

Networked learning in children's transition from day-care to school: Connections between contexts

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Abstract

This paper reports on a socioculturally informed design-based study concerning young children's use of tablets within the educational contexts constituting their transition from day-care to school. The study explores tablet-mediated and dialogical activities as potential means for negotiating connections between the different contexts which the children traverse during this transition. At several occasions, the participating 5- to 7-year-old children are invited to use tablets for producing photos, photo-collages and e-books about their everyday institutional environments, thus aiming at mediating the children's engagements within their contexts. During processes of mutual production and dialogical reviewing of this digital content, children, peers and professionals dialogically and multimodally explore the institutional contexts of transition. As an element of this, differences and similarities between these contexts are pivots of dialogue. Networked learning is thus conceptualized as a matter of networked situations and contexts for young children during their transition from day-care to primary school, and technological artefacts are viewed as potential means for mediating children's meaning making about continuities as well as differences during this process. It is argued that tablet-mediated activities in young children's educational settings tend to imply a certain theoretical as well as practical notion of worthwhile tablet use, valuating active digital production against consumption of content, and at the same time involving a certain educational use of tablets which dissociates itself from the social and emotional aspects of tablet use often related to games and play-culture. In the present project, activities partly adapt to prevailing notions of worthwhile tablet use by including literacy-aspects involved in the tasks of children producing digital content. But at the same time, the intended focus on children's engagements within and perspectives on their institutional contexts transcends tasks of simple instruction and implies dimensions of social and emotional character which may be delicate to handle within the educational context of pedagogically planned activities. This calls for certain considerations concerning the cultural and social dimensions of meaning making which are involved when dealing with children's experiences within their institutional contexts. Potentials as well as pitfalls are highlighted by way of examples, and finally some principles are outlined regarding the project's ongoing work on tablet-mediated activities as means for engaging pedagogically with children's experiences of their everyday institutional lives across contexts.

Keywords

Tablet-mediated activities, networked contexts, primary contexts, early childhood education and care, day-care, pre-school, primary school, transition.

Introduction

With the concept of networked contexts as a point of departure, a socioculturally inspired design-based study (Cole & Engeström, 2006; Cole & Packer, 2016), currently being conducted by the present author, will be presented in the following. The study practically explores tablet-mediated activities involving young children as (co-)producers of digital and multimodal content. To be more specific, the project explores tablet-mediated activities as potential means for creating connections between the contexts which the children traverse during their transition from day-care to school.

Through activities involving children's (co-)production of photos, photo-collages, e-books etc., the children are invited to point out places, activities, persons and things which bear significance to them within their institutional contexts. During as well as after the production process, children, peers and pedagogues engage dialogically with the content of the digital products. These activities take place within the children's well-known institutional contexts as well as when crossing into a new institutional context, thus prompting dialogues about similarities and differences between day-care and school on the micro level of everyday experiences.

In the new context, new points of interests are incorporated into existing or new digital (co-)productions, and new dialogues and narrations concurrently arise. Thus, potential connections between the children's institutional contexts are multimodally and dialogically explored through processes of mediation (Wertsch, 2007) as well as remediation.

On a theoretical level, the notion of primary contexts (Dohn, 2013) is central to this endeavour. Primary contexts imply contexts bearing significance to people in their everyday lives, contexts which people are emotionally engaged in and which are also linked to matters of identity in terms of giving significance to own and others' perception of oneself (Dohn, 2013, p. 105). By inviting children to multimodally point out and potentially elaborate on elements of importance to them in their institutional contexts, attempts are made to let the children address aspects of their institutional primary contexts in ways which may empower the children's voices on what bears significance to them. This relies on an epistemological assumption that context crossing, in this case the transition from day-care to school, involves complex processes of actively resituating knowledge as well as patterns of participation from one context to another. As part of this process, the children must necessarily draw on prior experiences from the institutional context of day-care and transformatively resituate these as flexible prerequisites for participation in the new school context. Within this perspective, children's active meaning making during transition will necessarily draw on their experiences from prior primary contexts. Through a process of mediating and remediating what may be termed as children's situational engagements (Hviid, 2000, p. 61) throughout transition from day-care to school, some connections between these diverse contexts can potentially be established in negotiations between children and pedagogues. It is important to mention that connections, in this case, does not simply imply continuities and similarities. Connections may imply discontinuities as well, thus making connections a matter of dealing explicitly with the manners in which the new context is experienced by the child to differ markedly from the known one, and how this difference may be handled in terms of participation, thus also making unspoken rules a matter of explicit grasping or even meta-communication on how to possibly participate in the new context (Pramling & Pramling Samuelson, 2012). A derived aspect is the professionals' awareness of the children's experiencing of transition and how this may inform reflected practitioners' adjustments of current practice.

The project resides within an overall approach which accentuates the importance of dealing actively with children's perspectives on their everyday institutional environments, not only in research but also in pedagogical everyday practices (Clark & Moss, 2011; Pramling Samuelsson, Hundeide, & Sommer, 2010), and it draws on studies accentuating the relevance of visual as well as multimodal approaches for engaging with these issues (Einarsdottir et al., 2009; Yelland, 2016; Garvis et al., 2015, pp 83-106).

Networked learning (NL) as a field of enquiry mainly addresses higher education and professional development whereas the present study employs a NL perspective on the diametrically opposite end of the educational system, i.e. early childhood education and the very entry into compulsory school education. The relevance of introducing NL into the fields of early childhood- and primary education relies on some central, shared aspects: Sociocultural perspectives emphasizing dialogue and interaction as central to learning and development and a focus on how technology-mediated activities may be an integrated part of this. Thus, an NL-inspired focus on technology-mediation and (co-)production of digital content seems highly relevant to this end of the educational spectre as well. By investigating and discussing tablet-mediated activities, with children as digital (co-)producers, as means for letting children, peers and pedagogues/teachers dialogically explore children's engagements with and perspectives on their differing institutional contexts during transition, the present study also engages with NL as a matter of networked situations and contexts (Dohn, Sime, Cranmer, Ryberg & de Laat 2018, in press, p. 16). By way of accentuating these aspects, the study aims at contributing to recent developments within the NL field of enquiry devoting attention to:

[...] the learning arising from the connections drawn between situations and from the resituated use in new situations of knowledge, perspectives and ways of acting from known ones (ibid., p. 17).

Empirical setting

The data reported in this paper originates from project activities taking place from January to October 2017. The activities involve children and professionals from three different day-care centres and one school in a middle-sized Danish municipality. Together, these institutions constitute one transition unity as most of the children from the three day-care centres attend the same local school.

Three chronologically successive contexts constitute transition in the specific case:

- Day-care centre. Most of the children have been attending this setting since they were three years old.

Pedagogues and pedagogical assistants are the professionals in charge. The present project involves activities during the children's last three months in day-care, i.e. from January to March 2017.

- Transition module. A designated transition module offered by all schools of the participating municipality. Taking place at school premises, lasting three months from April to June, and followed by school start in August. School pedagogues and pedagogical assistants are in charge, collaborating with pedagogues from the children's previous day-care centres who participate to varying degrees during the first weeks. The present project involves activities during the three months of the transition module, i.e. from April to June 2017.
- Primary school. First year of compulsory education in Denmark, named grade 0 or kindergarten class. Taking place at school premises but in a setting partly different from the transition module and with a grade 0 teacher as the professional in charge. The present project involves activities during the children's first three months in primary school, i.e. from August to October 2017.

The activities constituting the empirical basis of the project are a range of dialogical and tablet-mediated activities, all planned and carried out in collaboration between pedagogues/teachers and researcher. At several occasions throughout the nine months of project activities, the participating 5-7-year-old children have been invited individually or in different group constellations by pedagogue/teacher and researcher to use tablets with selected apps for producing and dialogically engaging with photos, photo-collages, photo-stories (a series of photos with embedded audio-recording), videos and e-books in order to thematise their institutional environments in different manners. The activities vary extensively, but a common feature is an intended focus byway of professionals' introduction and framing of the activities. This focus is on what the children value within their institutional contexts, fx. favourite places, toys, tools, activities, people etc. Central to investigating and highlighting what is of significance to the children are both elements which they engage with here-and-now in their present contexts, were engaged with in their prior contexts, or (envisage to) engage with in new (or future) contexts. In this paper, I shall show examples of how these activities may forge and negotiate connections between the contexts of transition. Analysis will be tentatively unfolded and discussed, but before proceeding to this, a theoretical background identifying young children's tablet use in education, as well as considerations on research methods, will be unfolded.

Other research on children's tablet use in education

In terms of research, tablet-mediated activities involving children aged 0-8 is currently being devoted attention, both as a feature of the home environment (Chaudron, 2015; Johansen, 2016) and as part of the institutional contexts of day-care and primary school (Burnett, Merchant, Simpson, & Walsh, 2017; Dezuanni, Dooley, Gattenhof, & Knight, 2015; Garvis & Lemon, 2016). This double focus is indebted to the actual whereabouts of the technology: Tablets as in-home entertainment technology with intuitive touch functions and millions of apps for young children have become immensely popular. A recent report on Danish 0-8-year-old children's use of digital technologies define Danish children as being "among the heaviest digital media users in Europe" (Johansen, 2016, p. 1), with tablets as the most commonly used technology. According to the report, more than 90 % of Danish children aged 0-8 have access to a tablet in their home. In continuation of this, tablets have also entered early years- and primary educational settings due to being relatively cheap, mobile and multifunctional tools with an intuitive interface which most of the children are familiar with from their home settings (Burnett et al., 2017, p. 2). One noteworthy feature of studies of young children's tablet-mediated activities, however, is an underlying discussion of what I will here term children's worthwhile tablet use in home and school, involving aspects of digital literacy, creativity as well as consumerism and game- or play culture. The aforementioned report on Danish children's technology use emphasizes that children's engagement with tablets is "mostly passive, resembling old-fashioned television viewing" (ibid., 4). The report concurrently recommends parents, educators and policy-makers that a primary focus area should be strategies aimed at encouraging children and young people to become creators and co-creators of digital content, not merely consumers. In accordance, this is defined as a currently underdeveloped area which should play a central part in future strategies within the field of media literacy (ibid., 5).

In the present study, local-practical approaches in the participating institutions have to some degree been resonating this notion of worthwhile tablet use, thus regarding the recreative or passive-consumerist use of technologies as a leisure phenomenon and as a consequence of this leaving pedagogues with what one of the participating pedagogues stated as "a bad conscience, profession-wise" when letting children use the tablet just for entertainment [March 3rd, 2017, Interview, Pernille, the Sunflower Kindergarten].

In a similar manner, studies of tablet use in early childhood- and primary education currently accentuate what I

will here term a notion of worthwhile tablet use. Creativity and digital production is widely valued rather than consumption of content (Dezuanni et al., 2015; Garvis and Lemon, 2016), an attitude which also applies for content which is developed for education, such as learning games. A recent study states and problematizes that a clear majority of the top selling preschool learning apps are primarily instructional, repetitive, and with no or only scarce possibilities for the user of actively creating or manipulating with content (Yelland, 2016). This statement resonates with an earlier analysis addressing a didactic dissonance between behaviourist content in learning games and more constructivist and sociocultural pedagogies of the professionals involved (Vangnes, Gram Økland and Krumsvik, 2012).

A recent study (Wohlwend, 2016) has reframed the relation between (supposedly passive) entertainment and (supposedly active) creative production in a somewhat different manner. Play-cultural aspects of media use such as knowledge of game content, popular characters etc., are addressed as a matter of potential participatory literacies for children playing their way into cultural settings. This points to the potentials of supporting “play-enriched participatory literacies” (ibid., p. 62), i.e. supporting children’s possibilities for drawing on their media knowledge and thus contributing to a rich and inclusive play-culture in their institutions (ibid). This approach is accompanied by a critique of reductionist notions of literacy which privilege printed text matters and simplified cognitive skills, and which at the same time ignore the vast literary potentials of characters and story-lines in media-universes. This approach points to a critique of merely installing a worthwhile tablet use by way of creative and productive apps.

As illustrated by the above, tablets are tools with a wide range of affordances grounded in in-home entertainment as well as in-school educational use. It could be argued that tablets have situated or domain specific affordances, and that this may lead to collisions when certain affordances cross domain context from home to school. This aspect of young children’s tablet use has been termed “the iPad-multiple” (Burnett, 2017) and this is an important premise for working with tablet-mediated activities in early childhood- and primary education. Due to the sketched dichotomy between worthwhile vs. less appreciated tablet use, it has been stated that “the shoring up of the ‘educational iPad’ involves ‘othering’ affective and social dimensions of practice” (Burnett et al., 2017, p. 11). This makes the earlier stated, worthwhile tablet use appear like a restricted educational domain logic, leaving out affordances relevant for use in other domains.

The present study touches upon different aspects of children’s tablet use in education. It explores the use of tablets with children as (co-)producers in a way resembling what has here been termed a worthwhile tablet use in educational contexts. But at the same time, it deliberately aims at including social and affective aspects of children’s experiencing of and perspectives on their institutional environments. With the aim of accommodating children’s engagements and perspectives as resources for establishing connections between primary contexts during transition, the study has a double aspiration. On the one hand, it unfolds as educational activities planned by professionals/researcher and with an aim of establishing connections and facilitating children’s transition. On the other hand, the focus on children’s engagements within their institutional settings potentially fuels open-ended, social and affective aspects. This act of balancing a double aspiration between carrying out a pedagogical activity and at the same time fulfilling an open-ended accommodation of perspectives involves delicate negotiations of professionals’ and children’s intentions within activities. Questions of intersubjectivity, joint attention and possible joint intentions have thus proven to be a crucial issue in the project, questions which also resemble the above outlined aspects of tablets as an ambiguous tool within education.

Research methods

The reported activities make up a first iteration of two in this design-based study. A second iteration is developed and carried out during February-September 2018 in the same institutional settings as the first, and based on principles derived from this. The iterative process serves to further develop, explore and qualify the question of using technology-mediated and dialogical activities as a means for engaging with children’s perspectives and engagements in order to forge and negotiate connections between contexts during transition. The inherent focus on children’s engagements and perspectives joins a range of current early childhood educational research viewing children as capable social actors with an expertise in their own lives, and quite a few researchers have been working with child-produced photos as an ethnomethodological means for rendering visible children’s perspectives on their institutional contexts (Garvis et al., 2015, pp. 83-106; Lemon, 2016; Magnusson, 2017). The present study is inspired by these approaches, but a central displacement of focus is significant. In the present study, the object of study is not mainly children’s perspectives as such. Moreover, the focus is on how pedagogical activities, involving technology-mediation and dialogue, may serve as an arena for working with children’s experiencing as a resource for transition pedagogy. In the field of transition studies, researchers have also been focusing on how children’s experiencing of their transition from preschool to school

may be rendered visible by employing visual methodologies involving children's drawings (Einarsdóttir et al., 2009, Salmi and Kumpulainen, in press, 2017). This focus on visual methodologies as the researcher's tool for gaining insight into children's experiencing of transition, whereas the present study looks into the complex tissue of pedagogical activities accommodating, mediating and re-mediating children's experiencing as a resource for establishing connections during transition. In the current project, child-produced digital content is thus not conceptualized as the primary research data. Rather, the mediated and interactional processes, i.e. the tool-mediated activities, are the unit of analysis, and video-observations, field notes as well as post activity interviews with professionals and children are gathered as data.

As may be obvious from the above, the activities of this project do not aim at children's acquisition of a precise body of knowledge and skills. Rather, it works exploratorily to provide practical as well as theoretical insights into a complex and messy state of affairs which is the condition when conducting design-based research in real-world settings (Joseph 2004:235). Tablets are not assumed to be an exclusively privileged tool for this endeavour. Other tools might be of relevance as well, and might even serve the purpose better. And as a matter of fact, analogue and hybrid tools have been involved in project activities as well: children's drawings have been photographed by the children and integrated into digital photo-stories, and analogue maps of institutional settings with printed photos, drawings and QR-codes linking to child-produced videos etc. have been created as well. However, as will be outlined in the following, using digital technologies, in this case tablets with productive apps, as a means for approaching children's here and now-perspectives on and engagements within their institutional contexts, is one possible way of addressing this issue.

Analysis: Potentials and pitfalls in project activities

In the following, four empirical examples will serve to illustrate possibilities as well as problems associated with the endeavour addressed in this paper. All names of persons and institutions are anonymized in the following, and informed consent concerning video observation and data use has been obtained from parents/guardians of participating children as well as from professionals.

The first example shows an activity taking place within in the setting of day-care, i.e. the first of the three above listed transition contexts. In this context, which the children know very well, different activities as e.g. taking photos of favourite elements and adding these photos to a common album and/or inserting photos into an individual e-book seem to have clear potentials as a way of accommodating children's engagements with and perspectives on their institutional contexts:

A small group of children in the day-care institution are taking turns, individually and in small groups of own choice, to photograph their favourite places indoor and outdoor with tablets. Storm is taking a round with the tablet on his own, he takes a picture of a blue sofa in the common area. As I pass by, I ask him why he took a photo of the sofa, and he answers: 'It's because that... when I arrive in the morning I sometimes can't figure out what to do, and then I can lie down on this sofa and think of what to do. Then I very often get a good idea, and then I can play that!' Later, Pernille (pedagogue) gathers the group in order to look at their photos projected on the wall. Each child gets an opportunity to tell about one or two of their photos if they feel like it, and Storm narrates about the sofa as his 'place for thinking'.
[January 11th 2017, the Sunflower kindergarten]

In activities like this, many children show confidence as well as interest in collecting traces of what could be termed their "situational engagements" (Hviid, 2000, p. 61) within their well-known primary contexts. An important aspect of primary contexts is the tacit and embodied knowledge which is integrated in these (Dohn 2013), and it seems plausible that simple photo-activities like the above may let children record traces rooted in their primary contexts as well as verbally unfolding the meaning which they ascribe to these.

In the new and less well-known context of primary school, i.e. the third of the above listed transition contexts, a more explorative approach to the institutional context appeared in many activities, exemplified by the following:

A group of children, who have been attending primary school for one month, are adding new pages to the individual e-books which they started creating in day-care, and which they have been revisiting during the transition module. Anne (teacher) has presented the task as one of 'adding a new page to your book of something you really like on the indoor school premises'. Together, teacher and children plan their route based on what the children want to add to their books, and then they take a stroll to visit the different places. Jesper wants to make a page in his book about 'the fox in the basement', as he says. In the basement, Anne unlocks the door to the science classroom, a classroom normally not used by grade 0, and they all enter. Jesper takes a photo of

the stuffed fox on the floor. He adds the picture to his e-book page on the tablet. After having returned to the classroom, the children add sound recordings and/or text to their pages. Jesper finds a quiet corner and touches the icon on the tablet display to activate audio recording on the e-book page. Then he speaks: 'I love looking at a fox because that it's fun and it's because that it's fun 'cause it stares at me'. Jesper listens to his own audio recording, smiles, shows the page to a friend and exits the e-book. Then he goes to have a look at another child's e-book [September 25th 2017, the South School, grade 0].

In the two examples above, children use tablets as means for tracing their engagements within known as well as new institutional surroundings. In the first example, a snapshot of Storm's whereabouts in his well-known context becomes a potential anchorage point for dialogue, whereas the second example is a matter of exploring possibilities which the new context offers from a child's point of view. Within the project activities, these two different ways of tracing engagements are recurrent: tracing well-known as well as exploring new engagements. When it comes to dialogical interactions between children and professionals/peers within activities, matters are more complicated. In some instances, pedagogues/teachers dialogically scaffold the children in processes which restate, confirm and extend the children's utterances on their institutional contexts, well-known as well as new ones, thus jointly exploring potential connections (continuities as well as differences) between the contexts of transition, and in these cases social and affective aspects resonate into the activities as well:

Pernille (pedagogue) assists some of the oldest children in the day-care setting in working on their individual e-books. Sif is eager to add new content, she has already inserted a photo of herself holding her younger sister, Kira, who also attends the day-care. Sif wants to write Kira's name in the book and she asks Pernille to help her with the spelling. Pernille sets the e-book keyboard to capital letters for Sif to easier find the letters and she starts writing. Concurrently, a dialogue between Sif and Pernille unfolds about Kira staying in day-care while Sif will be attending transition module in one month. Sif looks intensely at Pernille and exclaims loudly 'But then I'll miss her!' The dialogue continues about Sif picking up Kira with her parents after school, and Pernille suggests to write in the e-book that Kira will be staying in day-care. Sif keenly agrees, but she insists to write the sentence herself. After having completed the sentence, still using capital letters, Sif adds her own name. The e-book page now displays the text KIRA MUST STAY IN DAY-CARE. SIF. After this, Sif makes an audio recording on the page, singing an improvised alphabet-like song. [March 2nd 2017, the Sunflower kindergarten]

Situations like the above are visible in many of the project's activities: Children and pedagogues mutually engage with child-initiated content in a manner which potentially prompts dialogue about aspects of transition with obvious importance to the children. In other instances, activities run counter to mutual dialogue, as when a pedagogue develops a disposition which all children's e-books must adapt to, each page thus having a pre-defined content which photo, text and audio recording must reflect, e.g. 'my favourite outdoor activity, my favourite indoor activity, my imagined school activities'. In these cases, substantial dialogues fail to appear in favour of instructional turn-taking, and the children never gain agency or ownership. In cases like Sif's above, a flexible in situ attitude prevails, thus resulting in complex, multimodal products tightly indebted to the dialogic situation in which they were created. As a consequence of this, the e-books created within these activities cannot be viewed as static, communicative products infused with a specific meaning. However, exactly such expectations may easily accompany the children's digital products when encountered in a new context. This is another pitfall within the project activities. In the last example, we meet Sif a few months later than in the example above, in the new context of transition module at school:

Sanne (pedagogical assistant) has invited a group of four children in the transition module to show the e-books which they created in their prior day-care institutions. They all sit down on a blanket on the floor, the children taking turns in showing their e-books and Sanne engaging in dialogue with them about the content. When Sif opens her e-book, she instantly swipes to the first page. Sanne looks at the page, leans over and reads aloud, theatrically frowning her brows a bit, reading the sentence as an imperative made by Sif: 'KIRA MUST STAY IN DAY-CARE. SIF!' [May 11th 2017, the South School transition module]

As this example shows, approaching the child (co-)produced content as an opportunity for dialogical encounter within a new context is not easy. Sanne reads aloud Sif's capital letters as if it represents a meaning conventionally ascribed to capitalized text. As a result of this, the re-contextualization of Sif's e-book leads to an over-simplification and a complete change of meaning (Linell 1998:145). In other examples, pedagogues and children do succeed in establishing situations of multimodal and flexible communication where content produced in one context become open for re-negotiation in the new context, and where differences and continuities between the contexts of transition are dialogically negotiated, but a strong sensibility towards re-negotiation of re-contextualized meaning seems to be the prerequisite for this.

Concluding discussion

This paper has been unfolding the issue of using tablet-mediated activities with children as digital (co-)producers as possible means for letting children, peers and professionals explore children's engagements with, and perspectives on, their differing institutional contexts during transition. What seems to be a potential, according to the reported study, has to do with children's use of tablets for actively and multimodally exploring well-known as well as new institutional settings. And in addition to this, the creation of complex, multimodal utterances, e.g. e-books, may potentially prompt in situ dialogues among children and pedagogues/teachers on connections, differences and continuities between transition contexts. This may be obtained by way of dialogues about aspects of importance to the children in their institutional everyday lives: play activities, friends and siblings in the institution, institutional rules etc. In some instances, digital products may also be picked up and re-contextualized during transition, but this calls for a strong awareness on behalf of the pedagogues/teachers involved of not viewing the digital products as static utterances with a stable meaning content. On the contrary, the digital products must be encountered as pivots for new and re-contextualized dialogical interaction, and the children must have dialogical agency in order to negotiate meaning in the new context. The second iteration of project activities will serve to further develop digital (co-)production in early childhood- and primary education as a means for collaborative reasoning between children, peers and professionals. And further work will be done in order to develop meaningful re-contextualizations during transition, thus creating meaningful connections between contexts. The project accentuates how meaning is a matter of "shareholding" (Rommveit 2013); it is constructed dialogically between contextually situated people using available resources and, thus, must be treated carefully when crossing contexts.

References

- Burnett, C. (2017). The fluid materiality of tablets: Examining 'the iPad multiple' in a primary classroom. In C. Burnett, G. Merchant, A. Simpson, & M. Walsh (Eds.), *The case of the iPad: Mobile literacies in education* (pp. 15-27). Singapore: Springer
- Burnett, C., Merchant, G., Simpson, A., & Walsh, M. (2017). *The case of the iPad: Mobile literacies in education*. Singapore: Springer.
- Chaudron, S. (2015). Young children (0-8) and digital technology - A qualitative exploratory study across seven countries. Retrieved January 2018 from <http://publications.jrc.ec.europa.eu/repository/handle/JRC93239>
- Clark, A., & Moss, P. (2011). *Listening to young children: The mosaic approach* (2nd; ed.). London: NBC (National Children's Bureau).
- Cole, M., & Engeström, Y. (2006). Cultural-historical approaches to designing for development. In Valsiner, J & A. Rosa (Eds.), *The Cambridge Handbook of sociocultural psychology* (pp. 484-507). Cambridge: Cambridge University Press.
- Cole, M., & Packer, M. (2016). Design-based intervention research as the science of the doubly artificial. *Journal of the Learning Sciences*, 25(4), 503-530
- Dezuanni, M., Dooley, K., Gattenhof, S., & Knight, L. (2015). *iPads in the early years: developing literacy and creativity*. London: Routledge.
- Dohn, N. B. (2013). Viden i praksis - implikationer for it-baseret læring. [Knowledge in practice – implications for IT-based learning]. *Res Cogitans*, 9(1), 94-128.
- Dohn, N. B. (2014). Implications for Networked Learning of the 'practice' side of social practice theories: A tacit-knowledge perspective. In V. Hodgson, M. de Laat, D. McConnell, & T. Ryberg (Eds.), *The design, experience and practice of networked learning* (pp. 29-49), Cham: Springer
- Dohn, N. B., Sime, J.-A., Cranmer, S., Ryberg, T., & de Laat, M. (2018, in press). Chapter 11: Reflections and challenges in networked learning. In N. B. Dohn, S. Cranmer, J.-A. Sime, T. Ryberg, & M. De Laat (Eds.), *Networked learning: Reflections and challenges*. Cham: Springer.
- Einarsdóttir, J., Dockett, S., & Perry, B. (2009). Making meaning: children's perspectives expressed through drawings. *Early Child Development and Care* 179(2), 217-232

- Garvis, S., & Lemon, N. (2016). *Understanding digital technologies and young children: an international perspective*. London & New York: Routledge.
- Garvis, S., Ødegaard, E. E. & Lemon, N. (2015). *Beyond observations: Narratives and young children*. Rotterdam: Sense Publishers.
- Hviid, P. (2000). Forskning med børn, der deltager. [Research with children who participate] In P. S. Jørgensen & J. Kampmann (Eds.), *Børn som informanter*. [Children as informants] (pp. 55-69). Copenhagen: Børnerådet.
- Johansen, S. L., Larsen, M. C & Ernst, M. J (2016). Young children (0-8) and digital technology. A qualitative exploratory study. National Report, Denmark. Aarhus Universitet & Medierådet for børn og unge. Retrieved January 2018 from: http://www.aau.dk/digitalAssets/201/201213_national-report_2015_denmark_proofread-2-.pdf
- Joseph, D. (2004). The practice of design-based research: Uncovering the interplay between design, research, and the real-world context. *Educational Psychologist* 39 (4), 235-242.
- Lemon, N. (2016). Young Children Photographing Their Learning to Share Their Lived Experiences of the Learning Environment. In Garvis, S. & N. Lemon (Eds.), *Understanding Digital Technologies and Young Children. An International Perspective* (pp. 46-58). New York: Routledge.
- Linell, P. (1998). Discourse across boundaries: On recontextualizations and the blending of voices in professional discourse. *Text & Talk* (18), 143-157.
- Magnusson, L. O. (2017). *Treåringar, kameror och förskola: En serie diffraktiva rörelser* [Three-year-olds, cameras and pre-school: A series of diffractive movements], PhD thesis, University of Gothenburg
- Pramling, N. & Pramling Samuelsson, I. (2012). School readiness and school's readiness. On the child's transition from preschool to school. In Suggate, S. & E. Reese (Eds.) *Contemporary Debates in Childhood Education and Development* (pp. 133-142). London & New York: Routledge.
- Pramling Samuelsson, I., Hundeide, K., & Sommer, D. (2010). *International perspectives on Early Childhood Education and Development: Child Perspectives and Children's Perspectives in Theory and Practice*. Dordrecht: Springer.
- Rommetveit, R. (2003). On the role of "a Psychology of the Second Person" in Studies of meaning, language, and mind. *Mind, Culture, and Activity*, 10(3), 205-218.
- Salmi, S. & Kumpulainen, K. (2017, in press). Children's experiencing of their transition from preschool to first grade: a visual narrative study. *Learning, culture and social interaction* (Published online 19. October 2017). <https://doi.org/10.1016/j.lcsi.2017.10.007>
- Vangsnes, V., Gram Økland, N. T., & Krumsvik, R. (2012). Computer games in pre-school settings: Didactical challenges when commercial educational computer games are implemented in kindergartens. *Computers & Education*, 58(4), 1138-1148.
- Wertsch, J. V. (2007) *Mediation*. In Daniels, H., M. Cole & Wertsch, J (Eds.) *The Cambridge Companion to Vygotsky* (pp. 178-192). New York: Cambridge University Press
- Wohlwend, K. E. (2016). Who gets to play? Access, popular media and participatory literacies. *Early Years: An international research journal*, 37(1), 62-76.
- Yelland, N. (2016). iPlay, iLearn, iGrow: Tablet technologies, curriculum, pedagogies and learning in the 21st century. In S. Garvis & N. Lemon (Eds.), *Understanding Digital Technologies and Young Children - an international perspective* (pp 122-138). London & New York: Routledge