

Misunderstanding child-centeredness: The case of “child 2.0” and media education

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ABSTRACT

This qualitative study demonstrates the kinds of pedagogical pitfalls that are included in simplistic understandings of child-centeredness in the context of media education, an emerging field of early childhood teacher education with only a little empirical research done so far. Course diaries from 15 preservice teachers were analyzed to find answers to the question: How do preservice teachers approach child-centered education in the context of media education? The main findings can be summarized as follows. First, preservice teachers approached child-centeredness as an all-encompassing principle that guides early childhood education. Second, media education-related issues – beliefs about children and media, ambiguity of media literacy, and insecurity about oneself as a media educator – appear to bolster views of children as self-driven learners, and teachers as mere facilitators who do not have an active role in children’s learning processes.

Keywords: *child-centered education, early childhood education, media education, media literacy, teacher education.*



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INTRODUCTION

This qualitative study demonstrates the kinds of pedagogical pitfalls that are included in simplistic understandings of child-centered education in the context of media education, an emerging field of early childhood teacher education with only a little empirical research done so far. The empirical setting of the study is a compulsory media education course for first-year university-based early childhood education preservice teachers. The course design included a two-day movie-making workshop in a local kindergarten. The motive to study preservice teachers' perceptions of child-centered education was data-driven: While the concept was not included in the course syllabus, the participants expressed an explicit desire to be child-centered (media) educators carrying out child-initiated (media education) pedagogies. Quite often child-centered education meant minimal intervention into children's actions. To understand this phenomenon better, participants' course diaries – in which they explain their pedagogical decisions during the course – were analyzed to seek an answer for the following research question: *How do preservice teachers approach child-centered education in the context of media education?*

In this paper, child-centeredness is understood to refer to an underlying educational philosophy wherein child-initiated pedagogy is conceptualized as one approach for implementing that philosophy into practice (see also Tzuo, 2007). Put differently, child-centeredness refers to an understanding that the child and her/his ways to be should be at the very core of educational choices and decisions (Georgeson et al., 2015). Child-initiated pedagogies, in turn, refer to actual practices in which children's voices, views, wishes, and experiences are used as starting points for pedagogical activities (Helavaara Robertson, Kinos, Barbour, Pukk, & Rosqvist, 2015). Throughout the remaining paper, when applicable, child-centered education is used as an umbrella term to avoid unnecessary repetition of the concepts.

BACKGROUND

Child-centeredness and child-initiated pedagogies are trending themes in contemporary early childhood education (e.g., Helavaara Robertson et al., 2015; Miglani, Subramanian, & Agnihotri, 2017; Perrern, Iljuschin, Frei, Körner & Sticca, 2017; Rajab & Wright, 2018; Sak, Tantekin-Erden, & Morrison, 2010; Sriprakash, 2010) and they are cherished especially by

the younger generation of teachers (Broström, Johansson, Sandberg & Frøkjær, 2014). Proponents of child-centeredness have argued that instructional practices that support child-initiated activities promote children's learning and development in numerous areas including social and cognitive skills (Kinos, Robertson, Barbour, & Pukk, 2016; Robson, 2016) and, thus, child-centered beliefs are claimed to be a strong indicator of teacher quality (Hur, Buettner, & Jeon, 2015).

These viewpoints are easy to agree with and, therefore, it is not a surprise that child-centeredness and child-initiated pedagogies are common keywords in early-years curricula across the globe (e.g., Finnish National Board of Education, 2016; Niland, 2009; Sriprakash, 2010; Tzuo, 2007). Nevertheless, child-centeredness and child-initiated pedagogies are by no means unproblematic concepts. Take the statement about the correlation between child-centered beliefs and teacher quality, for example. The use of word "belief" implies that child-centeredness and child-initiated pedagogies are not built around *actual* but *perceived* characteristics of the child. These views, according to critics, are often illusionary and de-contextualized (Hempel-Jorgensen, 2015; Langford, 2010; Uprichard, 2008).

An illustrative example of de-contextualized discourses is the way children are treated as a homogenous group in relation to digital media in public discussions. Terms such as "touch screen generation" (Rosin, 2013), "iPad generation" (Donnelly, 2016), and "iGen" (Twenge, 2017) have been recently used to refer to the children born in 2010 and after. Regardless of the name, all these representations are based on a view that due to the digitalization of children's lifeworld, this so-called "child 2.0" differs not only from adults but also from children of previous generations. This dichotomy is apparent in Prensky's (2001) nearly 20-year-old claim of children being "digital natives" who are native speakers of the digital language of computers and the Internet, and thus think and process information fundamentally differently from their predecessors, whom Prensky calls "digital immigrants." Alongside these techno-optimistic views, children have also long been represented as victims of the mediatised and digitalized society in public discussions (Selwyn, 2003).

Why these discourses matter is that they are widely accepted by early childhood teachers. In-service teachers have considered children to be born-competent digital media users (Roberts-Holmes, 2014) and even young preservice teachers (PST) born in the mid-1990s (who, thus, are Prensky's digital natives themselves)

have made explicit distinctions between themselves and children whom they consider as the “real digital natives” (Mertala, 2019). In these views, children’s learning is conceptualized as an independently occurring process, as children are “just picking it up” when it comes to mastering digital media (Plowman, McPake & Stephen, 2008, p. 303). No active teacher participation is required; it is enough that children are simply provided digital devices and contents with which to operate. Views of children as self-directed learners and beliefs of learning taking place in children’s interactions with their environment are common in child-centered education (e.g., Chung & Walsh, 2000; Oelkers, 2002; Rajab & Wright, 2018).¹

These views have faced a notable amount of criticism. First, these views treat all children the same and leave no room for cultural, historical, or individual differences (Langford, 2010; Uprichard, 2008). Additionally, when children are considered to be self-driven learners, the role of teacher is typically constricted to a mere “facilitator” or “stage manager” who is supposed to be working from “behind the scenes” rather than as an active participant in the knowledge construction (Langford, 2010, p. 113; see also Helavaara Robertson et al., 2015; Hytönen, 2008).

RESEARCH CONTEXT AND DESIGN

The empirical context of this paper was a compulsory European Credit Transfer System (ECTS) two-credit² course, titled *Digital Media in Learning and Teaching*, for which I was the teacher. The objective of the course was to provide the participants with theoretical and practical insight into why and how to conduct media education in early childhood education.

Media education, as defined by Kupiainen and Sintonen (2009), is goal-oriented interaction involving the educator, the educatee, and media culture. The goal of this interactive process is media literacy (Kupiainen & Sintonen, 2009). In this interpretation, media is not approached only as devices and applications one should master, as the concept of media culture also includes values, cultures, tastes, and relationships related to media (Hodkinson, 2017). Accordingly, the use of the term “literacy” instead of “skills” or “competences” implies a broader form of education about media that is not only about mechanical skills, but suggests a more

rounded, humanistic conception (Buckingham, 2015 that includes critical thinking as well as cultural and social dispositions or tastes (Buckingham, 2009; Nixon, 2003). Drawing on Green’s (1988) 3D model of literacy, these scopes can be conceptualized as operational, critical, and cultural dimensions of media literacy (see also Marsh, 2017). To put this idea into context, a child can learn about and become interested in a particular digital game due to peer influence (cultural dimension), and while this child may be able to download and play the game (operational dimension), it does not mean that he or she would be able to critically evaluate how gender and/or ethnicity is represented in that game (critical dimension). Due to this ambiguity, media literacy should not be understood as something one either has or has not, but rather as a set of situated and contextual abilities (McDougall, Readman, & Wilkinson, 2018).

Media education is also an emerging field in both teacher education (Cherner & Curry, 2019; Gretter & Yadav, 2018; Meehan, Ray, Wells, Walker & Schwartz, 2015; Tiede & Grafe, 2016) and early childhood education (Sefton-Green, Marsh, Erstad, & Flewitt, 2016). Given the rapid mediatization and digitalization of contemporary societies, it has been emphasized that institutional education should support children’s media literacy via media education (European Union, 2009). The recently reformed Finnish National Core Curriculum for Early Childhood Education (Finnish National Board of Education, 2016) has answered this call by including media education as one of its learning areas. The task of media education is seen as supporting children’s opportunities to be active and to express themselves in their community. Media content in relation to children’s lives, including its veracity, is reflected by children with the aid of the educators. Through this process, the emergent source and media criticism evolve. Play, drawing, and drama are examples of child-centered methods for exploring media-related themes (Finnish National Board of Education, 2016).

Despite the seeming incompatibility between the abstractness of media literacy and the hands-on traditions of early childhood education, the literature contains various cases in which these two elements have been successfully integrated (e.g., Leinonen & Sintonen, 2014; Mertala, 2020; Salomaa & Mertala, 2019). Most recently, Salomaa and Mertala (2019) reported on a project in which Finnish kindergarten children’s critical

¹ These views are typically located in Rousseau’s and Piaget’s works (Chung & Walsh, 2000; Oelkers, 2002; Rajab & Wright, 2018).

² Two ECTS credits equals 54 hours of work.

game literacy (a subset of media literacy) was supported by having the children design their own games through drawing and crafting. Many of the designs were hybrids, whereby the children combined elements from existing games with their own creative ideas. For example, some of the girls replaced male main characters with female ones, which can be regarded as an example of critical emerging media literacy, as leading characters in video games are predominantly male (Williams, Martins, Consalvo, & Ivory, 2009). A prerequisite for such practice is that children feel that their media-related dispositions, values, and tastes are accepted and appreciated by the teacher. For example, children's interest in media-related fighting themes and role-plays has been found to be a problematic topic in early childhood education: Teachers are often dismissive of anything that portrays even a semblance of violence, and children learn to remain silent about these themes and play them in hiding (Lehtikangas & Mulari, 2016). In other words, if the child knows that the teacher would not approve a fighting-themed game idea, he or she will not draw and/or craft one, in contrast to the various fighting-related game ideas in Salomaa and Mertala's (2019) study. This notion highlights the importance of understanding media education not only as an isolated

subject but also as the everyday interaction between children and teachers.

Lastly, the demand for implementing media education in early childhood education requires that media education be included in teacher training programs. Research, however, suggests that media education is a marginal subject in early childhood teacher education in Finland as well as internationally (Friedrichs-Liesenkötter, 2015; Salomaa, Palsa, & Malinen, 2017; Share, 2017). Additional findings are that preservice teachers give teaching critical media literacy high value (Salomaa et al., 2017) but do not feel confident introducing children to media content with which they are not familiar (Souto-Manning & Price-Dennis, 2012).

Participants and course design

The participants (N=15) were first-year early childhood preservice teachers in a Finnish university-based early childhood education teacher program.³ As all but one of the participants were female, and as matters of gender are not discussed in this paper, all preservice teachers are referred to by the feminine noun. The structure of the course is presented in Figure 1.

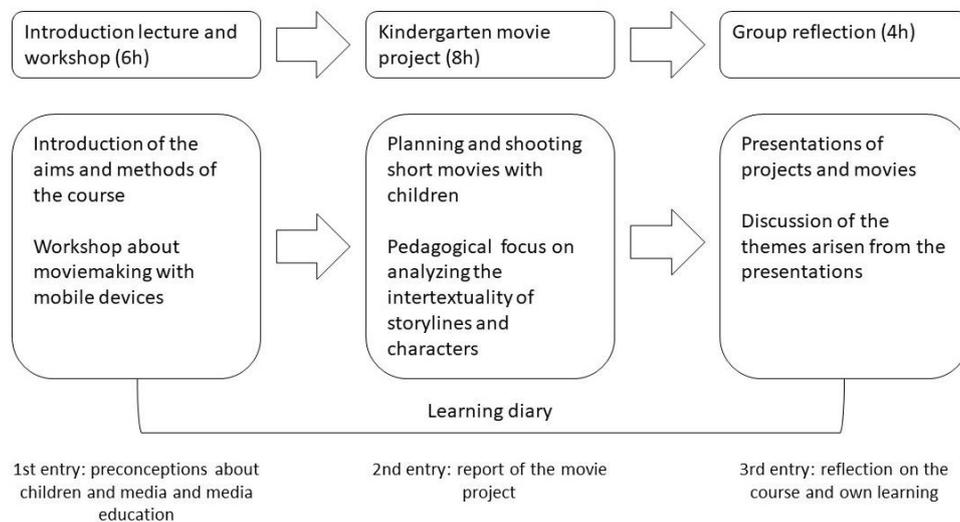


Figure 1. Overview of course design

³ The particular class was a segregated training group funded by the Finnish Ministry of Education. Due to the different criteria for eligibility, the student population was more heterogeneous than in the "basic" class. Several students had worked in kindergartens as child minders and some had previous university degrees, while others had only graduated

from high school but had undergone basic studies in educational sciences as open university studies. Due to the special nature of the participating class, no additional background information is provided in order to protect their anonymity.

The participants wrote a diary throughout the course. These diaries (150 pages in total) form the empirical data of this paper. Permission to use the diaries as research data was sought after the course, as opposed to before, so as to avoid influencing the content of diary entries (de Oliveira Nascimento & Knobel, 2017). The diaries were to be returned to the teacher of the course (the author) two weeks after the last meeting.

The contact lessons consist of an introductory session, kindergarten movie project, and group reflection. In the introductory session, the participants were first asked to draw a concept map around two themes: “children and media” and “media education.” They were further instructed to reflect on the kinds of presumptions that they have about children’s media use as well as what they understand about media education. The concept maps were later written and used as the first input in the course diary. This was done in order to have them reflect upon their initial views and beliefs. Next, the scholarly definitions of media education and media literacy were presented to and discussed with the participants.

After that, the course design was introduced. The participants were told that the pedagogical aim of the kindergarten movie project was to explore the intertextuality of media texts with the children. The concept of intertextuality refers to an idea that every text is a tapestry of two or more (previous) texts (Kristeva, 1986), which also applies to children’s media texts. For example, many Disney movies are more or less grounded in classical fairy tales (i.e., *Sleeping Beauty*, *Snow White*, *Cinderella*, *The Little Mermaid*, *Aladdin*, *Beauty and the Beast*, *Tangled*, and *Frozen*) and historical accounts (*Pocahontas*).

These so-called everyday (media) texts can be so common that we fail to pay attention to the kinds of messages about our world which they convey (Vasquez, 2012, p. 80). These messages can be problematic, for example in terms of gender and ethnicity, and experienced differently by different people (Coyne, Linder, Rasmussen, Nelson, & Birkbeck, 2016; Souto-Manning & Price-Dennis, 2012).

A large-scale content analysis of characters in a video game revealed a systematic over-representation of males, whites, and adults and a systematic under-representation of females, Hispanics, Native Americans, children, and the elderly (Williams et al., 2009).

Additionally, despite the advent of more progressive Disney heroines in recent years, the male character and voice still dominate in popular children’s movies (Golden & Jacoby, 2018). Thus, from a media educational viewpoint, it is highly important to help children become aware that certain representations of people are more prevalent than others in media texts. One starting point for this path is to aid children in noticing that there are recurring themes in media texts in terms of storylines.

To familiarize the preservice teachers with intertextuality, popular children’s media texts, such as *Frozen*, were analyzed collaboratively during the introduction workshop. They were also taught how to use the devices (the iPad) as well as the applications (iStopMotion; iMovie) needed for making the movies. The decision to use media production (movie-making) as a method for exploring intertextuality was grounded in the research literature that promotes the possibilities of media production in the development of critical media literacy (Buckingham, 2015). Both the goal and the methods were in line with the media educational alignments of the Finnish National Core Curriculum (Finnish National Board of Education).

The actual movie project took place over two consecutive days on the premises of a local kindergarten. The preservice teachers had visited the group once earlier in the semester. The aim of the first day was to plan and create the story line, characters, and scenery. It was up to the preservice teachers and children to decide which techniques (i.e., animation, acting) they would use to create the movies⁴.

The second day was used for shooting and editing the movie. The preservice teachers worked either in pairs or in groups of three. The children were divided into small groups of three or four by the educators of the group. I was present on both days and acted as a pedagogical and technological support.

At the end of the course, the preservice teachers presented their projects (including the movies) to the others in the course. For the presentation, they were instructed to articulate the pedagogical bases of the choices they had made during the project. The themes and questions arising from the presentations were discussed by the whole group.

⁴ Stop-motion animations were the most popular choice. One group acted scenes from those made via iStopMotion. The children’s choices of materials used in the stop-motion

animation included play-dough, Lego, plastic animals, and self-crafted cardboard figures.

Analysis

An abductive approach guided the analysis process. Abductive reasoning discards the idea that the researcher's observations and interpretations could be purely inductive and acknowledges that there is always a guiding theoretical thread included in the analysis process (Grönfors, 2011). In this study, the first theoretical thread was the critical remarks about how children and teachers are characterized in child-centered education (e.g., Hempel-Jorgensen, 2015; Langford, 2010; Hytönen, 2008). The second thread was the way in which children are represented in public discourses about children and media (Donnelly, 2016; Palmer, 2015; Rosin, 2013; Twenge, 2017).

Unlike in deductive analysis, the following of a theoretical thread does not mean that the theory is taken as a given or that the role of the analysis process is simply to test the theory. Instead, in abductive analysis, the researcher moves between inductive reasoning and existing theoretical models to open up new ways of theorizing on the phenomenon under investigation (Dey, 2003) by practicing a constant comparative analysis method (Suddaby, 2006). There are no universal or all-

applicable rules governing how constant comparison should be carried out in practice. It is suggested that it is the research objective (Fram, 2013) and the kind of material involved (Boeije, 2002) that determine the number of steps taken and the types of comparisons carried out during the analysis process.

In this study, comparison took place on three levels that were more overlapping than purely sequential in nature: 1) comparison between data and theory, 2) comparison within the data, and 3) comparison between the categories formed during the first two phases of comparison. Initially, I went through all the data and sought references to beliefs about children and media, perceptions of child-centered education, and initial views of media education. Parts that discussed such topics were highlighted from the diaries and collected into an Excel file. Next, linkages to previous research were opened up next to data extracts. Table 1. provides an example of the coding procedures by using child-centered education as a reference. The acronym PST refers to preservice teacher. More extracts from the data are presented in the Findings section to improve the reliability and clarity of the research.

Table 1. *Example of the first phase of the analytical comparison*

Data extract	Interpretation	Links to previous research
Our goal was to implement child-initiated pedagogy and try not to guide the course of the project too much. (PST#1)	In child-initiated pedagogy, teacher's role is to provide facilities for learning but not to actively participate in and mediate the process.	Children as self-directed learners (Oelkers, 2002); learning as interaction between child and environment (Rajab & Wright, 2018); teacher as a facilitator (Langford, 2010).

At the second phase, the diaries were read vertically (close reading of one diary at a time) and horizontally (comparative reading of all the diaries) to gain an understanding of the similarities and differences between the data from different participants.

Via these phases, four collective categories were formed: 1) child-centeredness as the core of early childhood education, 2) beliefs about children and media, 3) ambiguity of media literacy as an educational goal, and 4) insecurity about oneself as a media educator.

In the third and the final phases, these categories were compared with each other to identify if and how these categories were related to each other in shaping preservice teachers' understanding of child-centeredness in the context of media education.

FINDINGS AND DISCUSSION

The findings of this study suggest that preservice teachers' understanding of child-centered education in the context of media education is a combination of broader traditions and values of early childhood education and specific media educational aspects. Next, these issues will be discussed in more detail in four sub-sections. In the first one, the focus is on the participants' relationship with child-centered education. In the following three sub-sections, I will dig deeper into the more specific media educational aspects. These themes are more overlapping and interactive than distinguished and independent. Preservice teachers, for example, reported low media educational self-efficacy and considered children to be more skilled with media than themselves, and perceptions were in relation to a one-

sided view of media literacy in which the operational dimension of media literacy (ability to use devices and applications) was overemphasized.

The interactions and relations between the main themes are illustrated in Figure 2.

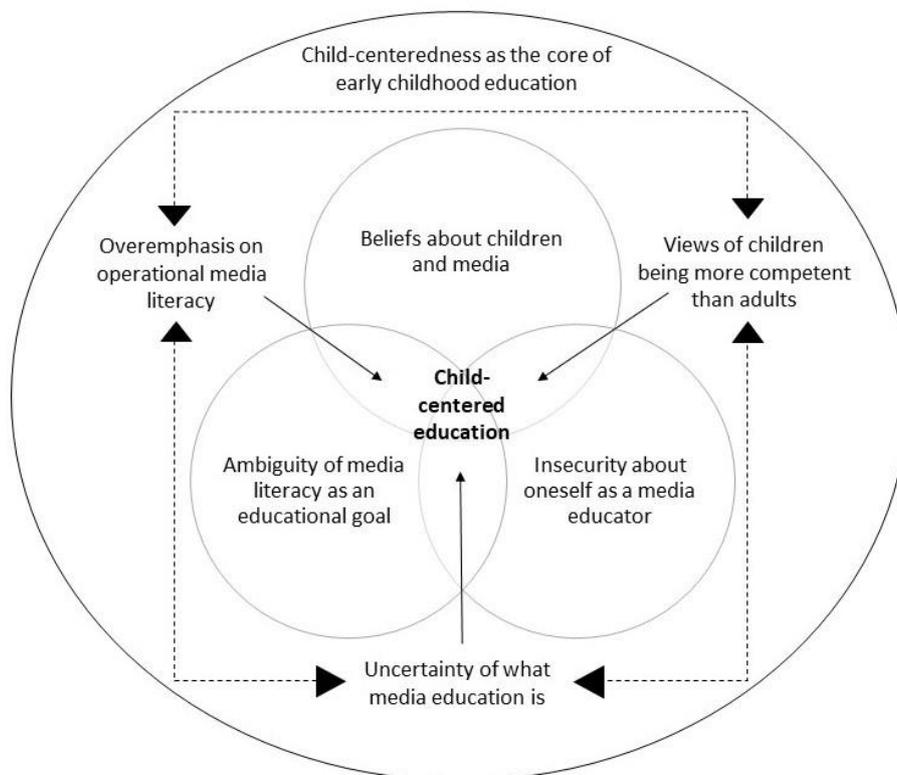


Figure 2. Aspects shaping the ways how child-centeredness is approached in the context of media education

Child-centeredness as the core of early childhood education

A desire to conduct child-centered education was a central theme in practically every diary, either on a philosophical or a practical level. An illustrative example of the former is the opening sentence from one diary in which the participant writes:

Today, I drew a circle on an A4 paper. Inside the circle I wrote “Me as a media educator... After that, I drew three lines on the paper. At the end of the lines, I wrote the words: enabler, familiarizing to media, and child-centered educator. (PST#12)

The extract suggests that child-centeredness was a guiding principle in her approach to what media education is and what it demands from the teacher. Put differently, child-centeredness was understood as an all-encompassing pedagogical principle that should be implemented in all early childhood education, including media education. Accordingly, several other participants

wrote how child-centeredness was the primary goal or guiding approach of their movie project.

Child-initiated pedagogy is reflected in the fact that the children have had the lead role in designing, implementing, and preparing, etc. [Name of a classmate] and I just provided a safe framework for implementing this project. (PST#10)

We aimed to keep the project as child-initiated as possible. We adults should have the role of supporter and observer. (PST#5)

The prevalence of and emphasis on child-centered education is an interesting phenomenon, as it was not a required theme to address in the diaries. This also applies to the way child-centered education was discussed in the data. For example, it would have been rather logical if those who named child-centeredness as the primary goal of their movie project were openly critical of the project, the goals and methods of which (supporting children’s critical media literacy by exploring intertextuality of media texts via movie making) were determined by an adult – that is, the

author. This, however was not the case. While some preservice teachers referred to the Finnish National Core Curriculum of Early Childhood Education (Finnish National Board of Education, 2016) when describing the importance of child-centered education, others simply stated it being important per se. In other words, it appeared that the participants considered child-centeredness to be something expected from them, and that this expectation overrode the media educational goals. One participant, for example, introduced her and her classmate's project by stating that "*we did not guide the discussions based on our goals – but the whole animation project was implemented on children's ideas*" (PST#15).

When reading the diaries, it became evident that in preservice teachers' understanding of child-centered education the teacher is not considered an active mediator or participant, but what Langford (2010) has described as "facilitator" and "stage manager" (or "enabler," "supporter," and "observer," to use preservice teachers' own terms) who operates behind the scenes. In other words, the teacher's task is to organize the physical, social, and psychological learning environment so that learning and development can happen, but not to actively participate in the children's learning process. In such understanding of child-centeredness, children are considered self-directed learners whose learning take place in interactions with their environment (e.g., Chung & Walsh, 2000; Oelkers, 2002; Rajab & Wright, 2018).

These notions are problematic for at least two reasons. First, such views make children accountable for their own learning and reduce the teacher's educational responsibility. It is quite unreasonable to expect that a group of children would end up critically reflecting on the intertextual tapestry of media texts by themselves, or with minimal guidance. Second, the idea of child-initiated pedagogies as something that is all about children's ideas is an awkward one, as it neglects the fact that children's autonomy and independence from teachers are also adult-determined goals for pedagogical activities. In addition, children's freedom inside institutional education is always freedom within some limits.

These limits can be schedules that structure the day (i.e., fixed lunch and naptimes) or relate to the social or practical rules of the kindergarten, to name a few examples. In fact, some preservice teachers explained in their diaries how they had invested a lot of effort in motivating and engaging some of the children, who felt that shooting the frames for the movie was too slow-

paced. Letting the children quit the project was not an option for them and, thus, the only feasible child-initiated ideas and actions would be those that fit inside teachers' predetermined boundaries.

Beliefs about children and media

As stated in the Introduction, children of the current era are often considered a homogenous and digital-savvy generation. Such images were also identified from the diaries, as many of the preservice teachers appeared to possess beliefs that children, even this young, outshine older generations in using and understanding media. As put by one of them:

I think that already small children are much more competent than adults are. Today, children are born around media, especially social media, so they get used to it better, compared to an adult who has lived a different life long before social media. (PST#14)

Her choice of words is almost a rephrase of Prensky's (2001) claim of younger generations being "digital natives" who are surrounded by and use various digital devices and content and, thus, are "native speakers" of the digital language of computers, video games, and the Internet. The extract also portrays older generations as "digital immigrants," who – according to Prensky (2001) – despite their efforts to adapt to the new digital environment, always retain their "accent" to some degree because they were socialized differently from their children and are now in the process of learning a new language.

On the other hand, some of the preservice teachers saw young children as unable to have a critical attitude toward the messages and influences of commercial media.

Obviously, media representatives and especially advertisers have understood that children are the easiest to influence because they still cannot be critical towards the media. In addition, everything from toothbrushes to bed covers are associated with the trend of that time. Take Frozen, for example. There surely are Frozen toothbrushes or a bed covers available in stores. ... Media is full of ads that try to influence the user. Without the right kind of criticality, it can result in some bad stuff. (PST#3)

In this view the child is positioned as an "innocent" user of media who is exposed to content she or he cannot understand nor have a critical attitude toward. This "victimized" image of the child is also a common illustration in public discourses of children and media (Selwyn, 2003). The preservice teachers also expressed their concern that children's encounters with media are

mere passive reception of different kinds of digital content, namely movies, children's programs, and games.

These initial views, however, were not static, but subject to change and/or reinforcement during the course. For those having an initial assumption of children being handy users of digital media, the movie project appeared to strengthen such views. Preservice teachers possessing a more anxious attitude, in turn, appeared to be relieved to see children using digital media for self-expression and creation in quite a skillful manner.

This phenomenon was neatly captured in the diary of PST#3. As pointed out in the previous extract, her initial view of the need for media education was based on the importance of teaching children about critical media literacy – a view shared by many Finnish preservice teachers (Salomaa et al., 2017). As this was also the pedagogical core of the movie project, it would have seemed presumable that she would have discussed these themes throughout the diary. That, however, was not the case. In the evaluation of the movie project she made no references to the development of critical media literacy but commented with her observations of children's handiness with digital media.

Perhaps the most important thing I have learned from this course is that kids are really capable technology users. Children should be freely given the opportunity⁵ to express themselves with digital devices. (PST#3)

It is important to notice that what the children were asked to do was not exceptionally technically demanding. Their tasks were mainly to take pictures for the stop-motion movie and to drag video clips across the screen, both simple functions that even three-year-olds are often able to perform unassisted (Friedman, 2016; Marsh, Plowman, Yamada-Rice, Bishop, Lahmar, Scott & Thornhill et al., 2015). Thus, the notion that when five- to seven-year-olds are asked to take pictures, they prove to be quite good at it, is not a spectacular one.

Moreover, the logic that the ability to take pictures and drag items is evidence of broader media literacy would be awkward, as having operational skills does not mean that children would be able to critically evaluate digital media texts.

⁵ The choice of words "children should be freely given the opportunity" once again suggests that the participant possesses

Ambiguity of media literacy as an educational goal

Another main finding of this study is that the ambiguity and multidimensionality of media literacy (as an educational goal) challenges preservice teachers' conceptions of what media education is about. As previously discussed, media literacy can be approached as operational, critical, and cultural capacities (e.g., Buckingham, 2009; Marsh, 2017). Whereas some of the participants emphasized the importance of supporting children's critical media literacy, in several cases participants' initial perception of media education was highly device-centered, and media education was conceptualized as "*familiarizing children with different kinds of devices and technologies*" (PST#6), which refers to supporting children's operational media literacy.

It is also important to acknowledge that the three dimensions of media literacy differ from each other not only in their contents but also in their concreteness. Whereas learning how to use a new device or application is concrete evidence of development of operational media literacy, the development of critical media literacy is much more difficult to operationalize and recognize. To put this statement into context, if the child does not know how to use iMovie at the beginning of the project but learns how to master it during the project, the gain of new skills is unquestionable evidence of development of operational media literacy. Conversely, it would be rather bold to state that after the movie project children would be capable of critically observing the intertextual features of children's media texts in any given situation. In addition, the need for the children to learn how to use the devices and applications needed in the project is more immediate than the need for learning critical media literacy. Put differently, if the children cannot use the devices and applications, the movie project falls short, whereas critical media literacy is not required for finishing the movie.

The disparity between (concrete) operational and (abstract) critical media literacy is highlighted by the fact that no examples of how the project supported children's critical media literacy were included in the diaries (despite that being the objective of the project). Instead, the diaries contained rich numbers of examples of children's learning of operational skills. Interestingly,

a view of child-centered media education in which the teacher's role is to be a mere enabler.

development of operational media literacy was also the most prominent theme in the participants' evaluations of what they learned during the course. The following extracts are representative samples from the data.

When making the animation, the children were able to use the device well and independently as we had gone through how the iStopMotion application works. (PST#4)

This course gave me more information on the use of the iPad and the applications it offers (iStop-motion and iMovie) and their use in an actual early childhood education environment. (PST#13)

Insecurity about self as a media educator

In the beginning of the diaries, the preservice teachers were asked to describe their initial views of self as a media educator. Given that the participants were first year preservice teachers, it was rather unsurprising that they described themselves as novices when it came to media educational professionalism. To quote one of the participants, “*I do not feel myself as a media educator at this time, but I want to develop into a good one*” (PST#5). However, many participants also expressed that they feel insecure about their personal competencies concerning media and media culture in general.

The contemporary media world is unfamiliar to me. (PST#9)

We adults are uncompromisingly out of the ever-accelerating evolution, where the media increasingly and more regularly schedules and determines daily life. (PST#7)

Doubts about one's media content knowledge and low media educational self-efficacy are common among in-service and preservice early childhood teachers (e.g., Garvis & Pendergast, 2011; Salomaa & Mertala, 2019; Souto-Manning & Price-Dennis, 2012). In the present study it was noticed that participants' insecurity about self as a media educator constrained their pedagogical thinking in the movie project. An illustrative example was one movie project in which the children came up with an idea that the movie would be about three squirrels who have to find a new home because their home-trees have been cut down. According to the children, the idea was based on the movie *Alvin and the Chipmunks*, which two of the children were familiar with. Already during the manuscript phase, I told the preservice teachers that such a plot is quite common in

⁶ *Onneli's and Anneli's Winter* is a Finnish children's book by Marjatta Kurenniemi (1968). It was adapted into a motion picture in 2015.

children's media texts and gave them a couple of concrete examples. One of them recalled in her diary that:

We talked with the teacher [author] during the project, and he told us that our movie, which we started to design, has media-cultural intertextuality. Our film had the same features as Onneli's and Anneli's *Winter*⁶ and *Watership Down*.⁷ In both films, the forest is cut down, and the characters are forced to move to another location. (PST#14)

However, even though both the children and I informed the preservice teachers about the reference movies, these intertextual connections were not discussed with the children. Given that *Onneli's and Anneli's Winter* was a box office hit (Hautamäki & Sotaniemi, 2016) and well-known among even those Finnish kindergarteners who had not seen the movie (Lehtikangas & Mulari, 2016), it is presumable that the children would have been familiar with the plot, and pinpointing this similarity would have served as a fruitful starting point for a media educational explorative discussion with the children.

It seems that the preservice teachers did not feel that they would have enough content knowledge to address these issues with the children. Based on the diaries, they were not familiar with *Onneli's and Anneli's Winter* and *Watership Down*. Similarly, as “Alvin” was misspelled as “Alvar” in the diaries, *Alvin and the Chipmunks* was also an unfamiliar movie for them. This conclusion is supported by previous research, which has identified that it does not feel natural for preservice teachers to introduce media texts to children about which they are not very familiar, as they think that they should always be more knowledgeable than children (Souto-Manning & Price-Dennis, 2012). Such views were expressed by the participants in this study as well. According to one of them:

To be a good media educator and to be able to teach children about media, one must have up-to-date knowledge about what is happening in the field of media. (PST#11)

That being said, it is worth questioning how much knowledge about some particular media texts one actually needs in order to be able to conduct media education. It is impossible for anyone to be familiar with all the possible traditional and contemporary media texts, but teachers should have the means to guide

⁷ *Watership Down* (1972) is a fantasy novel by Richard Adams, which has been adapted into an animated movie (1978) and children's television series (1999–2001).

children's attention toward the possible similarities between the media texts that children are aware of. In this case, even though the preservice teachers had no references in mind, they could still have stimulated the children's thinking by asking the children whether they were aware of any other movies, children's programs, or stories in which someone has to leave his or her home – be it a tree or not.

CONCLUSIONS

In this research study, course diaries from 15 preservice early childhood teachers were analyzed to explore the following research question: *How do preservice teachers approach child-centered education in the context of media education?* The main findings can be summarized as follows. First, preservice teachers approached child-centered education as an all-encompassing principle that guides early childhood education. Second, media education-related issues – beliefs about children and media, ambiguity of media literacy, and insecurity about oneself as a media educator – appear to bolster views of children as self-driven learners and teachers as mere facilitators who do not have an active role in children's learning processes. The combination of decontextualized beliefs about children and media and a strong desire to be child-centered educators propelled the preservice teachers to neglect the critical dimension of the media education project on which this study was based.

The findings of this study support the numerous arguments about the dangers and shortcomings of uncritical and simplistic approaches to child-centered education (Hempel-Jorgensen, 2015; Hytönen, 2008; Langford, 2010), and this growing body of research challenges the assumption that child-centered beliefs are by default an indicator of teacher quality (Hur et al., 2015). Thus, researchers and educators should question whether child-centeredness and child-initiated pedagogies should be the flagship terms of 21st-century early childhood education.

This argument is also grounded in the ways in which these terms are used in the recent research literature. For example, Helavaara Robertson and her colleagues' (2015) view of child-initiated pedagogies being a co-construction of learning experiences between children, adults, and the environment does not actually put the child or his/her initiatives in the center of the education; the central element is the interaction between different stakeholders. This notion is almost identical to

Kupianen and Sintonen's (2009) description of media education being intentional interaction between educator (adult), educatee (children), and media culture (environment). Acknowledging these similarities raises the question: what exactly makes the aforementioned approach child-initiated in the first place? Could it be that child-centeredness and child-initiated pedagogies are sometimes nothing more than rhetorical devices to distinguish ourselves from teacher-centered approaches, even though there is nothing particularly child-centered in our own approach (see also Sriprakash, 2010)?

That being said, I wish to make it clear from the outset that I am not suggesting a return to teacher-centered views of education in which children are understood as incompetent or incomplete "becomings" (Uprichard, 2008). What I am proposing here is that it is worth considering whether we should move away from discourses and labels that exclusively emphasize either children or teachers, as by highlighting one we tend to cast a shadow over the other (see also Mascolo, 2009). My suggestion, inspired by Kant and Schleiermacher (Siljander, 2002), is that the relationship and interaction between the educator and the educatee is the element that should be placed in the center of education. This so-called pedagogical interaction has some unique features. First, the interaction is intentional, as the educator aims for the learning and development of the educatee. The interaction is also asymmetrical; the educator not only has the power over the educatee, but she is also responsible for the best of the educatee and for society. Third, the relationship is paradoxical, as the educator uses her power to liberate the educatee from being under her power (Siljander, 2002).

It is precisely the tensioned relationship between freedom and coercion where concepts such as child-centeredness and teacher-centeredness run short. During the last meeting, I managed to challenge the pre-service teachers to think about the importance of child-teacher interaction. These discussions enabled some of them to critically reflect on their understanding of child-initiated pedagogy. In the words of one participant:

I think our teacher said it well to us when he asked: "what is the role of the teacher if she does not say anything to the children?" The teacher is always the one with the responsibility, whether she intervenes in things and guides children or not. These comments helped me to structure my own thinking of what child-centeredness in early childhood education means. Certainly, I will return to this subject on several occasions during my studies as well as during my working life. (PST#2)

Implications for teacher education

It is important to acknowledge that no preservice teacher starts any course from a tabula rasa position and participants' initial conceptions of child-centered education, media education, and children and media were something they already possessed when they entered into the course. Taguchi (2007) has used a metaphor of "toolbox" for these initial views, values, and beliefs. According to her, preservice teachers enter their training with a toolbox already filled (and continuously refilling itself) with educational theories and methods that need to be critically unpacked (as in the case of child-centeredness in this paper). For her, teacher education is about practicing a continuous process of unpacking and repacking what is already in this toolbox, relating it to other ways of thinking, and constructing new transgressive supplements. These, in turn, need to be deconstructed and repeatedly reconsidered as a continuous self-reflexive process (Taguchi, 2007).

As the previous extract from PST#2 illustrates, some preservice teachers' "toolboxes" were unpacked and repacked during the course. She had initial ideas and beliefs about child-centered education and children and media, which were subject to change during the course. Moreover, her statement that she will certainly "*return to this subject on several occasions during my studies as well as during my working life*" further implies that this process is a continuing one. Continuous and profound reflection, however, is a demanding task, and it would be unreasonable to ask preservice teachers to go through it by themselves. Instead, critical reflection on essential questions about children, teaching, and learning should be a transversal theme that pierces through the whole teacher education curriculum and is explicitly included in the syllabus of teacher education programs (for further discussion, see Mertala & Salomaa, 2019). By doing so, the pedagogical pitfalls inherent in simplistic understandings of child-centeredness can be avoided, not only in the context of media education, but also in early childhood education in general.

LIMITATIONS

While this study has provided important and novel information, it is not without its limitations. As the data were collected from an initial teacher education course, the decisions I, as the teacher, had made regarding the course design shaped participants' experiences and learning opportunities. For example, the use of digital

tools (tablet computers and movie-making apps) may have guided some participants to reflect on media literacy mainly as an operational competence – that is, the ability to master the device and applications. In addition, the schedule of the course played a role in shaping participants' experiences. Some of them commented that two mornings was insufficient to conduct both tasks: to analyze the storylines and characters, and film the actual movie. The fear of running out of time may have propelled them to rush through the intertextual media analysis component, as it would have been unpleasant (and seemed unprofessional) to leave the children with an unfinished project. This fear, however, was overemphasized, as all the groups finished their projects well before the deadline. Thus, it is worth questioning whether different methods of media production (i.e., story crafting or puppet theater) and a more flexible time-frame would have led to different experiences.

REFERENCES

- Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and Quantity*, 36(4), 391-409. <https://doi.org/10.1023/A:1020909529486>
- Broström, S., Johansson, I., Sandberg, A., & Frøkjær, T. (2014). Preschool teachers' view on learning in preschool in Sweden and Denmark. *European Early Childhood Education Research Journal*, 22(5), 590-603. <https://doi.org/10.1080/1350293x.2012.746199>
- Buckingham, D. (2009). The future of media literacy in the digital age: some challenges for policy and practice. *Medienimpulse*, 47(2). *Beiträge zur Medienpädagogik*. <https://www.medienimpulse.at/articles/view/143>
- Buckingham, D. (2015). Defining digital literacy – What do young people need to know about digital media? *Nordic Journal of Digital Literacy*, 10(anniversary issue), 21-35. https://www.idunn.no/dk/2006/04/defining_digital_literacy_-_what_do_young_people_need_to_know_about_digital
- Cherner, T. S., & Curry, K. (2019). Preparing preservice teachers to teach media literacy: A response to "fake news". *Journal of Media Literacy Education*, 11(1), 1-31. <https://doi.org/https://doi.org/10.23860/JMLE-2019-11-1-1>

- Chung, S., & Walsh, D. J. (2000). Unpacking child-centredness: A history of meanings. *Journal of Curriculum Studies*, 32(2), 215-234. <https://doi.org/10.1080/002202700182727>
- European Union. (2009) Council conclusions of 27 November 2009 on media literacy in the digital environment. *Official Journal of the European Union*. 301/09. <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:301:0012:0012:EN:PDF>
- Coyne, S. M., Linder, J. R., Rasmussen, E. E., Nelson, D. A., & Birkbeck, V. (2016). Pretty as a princess: Longitudinal effects of engagement with Disney princesses on gender stereotypes, body esteem, and prosocial behavior in children. *Child Development*, 87(6), 1909-1925. <https://doi.org/10.1111/cdev.12569>
- Dey, I. (2003). *Qualitative data analysis: A user-friendly guide for social scientists*. Routledge.
- de Oliveira Nascimento, A. K., & Knobel, M. (2017). What's to be learned? A Review of sociocultural digital literacies research within pre-service teacher education. *Nordic Journal of Digital Literacy*, 12(3), 67-88. <https://doi.org/10.18261/issn.1891-943x-2017-03-03>
- Donnelly, L. (2016, January 10). 'iPad generation' means nine in 10 toddlers live couch potato lives. *The Telegraph*. <http://www.telegraph.co.uk/news/health/news/12108895/iPad-generation-means-nine-in-10-toddlers-live-couch-potato-lives.html>
- Hautamäki, R., & Sotaniemi, J. (2016). *Elokuvavuosi 2016: Facts and figures*. The Finnish Film Foundation. http://ses.fi/fileadmin/dokumentit/Elokuvavuosi_2015_Facts_Figures.pdf
- Finland. Finnish National Board of Education. (2016). *Varhaiskasvatussuunnitelman perusteet*. https://www.oph.fi/sites/default/files/documents/varhaiskasvatussuunnitelman_perusteet_2016.pdf
- Fram, S. M. (2013). The constant comparative analysis method outside of grounded theory. *The Qualitative Report*, 18(1), 1-25.
- Friedman, A. (2016). Three-year-old photographers: Educational mediation as a basis for visual literacy via digital photography in early childhood. *Journal of Media Literacy Education*, 8(1), 15-31. <http://digitalcommons.uri.edu/jmle/vol8/iss1/2/>
- Friedrichs-Liesenkötter, H. (2015). Media-educational habitus of future educators in the context of education in day-care centers. *Journal of Media Literacy Education*, 7(1), 18-34. <http://digitalcommons.uri.edu/jmle/vol7/iss1/3/>
- Garvis, S., & Pendergast, D. (2011). An investigation of early childhood teacher self-efficacy beliefs in the teaching of arts education. *International Journal of Education & the Arts*, 12(9), 1-15. <http://www.ijea.org/v12n9/v12n9.pdf>
- Georgeson, J., Campbell-Barr, V., Bakosi, É., Nemes, M., Pálfi, S., & Sorzio, P. (2015). Can we have an international approach to child-centred early childhood practice?. *Early Child Development and Care*, 185(11-12), 1862-1879. <https://doi.org/10.1080/03004430.2015.1028388>
- Golden, J. C., & Jacoby, J. W. (2018). Playing princess: preschool girls' interpretations of gender stereotypes in Disney princess media. *Sex Roles*, 79(5-6), 299-313. <https://doi.org/10.1007/s11199-017-0773-8>
- Green, B. (1988). Subject-specific literacy and school learning: A focus on writing. *Australian Journal of Education*, 32(2), 156-179. <https://doi.org/10.1177/000494418803200203>
- Gretter, S., & Yadav, A. (2018). What do preservice teachers think about teaching media literacy? An exploratory study using the theory of planned behavior. *Journal of Media Literacy Education*, 10(1), 104-123. <http://digitalcommons.uri.edu/jmle/vol10/iss1/6/> <https://doi.org/10.23860/JMLE-2018-10-1-6>
- Grönfors, M. (2011). *Laadullisen tutkimuksen kenttätömenetelmät*. SoFia-Sosiologi Filosofiapu Vilka.
- Helavaara Robertson, L., Kinos, J., Barbour, N., Pukk, M., & Rosqvist, L. (2015). Child-initiated pedagogies in Finland, Estonia and England: Exploring young children's views on decisions. *Early Child Development and Care*, 185(11-12), 1815-1827. <https://doi.org/10.1080/03004430.2015.102839216>
- Hempel-Jorgensen, A. (2015). Working-class girls and child-centred pedagogy: What are the implications for developing socially just pedagogy?. *International Studies in Sociology of Education*, 25(2), 132-149. <https://doi.org/10.1080/09620214.2015.1045010>
- Hodkinson, P. (2017). *Media culture and society: An introduction*. Sage.
- Hur, E., Buettner, C. K., & Jeon, L. (2015). The association between teachers' child-centered beliefs

- and children's academic achievement: The indirect effect of children's behavioral self-regulation. *Child & Youth Care Forum* 44(2), 309-325.
<https://doi.org/10.1007/s10566-014-9283-9>
- Hytönen, J. (2008). Suomalaisen lapsikeskeisen pedagogiikan kehityslinjoja toisen maailmansodan jälkeen Eräitä kriittisiä havaintoja. In J. Hytönen (Ed.) *Educational environment in early childhood education in Estonia and Finland IV: Collection of articles* (pp. 137-144). University of Helsinki.
https://helda.helsinki.fi/bitstream/handle/10138/15094/RR311_verkkoversio.pdf?sequence=2
- Kellner, D. (2003). *Media culture: Cultural studies, identity and politics between the modern and the post-modern*. Routledge.
- Kinos, J., Robertson, L., Barbour, N., & Pukk, M. (2016). Child-initiated pedagogies: Moving toward democratically appropriate practices in Finland, England, Estonia, and the United States. *Childhood Education*, 92(5), 345-357.
<https://doi.org/10.1080/00094056.2016.1226107>
- Kristeva, J. (1986). Word, dialogue and novel. In J. Kristeva, & T. Moi (Eds.), *The Kristeva reader* (pp. 35-61). Columbia University Press.
- Kupiainen, R. & Sintonen S. (2009) *Medialukutaidot, Osallisuus, Mediakasvatus*. Helsinki University Press.
- Langford, R. (2010). Critiquing child-centred pedagogy to bring children and early childhood educators into the centre of a democratic pedagogy. *Contemporary Issues in Early Childhood*, 11(1), 113-127.
<https://doi.org/10.2304/ciec.2010.11.1.113>
- Lehtikangas, A. & Mulari, H. (2016). 'Mä en oo kattonu mut mä vaan tiiän ne': Havainnointi, medialeikit ja eronteot päiväkodissa In H. Mulari (Ed), *Solmukohtia: Näkökulmia lasten mediakulttuurien tutkimusmenetelmiin ja mediakasvatukseen* (pp. 55-78). Nuorisotutkimusverkosto/Nuorisotutkimusseura, Verkkojulkaisuja 103.
<https://www.nuorisotutkimusseura.fi/images/julkaisu/solmukohtia.pdf>
- Leinonen, J., & Sintonen, S. (2014). Productive participation-Children as active media producers in kindergarten. *Nordic Journal of Digital Literacy*, 9(3), 216-236.
https://www.idunn.no/dk/2014/03/productive_participation_-_children_as_active_media_produce
- Marsh, J. (2017). Introduction. In: J. Marsh, K. Kumpulainen, B. Nisha, A. Velicu, A. Blum-Ross D. Hyatt, ... G. Thorsteinsson (Eds.) *Makerspaces in the early years: A literature review*, (pp. 6-11). University of Sheffield.
http://makeyproject.eu/wpcontent/uploads/2017/02/Makey_Literature_Review.pdf
- Marsh, J., Plowman, L., Yamada-Rice, D., Bishop, J. C., Lahmar, J., Scott, F., ... & Thornhill, S. (2015). *Exploring play and creativity in pre-schoolers' use of apps: Final project report*.
http://www.techandplay.org/reports/TAP_Final_Report.pdf
- Mascolo, M. F. (2009). Beyond student-centered and teacher-centered pedagogy: Teaching and learning as guided participation. *Pedagogy and the Human Sciences*, 1(1), 3-27.
- McDougall, J., Readman, M., & Wilkinson, P. (2018). The uses of (digital) literacy. *Learning, Media and Technology*, 43(3), 263-279.
<https://doi.org/10.1080/17439884.2018.146220617>
- Meehan, J., Ray, B., Wells, S., Walker, A., & Schwarz, G. (2015). Media literacy in teacher education: A Good fit across the curriculum. *Journal of Media Literacy Education*, 7(2), 81-86.
<http://digitalcommons.uri.edu/jmle/vol7/iss2/8/>
- Mertala, P. (2019). Wonder children and victimizing parents—preservice early childhood teachers' beliefs about children and technology at home. *Early Child Development and Care*, 189(3), 392-404.
<https://doi.org/10.1080/03004430.2017.1324434>
- Mertala, P. (2020). Young children's perceptions of ubiquitous computing and the Internet of Things. *British Journal of Educational Technology*, 51(1).
<https://doi.org/10.1111/bjet.12821>
- Mertala, P. & Salomaa, S. (in press). Media educational consciousness of early childhood student teachers: A critical case-description and a suggestion for a cross-curricular framework. In I. Jones & M. Lin (Eds.), *Critical issues in early childhood teacher education: Vol 2 – International Perspectives*. Information Age Publishing.
- Miglani, N., Subramanian, J., & Agnihotri, V. (2017). Unpacking participation: The case of child-centered pedagogy in India. In H. Kidwai, R. Iyengar, M. Witenstein, E. J. Byker, & R. Setty (Eds.), *Participatory action research and educational development: South Asian perspectives* (pp. 129-159). Palgrave Macmillan.
- Niland, A. (2009). The power of musical play: The value of play-based, child-centered curriculum in early childhood music education. *General Music Today*, 23(1), 17-21.
<https://doi.org/10.1177/1048371309335625>

- Nixon, H. (2003). New research literacies for contemporary research into literacy and new media? *Reading Research Quarterly* 38(3), 407-413.
- Oelkers, J. (2002). Rousseau and the image of “modern education”. *Journal of Curriculum Studies*, 34(6), 679-698.
<https://doi.org/10.1080/00220270210141936>
- Palmer, S. (2015). *Toxic childhood: How the modern world is damaging or children and what we can do about it*. Hachette.
- Perren, S., Herrmann, S., Iljuschin, I., Frei, D., Körner, C., & Sticca, F. (2017). Child-centred educational practice in different early education settings: Associations with professionals’ attitudes, self-efficacy, and professional background. *Early Childhood Research Quarterly*, 38, 137-148.
<https://doi.org/10.1016/j.ecresq.2016.07.001>
- Plowman, L., McPake, J., & Stephen, C. (2008). Just picking it up? Young children learning with technology at home. *Cambridge Journal of Education*, 38(3), 303-319.
<https://doi.org/10.1080/03057640802287564>
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-6.
<https://doi.org/10.4135/9781483387765.n6>
- Rajab, A., & Wright, N. (2018). The idea of autonomy and its interplay with culture in child-centered education: Evidence from practitioners in preschools in Saudi Arabia. *Early Years: An International Research Journal*.
<https://doi.org/10.1080/09575146.2018.1434134>
- Roberts-Holmes, G. (2014). Playful and creative ICT pedagogical framing: a nursery school case study. *Early Child Development and Care*, 184(1), 1-14.
<https://doi.org/10.1080/03004430.2013.77299118>
- Robson, S. (2016). Self-regulation, metacognition and child-and adult-initiated activity: Does it matter who initiates the task? *Early Child Development and Care*, 186(5), 764-784.
<https://doi.org/10.1080/03004430.2015.1057581>
- Rosin, H. (2013). The touch-screen generation. *The Atlantic*.
<https://www.theatlantic.com/magazine/archive/2013/04/the-touch-screen-generation/309250/>
- Sak, R., Tantekin-Erden, F., & Morrison, G. S. (2018). Preschool teachers’ beliefs and practices related to child-centred education in Turkey. *Education 3-13*, 46(5), 563-577.
<https://doi.org/10.1080/03004279.2017.1322995>
- Salomaa, S. Palsa, L. & Malinen, V. (2017). *Opettajaopiskelijat ja mediakasvatus 2017*. The Finnish National Audiovisual Institute.
<http://www.mediataitokoulu.fi/opettajaopiskelijat.pdf>
- Salomaa, S. & Mertala, P. (2019). An education-centered approach to digital media education. In C. Gray & I. Palaiologou (Eds.). *Early learning in the digital age* (pp. 151-164). Sage.
- Share, J. (2017). Preparing educators to teach critical media literacy: *The Solo Journal: Educational Foundations and Social Justice Education*, 3(2), 15-33.
- Sefton-Green, J., Marsh, J., Erstad, O., Flewitt, R., (2016). *Establishing a research agenda for the digital literacy practices of young children: A white paper for COST Action IS1410*.
<http://digilitey.eu/wp-content/uploads/2015/09/DigiLitEYWP.pdf>
- Selwyn, N. (2003). “Doing IT for the kids”: Re-examining children, computers and the “information society”. *Media, Culture & Society*, 25(3), 351-378.
<https://doi.org/10.1177/0163443703025003004>
- Siljander, P. (2002). *Systemaattinen johdatus kasvatus-tieteisiin*. Otava.
- Souto-Manning, M., & Price-Dennis, D. (2012). Critically redefining and repositioning media texts in early childhood teacher education: What if? and why?. *Journal of Early Childhood Teacher Education*, 33(4), 304-321.
<https://doi.org/10.1080/10901027.2012.732669>
- Sriprakash, A. (2010). Child-centred education and the promise of democratic learning: Pedagogic messages in rural Indian primary schools. *International Journal of Educational Development*, 30(3), 297-304.
<https://doi.org/10.1016/j.ijedudev.2009.11.010>
- Suddaby, R. (2006). From the editors: What grounded theory is not. *Academy of Management Journal*, 49(4), 633-642.
<https://doi.org/10.5465/amj.2006.22083020>
- Taguchi, H. L. (2007). Deconstructing and Transgressing the Theory-Practice dichotomy in early childhood education. *Educational Philosophy and Theory*, 39(3), 275-290.
<https://doi.org/10.1111/j.1469-5812.2007.00324.x>
- Tiede, J., & Grafe, S. (2016). Media pedagogy in German and US teacher education. *Comunicar: Media Education Research Journal*, 24(2), 19-28.
https://www.scipedia.com/public/Tiede_Grafe_2016a
<https://doi.org/10.3916/C49-2016-02>

- Twenge, J. M. (2017). *IGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy – and completely unprepared for adulthood – and what that means for the rest of us*. Simon and Schuster.
- Tzuo, P. W. (2007). The tension between teacher control and children's freedom in a child-centered classroom: Resolving the practical dilemma through a closer look at the related theories. *Early Childhood Education Journal*, 35(1), 33-39.
<https://doi.org/10.1007/s10643-007-0166-7>
- Uprichard, E. (2008). Children as 'being and becomings': Children, childhood and temporality. *Children & Society*, 22(4), 303-313.
<https://doi.org/10.1111/j.1099-0860.2007.00110.x19>
- Vasquez, V. (2012). Creating opportunities for critical literacy with young children: Using everyday issues and everyday text. In J. Evans (Ed.) *Literacy moves on* (pp. 78-96). David Fulton Publisher.
- Williams, D., Martins, N., Consalvo, M., & Ivory, J. D. (2009). The virtual census: Representations of gender, race and age in video games. *New Media & Society*, 11(5), 815-834.
<https://doi.org/10.1177/1461444809105354>