared creative activity, in which stories and tales are entwined with the play environments that are being built according to children's ideas and wishes (Hendy & Toon, 2001[6]). In drama play, it is possible for children and adults to play together by acting out their roles. Thus, participants see each other in totally new ways.

"If and when adults assign play with learning goals, play becomes a learning method."
Lasse Lipponen

3   Bodrova, E. (2008). Make-believe play vs. academic skills: A Vygotskian approach to today's dilemma of early childhood education. European Early Childhood Education Research Journal, 16 (3), 369-381.

4   Lindqvist, G. (1998). Leikin mahdollisuudet: luovaa leikkipedagogiikkaa päiväkotiin ja kouluun, Jyväskylä : Koulutuksen tutkimuslaitos, 1998. Alkuperäisteos Lekens möjligheter, suomenkielinen käännös Inga Arffman.

5   Rainio, A. (2010). Lionhearts of the Playworld: an ethnographic case study of the development of agency in play pedagogy. Helsinki: University of Helsinki.

6   Hendy, L. & Toon, L. (2001). Supporting drama and imaginative play in the early years. Buckingham, UK. : Open University Press, 2001.

Imagination is an essential part of play. It is a means to widen our experience of the world (Zittoun & Cerchia, 2013[7]). Imagination differs from normal reality, the material environment, and the social presence of others. By imagining, a new space or form of thinking is created. This space closes when on one "comes back" to reality. When imagining, children can surpass their own level of understanding and create a zone of proximal development for themselves. Imagination is a door into new worlds. It is connected with affordances emerging in play, and this way, it can be said to have positive effects on community learning.

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[7]   Zittoun, T. & Cerchia, F. (2013). Imagination as Expansion of Experience. Integrative Psychological and Behavioral Science, 47 (3), 305-324.

Chomp, chomp, chomp, neigh!

Sini Helminen:
From horse-themed play into a digital storybook

"I am about to describe a horse-themed play created by two kindergarten students. This play served as the basis for a picture book we created using Book Creator.

The girls were about to start playing. They had a stable and horses as playing tools. I asked if I could participate. They said yes. I asked about the idea of their play and expressed interest in taking pictures of it. That suited the girls well and they became even more excited about it.

I was surprised that my photography did not interrupt their play. I was worried that my involvement might create unnecessary breaks in the play activity and disrupt the play idea as I took pictures. I took the first pictures myself and after that, the girls took turns taking pictures while I wrote down the progression of the play.

The girls alternated in generating ideas of events that took place in the stable. As the play progressed, they took time to enrich their play by decorating the surroundings of the stable with different materials (linen, play objects, plants). In this play, the children were active participants who used their specialized knowledge about horses.

The Book Creator application was easy enough for kindergarten children to use. The girls and I didn't have any prior experience of using this app. The placement of pictures was an object of negotiation. After that, we had no problems moving them onto the pages. The girls were very interested in modifying the picture, especially by cropping it. They were also excited about creating horse-like sounds by snapping their fingers and using other body parts to make sounds. Later, we used some instruments as well. The drawing application did not catch their excitement, even though one picture did have a river added to it.

We watched the book 'Happenings in Horseland' from our smartboard together with all the kindergarten children. The ratings were great. We have many more audiovisual books on the way! This project lowered the bar for me to document and transform children's play themes into a mobile format. I have had the groundless prejudice that mobile learning/play would result in the children missing out on something else. Now I will get to know how to use other applications. This is fun and effortless!"

4. Mobile learning and the playing child

In this paper, we describe mobile learning and children's play as a creative and productive activity that emerges when activities in the physical learning environment (kindergarten or school) and digital practices (devices, content) connect with the child's imagination. It is fairly common to see digital practices connected with activities in the physical world. However, combining these with the child's imagination and imaginary worlds requires understanding of both the nature of play and the pedagogy that supports children's agency. Questions such as the following one become relevant: "Does play emerge from children's or adults initiatives?"

Mobile learning enables children's active agency. It is creative and active learning, which does not constrict the child. The kind of learning where the child can work volitionally and in a way the child feels is their own.

Physical world

Digital practices

Mobile learning and the playing child
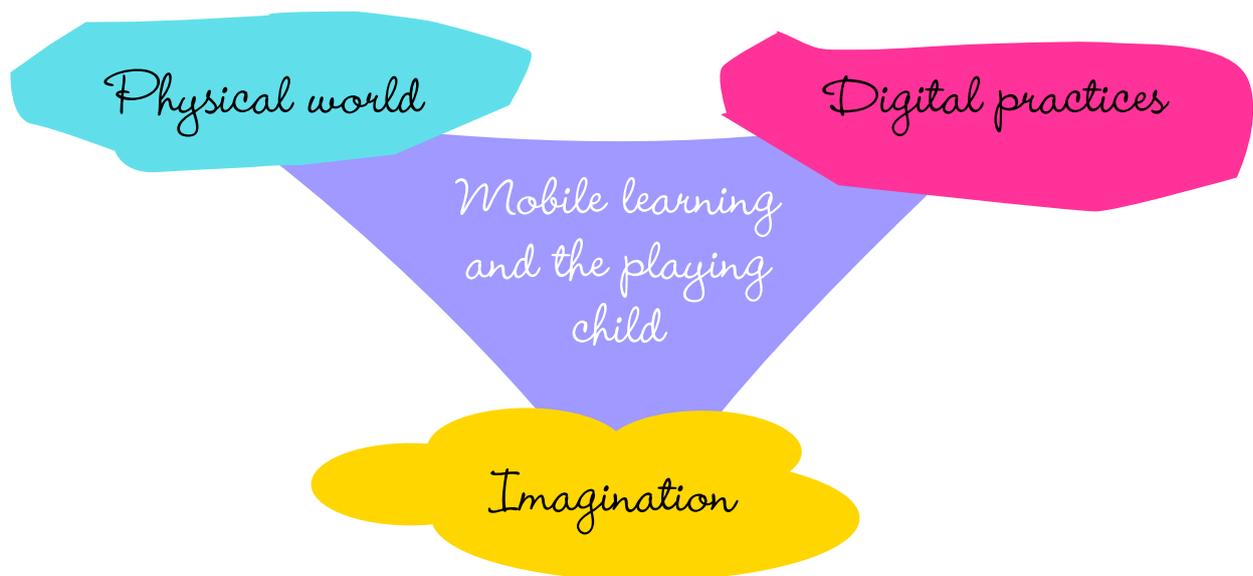
Imagination

Model 1. Mobile learning is viewed as an activity with the playing child's imagination at its core.

The physical world is an operational environment atop of and in which the child builds his or her own play world. A well-built operational environment has time, space, security, freedom, and purposeful tools. Children should be able to control all tools at their disposal. The tools should be safe, durable, aesthetically pleasing, engaging, and fun. Furthermore, they should support children's enthusiasm to create and try new things. The composition of the physical world does matter. On the one hand, it can set boundaries for play, but on the other hand, it can serve as an enabler. Small play spaces may create constrain movement, whereas parks, forests, and other outdoor spaces facilitate wider movement.

Digital practices have three separate roles in our model: inspiring to play, existing as items inside play, and functioning as a platform for digital production and documentation. Digital practices can support the process of imagination, upon which children start constructing their play. Moreover, digital practices can end up being a part of narratives emerging in play, considering the fact that day by day, they are becoming increasingly integral to our cultures. Lastly, they can be used to enable children's volitional production, thus making possible the documentation of creative ideas and realizations emerging in play.

Imagining is a natural and developmentally fundamental activity for children; thus, its potential should not be excluded from mobile learning solutions. We support the use of mobile devices in a way that does not exclude imagination, humans' best quality.

Mobile learning of the playing child becomes possible when the physical world is suitable for creativity and digital practices are a natural part of activity. Boundaries are crossed and a new understanding of the world is formed. It is the role of adults to observe and play along. Usually, the presence of an adult as a participant is needed for play to develop and enrich.

The child's imagination and past experiences combine, even as his or her actions constantly create something new.

Thump, Thump, I'm coming out of this device!

"The practices of a digitalized world should not become an obstacle for human imagination!"
Olli Ohls

Evamaria Silvennoinen: Toy night in kindergarten

"We looked at pictures of dinosaurs [http://www.huffingtonpost.com/refe-tuma/dinovember_ b_4270164.html] in small groups (my colleague became interested and she is doing the same thing with her group).

I gave a short briefing where I explained that in one family, the dinosaurs had started to mess around and the children had found them in these positions in the morning. This is when the pictures were taken. We discussed the pictures. The children thought that they were extremely funny, but at the same time, they found the theme a bit frightening. Could toys actually move at night and do what they willed.

I told them that the toys had not actually moved by themselves and that it was a prank played by the children's parents. We talked about the content in the pictures not always being true, as well as the nightly activities of toys being frightening (but also funny). Later on, we continued to process this exciting idea by pondering if the toys had batteries so they could move. We also discussed scary content that can appear on computers or television. Lately, we have been discussing the power of imagination with regard to themes like 'why do our own drapes look scary in the dark?' So this exercise really meets a need :-) -> I think that when a child gets to go 'behind scenes' while producing material, he or she builds news understanding about the content appearing in pictures and on TV shows. ->in small steps of course ;-)

Each of us chose a favourite picture (including arguments why it was chosen), which was printed and put up on the wall of our home space.

We had a conversation about our favourite toys that we presented to each other in a previous project. I asked the children if they remembered which toy they chose to present and they all remembered (I had the pictures ready for memory fresheners, but they were not needed). Imagine that one night when I'm working the evening shift and leave home, I close all the lights and lock the doors. All of your toys have been forgotten in your lockers... what would they do after the last teacher leaves and the kindergarten is empty...

Everybody created events for their own toys. I expected that the children would come up with wild stunts after hearing what the dinosaurs had been up to, but the toys did quite nice things in the children's imagination ;-) I explained that our goal was to create pictures similar to the ones about the dinosaurs. Even though the 'forbidden' things started appearing, the children always asked if they could do something in a specific way... and came up with alternatives, which would not create such a big mess. I told them that we could do anything as long as we

Toegobbler
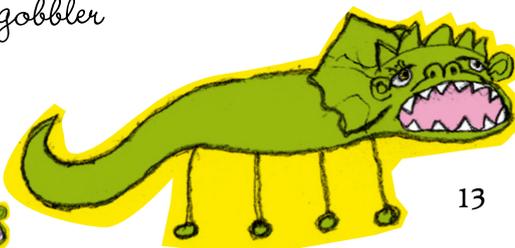
clean up our own mess afterwards. It was a great plus to see the most formal and correct child come up with loads of stuff that his toy would do: all the games would fall off shelves and the pieces would get totally mixed up...! YES! ;-)

I wrote down and praised their ideas. We planned scenery-related ideas together in a project where a car drives down a sewer and finds the Turtles' home. We searched for suitable cardboard tubes for sewers (ones that the car could fit through) and a few of the kids promised to lend their Turtles toy figures for scenery props. We tried to picture what kind of things could be found in the Turtles' home."

Activities with mobile devices can be devised such that mobile devices become a part of active play rather than being pedagogical tools. When children are given access to mobile devices and can choose to include them in their play (to be used according to common rules), mobile devices start becoming a natural part of their activities. Children should be given the opportunity to make choices of their own, as well as to follow instructions created by others.

Minna Laitinen: Vacation in Spain

"So our group received flight tickets to Spain. We had to take guardians with us due to the young age of the children. The children's parents were at work so the natural choice was the grandparents.

The flight was produced with ICT-equipment. The passengers were packed into the plane after proper check-in. This took some time, because many grandparents were present. When everybody was on board, we watched a projected video of a plane taking off and landing (YouTube: aeroplane take off and landing cockpit view). After the landing, a 'local' guide came to explain about all the available activities at the location. After this, the passengers could freely wander around and get to know the area.

Activity checkpoints:
SAILING BOAT HARBOR
• Children and grandparents made small toy ships from pine bark and placed them in a small pool full of water. The bark and sticks for masts were gathered during a trip to the forest in the same week. We used newspaper for sails.
BULL FIGHTING
• A big space with red carpets and linens. The grandparents were mainly acting out the role of matadors, while children were the bulls.

KARAOKE BAR
• Singing tunes that were familiar to both children and grandparents. At this checkpoint, we used a computer and projector. It was also possible to enjoy juice and cookies from the bar.
BEACH GAMES
• The children were given a large space with balloons to play. On top of that, we had a beach made from blankets and pillows.
WATER SLIDE
• The children were sitting in cardboard boxes and the grandparents on chairs. We projected a real water slide video on the wall. The experience became more realistic and '4D,' as the person in charge of the slide sprayed water on the children using a spray bottle. (The children were very excited even though it looked funny!)
FISHING
• Paper fish connected to a paper clip, which were fished from a tub using a fishing rod with a magnet. The fish had a letter and the children had to make up and write a word starting with that specific letter.
I must say this whole session was tremendously fun. The grandparents were fully engaged in play with the children. We spent a total of two hours in the Spanish warmth before taking a plane back to Kaivoksela airport!
In this exercise, ICT-equipment, computers (2 PCs) and projectors (2 PCs) became a part of the play world. We also took many pictures during our trip. We didn't use any actual mobile devices, because they will be arriving to us later this year. For this exercise, we could have used them to make a quiz about Spain.

When a play-related approach is used, we create for children the possibility to adopt mobile-devices as a natural part of learning in an early stage of growth and development. A collaborative, creative, and productive activity makes us aware of the many ways in which mobile devices can be used. Furthermore, we learn about participatory practices. These kinds of practices build a solid basis for a culture of participation and sharing.

5. Toward a culture of sharing and excitement

"I like to play by imagining what mobile learning could be in the future."

Kristiina Kumpulainen

Professional self-development is a central part of a Finnish educator's mindset. He or she is expected to have up-to-date information on many fields. Thus, professional self-development becomes very time-consuming to achieve, especially if information is always sought out from original sources. Many teachers have saved considerable resources by joining a community of practice.

Etienne Wenger[8] (1998), a specialist in communities of practice, describes them as groups or communities revolving around a shared object of passion or interest with a goal of developing group members' competences relating to said object. The sharing of best practices regarding a common source of interest is fairly common among professional educators.

"In the future, mobile learning will become a bigger part of my work. I also feel that the topic should be discussed at my workplace. Many educators are still against anything related to working with ICT even though they are not quite sure what it means. Prejudice and preconception are in the way of mobile learning becoming natural. I also feel that it is important to open a dialog with children's parents and relay information about mobile and media–based education. It is still quite a new thing."

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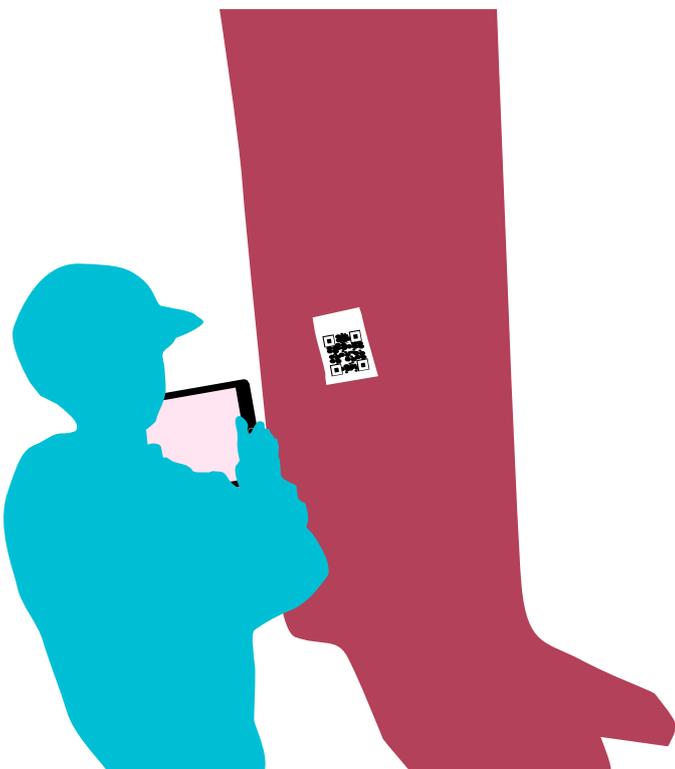
8   Wenger, E. (1998). Communities of Practice: Learning, Meaning, and Identity. Cambridge: Cambridge University Press

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Many educators who attended this course told us that they were the only ones in their work community who were excited about these themes. Mobile learning activities are seen as taking away something from the children. However, as one of the course participants noted, things must be viewed from the perspective of children as well:

"The use of devices is a part of today's world, and thus, they should not be kept apart from kindergarten activities. The playful aspect can be maintained if things are viewed through the children's perspectives. When planning an activity, mobile devices should be added to the list of possible ways to go about it. This is a new approach, which should be kept in mind. Even a small amount of devices is enough, if the children work in small groups and take turns using them. In work communities, device use should be discussed among peer educators and, after that, with parents. The questions 'how' and 'why' are important. We have interesting times ahead of us."

Support for your work can come from many directions and communities operating in different places. Your location does not limit you from participating in web-based communities of practice. This way, you can tap into the processed knowledge of a community and learn from their best practices. You can get in touch with Finnish communities of practice via various social media services. Joining a community does not necessarily require active participation. It is up to you to decide the kind of role you want play. You can read about other people's actions, share experiences of your own, or start a conversion about a topic that you feel warrants discussion.

Did you take a photo of me?

"In my own working community, I will act as a standard-bearer for mobile learning. Through my example, I will try to influence others so that in the near future, we would get tablets for our group, while using the devices we already have more frequently and in innovative ways."

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Children's motivation towards mobile learning should not be taken for granted. Children need community support and external engagement. According to the participants of the training program, it is better to work toward longevity instead of short-term "fun." Mobile learning is about documenting and placing something in memory, so that it can be retrieved at a future date. At their best, mobile devices play a supportive and enriching, but not a directive role.

To conclude, we sum up why developing mobile learning as a part of play in early childhood education is important. For a long time, play has been in a central part of Finnish early childhood education culture, and we hope it remains this way in the future. Play and imagination are children's volitional and active ways to develop and grow to become members of communities and their cultures. It would be impossible for adults to teach children everything that the children learn during play.

"What is learnt as a child will be mastered as an adult."
A Finnish proverb

The key points of "Mobile learning and the playing child" frame of mind:
- Become aware of media devices and multiple ways in which they can be used in early childhood education;
- Familiarize oneself with participatory ways of acting (a culture of sharing and participation);
- Adapt to mobile devices as natural and creative components of play;
- Understand the impact of the physical environment, external guidance, and playing tools and mobile devices on play;
- Appreciate and practice active knowledge creation processes;
- Practice to display learnt and observed things, keep track of personal and community learning progression; and lastly
- Learn to document and use authentic situations.