



Preschool teacher educators' conceptions about teaching early literacy to future preschool teachers

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ABSTRACT: This study aims to examine what conceptions preschool teacher educators in Norway have about the subject fields of children's language learning and early literacy. To investigate what the teacher educators in these two subject fields hold as important, we have interviewed twelve teacher educators having a master or PHD degree, six from the subject of Norwegian and six from the subject of Pedagogy. The research question is: What conceptions do teacher educators have about teaching in the subject fields of children's language learning and early literacy in preschool teacher education? The results show that the teacher educators had quite different perspectives on what to teach future preschool teachers in the subject fields of children's language learning and early literacy. The teacher educators in Norwegian talked of early literacy as a field of great importance, but gave equal status to children's literature, and said that they used more time to teach literature than to teach children' language learning and early literacy. The teacher educators in Pedagogy said they thought of children's language learning as having less importance than play. They all claim that the teacher students do not have solid educational knowledge when they graduate from the Preschool Teacher Education.

Keywords: teacher educators, preschool teacher education, language learning, early literacy

Introduction

The aim of this article is to examine what teacher educators with a master or PHD degree in the subjects of Norwegian and Pedagogy hold as important for future preschool teachers to learn in the subject fields of children's language learning and early literacy, and to discuss challenges related to teaching these fields. This study is based on theory and research by, among others, Neuman and Cunningham (2009) showing that the quality of the knowledge base student teachers obtain through education is of great importance

to the quality of their pedagogical work in preschool. To participate in and guide children's early literacy learning, preschool teachers must have a substantial knowledge base. This base must include an understanding of children's language learning and the knowledge, skills and dispositions necessary to shape learning experiences that engage children and support their use of language (Dickinson & Caswell, 2007; Siraj-Blatchford & Manni, 2008). In Norway there is little focus on what teacher educators teach future preschool teachers when it comes to children's language learning and early literacy, and how the future teachers can support children's language learning in pedagogical work (Vatne & Gjems, 2014).

The Norwegian preschool teacher education

Norwegian preschool teachers need a bachelor's degree in their profession to be fully qualified. In the bachelor's degree, the responsibility of teaching in the subject field of children's language learning and early literacy is divided between the teacher educators with a degree in Norwegian and in Pedagogy. In 2013 Norway introduced a new model for preschool teacher education (Ministry of Education and Research, 2012). The content of the preschool teacher education is divided into six multidisciplinary subject fields, which are quite comprehensive. The subject fields related to children's language learning and early literacy are mainly placed in the subject fields 1) Language, Text and Mathematics and 2) Children's development, Play and Learning. The student teachers spend six weeks each year in practical training, guided by practical training teachers. The teacher teams administrating different subject fields now share the overall responsibility for these practical periods.

We want to examine what the teacher educators in the two subject fields say they hold as important when teaching about children's language learning and early literacy. Further, we examine what the two groups of teacher educators say about the content of their teaching and what they emphasise as important to teach. We have interviewed teacher educators in the subjects of Pedagogy and Norwegian. The research question is *what conceptions do teacher educators have about teaching in the subject fields of children's language learning and early literacy in preschool teacher education?* First, we present theory and research about the importance of language learning in early childhood.

Children's language learning and development of early literacy in preschool

August, Carlo, Dressler & Snow (2005) claim that early literacy learning takes place in the age between one and eight years, and that children need to get knowledge of words, grammar and narrating, and to develop code-related skills. Early literacy also includes letter identification, awareness of the sounds in words and later sound-symbol correspondence (Dickinson & Porche, 2011). This knowledge is essential to children's learning to read and write in school. Further, early language learning is also important as an artefact for gaining all kinds of knowledge, to establish friendships and social contacts,

to join in play and to participate in all kinds of activities (Wells, 2007). Children's language learning and early literacy both concern children's language acquisition and we see them as part of the same learning process.

There is ample evidence of the importance of the early years for children's later development, but there is little international research and knowledge of what student teachers are taught in the field of early literacy and language learning (Neuman & Cunningham, 2009). In addition, there are few international studies of the content and quality of preschool teacher education (Early et al., 2007).

The quality of the early childhood stage is decisive for children's learning in general and early literacy in particular (Roskos & Neuman, 2005; Dickinson & Porche, 2011). Cunningham, Perry, Stanovich and Stanovich (2004) discuss early childhood education in USA, and claim that the knowledge of children's language development and early literacy vary in the group of preschool teachers. Their own study included 722 preschool teachers and revealed that the informants had little knowledge of children's language and of literature suitable for children. At the same time, the preschool teachers evaluated their own knowledge quite positively. Furthermore, a study by Dickinson and Caswell (2007) show that preschool teachers do not have sufficient knowledge of how to promote children's language development, which is the foundation of learning in general and especially the foundation of literacy. One explanation they present is that preschool teacher education has comprehensive subject fields the students are to be educated within, and that there is too little time to study the different areas in depth.

Research has revealed that the foundation for learning to read and write is laid in the preschool years (Dickinson & Porche, 2011). Language learning in the preschool years indirectly affects later reading (Verhoeven, van Leeuwe, & Vermeer, 2011). Language has this ability by supporting phonemic awareness and the ability to attend to the smallest units of sounds that reflect differences in word learning (Dickinson, Golinkof & Hirsh-Pasek, 2010). In addition, social and emotional development depend on a functional language for communication with other people, and is important for today as well as for tomorrow. Accordingly, preschool teachers must have thorough knowledge of how children learn language (Wasik & Ianonne-Campell, 2012).

Theory and relevant research about teacher education

An educational program significantly influences the conceptions developed by university educators and student teachers regarding the content of their education and the teaching profession. Polat (2010) defines educators' and student teachers' conceptions as "an inter-dependent complex system of [an] experiential, affective, cognitive, and metacognitive repertoire of perceptions, perspectives, ideologies, knowledge, theories, and principles that are somewhat related to teachers' decision making and instructional practices" (p. 196). The curriculum forms a societal system, which contextualizes the Vatne & Gjems *Varhaiskasvatuksen Tiedelehti* — *JECER* 6(1) 2017, 148–162.

understandings and ideology that preschool teacher students meet through programme descriptions and their teachers.

Shulman (2004) and Borko (2004) emphasised that future teachers, at all educational levels, must acquire a minimum level of three types of knowledge from their teacher education: First they need factual knowledge, i.e., theoretical and/or research-based knowledge ("knowing what"). To "know what" in the subject field of children's language learning must encompass the patterns of the language developmental process, as well as the different elements language learning consists of. Secondly they must acquire procedural knowledge ("knowing how"), procedures regarding the application of knowledge in pedagogical work with children. Procedural knowledge is knowledge that is especially important for acting in different pedagogical situations. If preschool teachers only develop content knowledge and knowledge of different facts, they will have problems with how to act and work as preschool teachers in practice. "Knowing how" in the field of children's language learning is for instance to know that children learn language at best when they are engaged in situations they experience as meaningful (Nelson, 2006). Thirdly, they must understand why they need such factual and procedural knowledge, which is characterised as meta-knowledge ("knowing why"). "Knowing why" is important for understanding the role of language in all kinds of learning and cognitive development. All three forms of knowledge, mentioned above, are interwoven with each other (Borko, 2004; Shulman, 2004). To promote children's language learning and early literacy as the foundation for social life, play and friendship, as well as learning to read and write, preschool teachers must have a solid knowledge base. This base includes knowledge of the language development process, as well as why language learning is important and how to promote children's learning in this field.

The teacher educators are important models for prospective teachers, and establish a foundation for how they learn to teach (Lunenberg & Korthagen, 2009; Hammerness et al., 2005). As models, they represent values and conceptions of how and what to teach. What knowledge novice student teachers think is of importance will be further developed when they meet different subject fields throughout their education, as well as when they get to know their educators' beliefs and conceptions (Polat, 2010). Despite the wealth of commentaries on teacher education there is little empirical research focused on teacher educators themselves (Cochran-Smith & Zeichner, 2005; Korthagen, 2004). According to Grossman and McDonald (2008) teacher educators are individuals that may emphasise, intentionally or not, different ways to prepare future teachers, focusing on theoretical and research based knowledge and/or on knowledge that is useful for practical pedagogical work with young children.

The role of teachers' domain-specific knowledge in the area of early literacy and its implications for pedagogical practice, has received increasing attention from researchers in the US and UK (Neuman & Cunningham, 2009). However, from the many different interventions to promote children's language learning in preschools, research has revealed only small to moderate gains in all central literacy domains (Dickinson, 2011). Vatne & Gjems *Varhaiskasvatuksen Tiedelehti — JECER* 6(1) 2017, 148–162.

Dickinson concludes his review by saying:" Changing teacher practices related to language use is proving to be nearly as hard as raising children's performance levels." (2011, p. 967). His findings focus on the interventions in preschools to teach and coach preschool teachers in their pedagogical practice. One conclusion of his review is to lay greater emphasis on children's language learning in the education of preschool teachers. Research on teacher education, however, lacks a common theoretical basis and there exist only a few empirical studies. Most of these are small-scale studies or analysis of policy documents (Cochran-Smith & Zeichner, 2005).

Method

Data were gathered by qualitative methods, through interviews with teacher educators. Interviews were chosen because we wanted to examine what conceptions the teacher educators have about the subject fields of children's language learning and early literacy, and we asked for their rationales. We could have observed them in their classrooms, but this would not have revealed their conceptions on the importance of these subject fields. Hammersley (2008) underlines that we need to remember that what people say in an interview is to a certain degree based on the questions they get, and implied values, which prescribe what they can talk about and not. Furthermore, the informants will adapt to how the interview, including the relation to the interviewer, develops. Though we tried to be as impartial as possible, both the aim of this study, the research question and interview questions sent in advance of the interview, may have influenced the teacher educator's answers.

Data consists of twelve semi-structured individual interviews with twelve teacher educators in preschool teacher educations in Norway. The teacher educators work at four different University Colleges. Six informants have a master's or PhD degree in Norwegian and six in Pedagogy. They teach in these respective subjects. Both teacher groups are instructed to teach about children's language and early literacy according to the national educational program (Ministry of Education and Research, 2012). To compare informants across institutions and subject fields, we chose pre-formulated themes and all the informants were asked the same questions. The selection of informants is based on obtaining a mix of 1) urban and rural institutions, 2) private and official institutions and 3) large and small institutions. These choices were made to give us richer and more reliable data (material). The head of the programs in each institution suggested who to invite to participate in the study. The ones who were invited were willing to participate in the study.

Research questions

In order to illuminate the research question, what conceptions do teacher educators have about teaching in the subject fields of children's language learning and early literacy in

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preschool teacher education, the educators were first asked about their opinion on the scope of the subject fields in the teacher education and how they think children learn language. Then we asked what they hold as important when it comes to children's language learning and early literacy, and what they want the student teachers to learn in to how to support children in these subject fields. Further, we asked about the educators' conceptions of the future teachers' knowledge about children's language learning and early literacy, after graduating. The questions were formulated based on theory of teachers' knowledge of what, why and how (Borko, 2004; Shulman, 2004).

Analysis of the data

The interviews were recorded and transcribed, and then analysed in accordance with Braun and Clarke's (2006) recommendations for qualitative research and thematic analysis. Braun and Clarke (2006) emphasise the importance of displaying the choices one makes through the analytic process, and present the procedures of the analytical process with the data material. Our analytical process was to read and reread the transcribed interviews, and then we coded the content in meaningful units. Then we identified topics and reconsidered themes. In the end, we redefined topics and subtopics. Through the process, we were close to the empirical material, the transcripts, and tried to do the analysis as transparent as possible (Braun & Clarke, 2006). In analysing the data, we also compared the answers from the teachers in the subject of Norwegian with the answers from the teacher educators in Pedagogy. We did find this approach appropriate for analysing the individual semi-structured interviews of educators in the subjects of Pedagogy and Norwegian. This is because one of the intentions of this study is to get to know what the teacher educators hold as important in what student teachers learn about language learning and early literacy.

When rereading the text, we divided the data into four categories based on theories and research on language learning, early literacy and teacher education. Then we classified the material into the four following sections: (1) The importance of children's language learning as part of future preschool teachers' education, (2) The importance of teaching about children's language learning and early literacy, (3) Teaching procedural knowledge about children's language learning and early literacy, and (4) Future preschool teachers' knowledge of children's language development and early literacy. The analytic process moved from the descriptive, where the data material was sorted and organised to reveal important patterns, to the interpretive, where the patterns are discussed in relation to theory and relevant research (Braun & Clarke, 2006).

Already at the first reading, we found that the two groups differed in what they found important for student teachers to learn in the matter of children's language and their conceptions regarding what future preschool teachers need to learn in how to support children's language learning. Through this analysis we identified both some common features and differences in the teachers' answers in what they see as important. Finally we selected some illustrative quotations from the teachers.

Critical aspects

In qualitative data, it is difficult to avoid being influenced by the researcher's ideological point of view. As teachers in Pedagogy, we know the subject Pedagogy better than we know the subject Norwegian. This might have influenced both the relation to the informants during the interview, the interpretation of the data and the presenting of the findings. The questions are based on our research interest, and they may have influenced the educator's answers. We are aware of the limited selection of 12 informants. It is not our intention to generalise the findings, but to illuminate some challenges in the field of children's language learning and early literacy in the Norwegian preschool teacher education.

Findings

Below we present the findings in the study. The abbreviations denote the two teacher groups as teacher educators in Norwegian (TENO) and teacher educators in Pedagogy (TEPE).

The importance of children's language learning as part of future preschool teachers' education

The two groups both talk about the importance of teaching about language learning, but they have different focus and different reasons. All the TENOs express that language learning is the most important field in the whole teacher education, because language competence is the ground for all learning. They also underline the importance of high quality books for language learning. One of the TENOs says: "I think it is very important that we teach literature in the preschool teacher education. And I think it could have been more, because literature gives good access to good language (...)". Three of the TEPEs say language is important mainly for children as beings here-and-now as opposed to children as becoming. The other three specify that language is very important for children's play. One of the TEPEs says: "When we talk about play, and give them an understanding of play, it is obvious that play is a learning arena for language and requires language competence". The TENOs emphasise language learning as part of book reading and the TEPEs as part of play.

The importance of teaching about children's language learning and early literacy

All the TENOs want to provide student teachers with knowledge of how to create good language situations for children. They all express that preschool teachers are important role models for children, both when they are talking about telling, participating in conversations and reading books. One TENO tells that he teaches about children's language learning, starting with the babies and proto-conversations, and then turns to dialogues. All the TENOs emphasise the connection between children's language

competence and their ability to learn. One says: "Language is the tool for thinking and lays the ground for cognitive development". In addition, three of the TENOs underline the importance of language to children's social competence and interaction with peers. However, they all refer to TEPEs as mainly responsible for children's cognitive and social learning. They also underline that they have too few hours for giving future teachers knowledge about children's language learning and early literacy in depth, because they consider knowledge about children's literature and teaching about how to evaluate books to be just as important for future preschool teachers.

The TEPEs, on the other hand, consider that children's language education takes place mainly in interactions between adults and children. The TEPEs consider that it is best for the student teachers to learn about children's language learning when collaborating with other subject fields, such as mathematics and ICT, by making and using artefacts. The general view among the TEPEs is that it is important that the student teachers learn how to stimulate children's language learning in general and to tell in particular, because this is important for contact with peers. All the TEPEs emphasise play and communication as fundamental to children's language learning. One of the TEPE's says that the field of children's language learning is too technical and that this is a field mainly for the TENO's teaching.

Teaching procedural knowledge about children's language learning and early literacy

All the teachers, both in Pedagogy and in Norwegian language, maintain there is too little time for them to give the student teachers knowledge about procedural knowledge. One of the TEPEs says: "I would like to answer that I use many hours and a lot of energy on teaching procedural knowledge, but as educators we do not have much time available to deal with this aspect."

One of the TENOs expresses that the students only have limited time to carry out their mandatory tasks in language learning when they are in their practical training periods. He points out that for the student teachers: "It is a challenge to carry out these tasks in their practical training periods. When the students present their experiences from their practical training periods, they talk mainly about their lack of time. There were too many other things which came in and spoiled their plans."

The informants in both subjects shift the responsibility to teach procedural knowledge on to other professionals. One TEPE says that the student teachers will learn about procedural knowledge by experience after they graduate preschool teacher education. Still another says that language learning and early literacy would be an important theme for further education. Five of the TENOs articulate that they anticipate that the student teachers will gain procedural knowledge from TEPEs. Five of the TEPEs answer that the students will learn this kind of knowledge through teaching practise, but that this of

course will depend on the quality of the preschools. They also express hope for the future teachers to learn by experience after finishing their education.

Future preschool teachers' knowledge of children's language development and early literacy

Most of the TENOs and TEPEs answers indicate that their preschool teacher students do not get sufficient education about factual, procedural and meta-knowledge to support children's language learning and early literacy in different areas. Both the TENOs and the TEPEs express that they are worried about the future teachers' (lack of) knowledge within the subject field of children's early literacy learning. They claim that because of low admission requirement after Upper Secondary school, most of the students do not have solid competence and knowledge when they enter, nor when they graduate from teacher education. A TENO says: "Some teacher students work hard and learn a lot, but too many have learned far too little". One TENO tells that he is worried that the newly educated preschool teachers will become too reliant on instruction books, mapping and testing, because they will lack self-confidence in both factual knowledge and procedural knowledge.

Three of the TEPEs maintain that children's language learning is presented in the curriculum in the subject field Children's development, play and learning. The other three TEPEs however, underline that this field is not placed under the subject field of Children's development, play and learning, but they suppose it is taken care of in the subject field of Language, text and mathematics in the curriculum. This reveals that in at least three of the six institutions we visited, children's language and early literacy are presented only in one of the six multidisciplinary subject fields in the Norwegian preschool teacher education.

Discussion

"Knowing how" (procedural knowledge) is theoretical and practical knowledge on how to work with children's language learning and early literacy in preschool, which is a very important period for language learning (Neuman, & Marulis, 2010; Siraj-Blatchford, & Manni, 2008). According to Early et al. (2007), some researchers and teacher educators believe that acknowledging relationships between children and adults form the basis for parts of the learning in early childhood, including academic skills. If such beliefs prevail, this might have consequences for the academic subject knowledge in the student teachers' education. The TENOs argue that language learning is of great importance in preschool. Further, they argue that to educate preschool teachers is to create meaningful language learning contexts and read aloud to the children. They were focusing on the academic content in their subject field rather than on merely acknowledging whatever the children were saying or doing (Early et al., 2007). The TEPEs said in accordance with Early et al.'s (2007) findings, that they emphasise language learning mainly as important to children's play and for them to be human beings. It seems like the two groups have quite different Vatne & Gjems Varhaiskasvatuksen Tiedelehti — JECER 6(1) 2017, 148–162.

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conceptions of what is important for the student teachers to learn about children's language learning and early literacy. The TENOs expressed that they regard the TEPEs as responsible for language learning in relation to children's cognitive and social learning, while they themselves take responsibility for language development and early literacy. The TEPEs on their side, mainly point to the importance of language as a tool for play and social interaction. Surprisingly, none of the informants pointed at the importance of the correlation between language learning, cognition, social interaction and early literacy, though the relation between them are of great significance to children's language learning and early literacy (Wells, 2007). In this way, both teacher groups undermine the comprehensive learning processes that lay the ground for children's cognitive development and language learning.

The two teacher groups in this study had somewhat unspoken expectations to each other concerning the "how"- element (procedural knowledge) in their teaching. The TENOs seem to rely on the TEPEs to give the preschool teacher students the procedural knowledge they need concerning children's language learning and early literacy. The TEPEs, on the other hand, think that the practical training teachers in preschools teach the future preschool teachers procedural knowledge. In this way, both TENOs and TEPEs avoid to take responsibility for the "how element" in language learning and early literacy in the education of future preschool teachers. We agree with Zeichner (2005) who claims that practical training teachers are key persons for quality in teacher training, but their responsibility is to support and guide the student teachers in their training situations (Ministry of Education and Research, 2012), not being the major teachers in an academic subject field.

These findings make us anxious that procedural knowledge is a missing element in the preschool teacher education. The practical training periods are fragmented because of a restricted amount of time available. If there is a weak connection between theoretical knowledge ("what" and "why") and procedural knowledge ("how"), and if the practical training periods do not work as cohesive element, one can be worried that the education develops in a direction that does not safeguard the professional perspective. According to Early et al. (2007) we lack information about what is taught in preschool teacher education, how the teaching is conducted and how the teacher students learn to transform knowledge into preschool practice. Our study indicates that according to 12 teacher educators, future preschool teachers achieve less knowledge about children's language learning and early literacy than one could hope for and expect. This will, according to a study by Tout, Zaslow and Berry (2006), have consequences for the quality of early childhood education. Their research shows that higher levels of teacher education, especially education that focuses on early childhood development, are generally linked to higher quality in preschools.

We found in our small-scale study that the teacher educators in the subjects of Norwegian and Pedagogy had quite different perspectives on what they consider important for future preschool teachers' knowledge in the subject field of children's language learning. The Vatne & Gjems *Varhaiskasvatuksen Tiedelehti — JECER* 6(1) 2017, 148–162.

teacher educators in Norwegian talked of early literacy as a field of great importance, but gave equal status to children's literature, and said that they used more time to teach literature than children's language learning. The teacher educators in Pedagogy described children's language learning as a field of less importance to the future teachers, though children's learning and children's cognitive development are their main responsibility according to the Norwegian national curriculum (Ministry of Education and Research, 2012). They spoke of language learning mainly as an aspect of social interaction and play. Both the teacher educators in Norwegian and Pedagogy in Norway, said that they only had time to collaborate if they were doing some projects together. The findings in this study indicate that in the field of children's language learning and early literacy the teacher educators cooperate only to a small degree. We assume that cooperation between teacher educators could give the future preschool teachers a more comprehensive knowledge base in the subject fields of children's language and early literacy learning (Neuman & Marulis, 2010).

Some of the informants also said that they find the subject field so complex that it should rather be a part of further education. The procedural knowledge seems to have low priority. Most of the teachers answered that procedural knowledge was a field they anticipated that another teacher group took care of. In addition, they claim that many of the student teachers do not have solid educational knowledge neither when they start, nor when they graduate teacher education. A question is whether the educators teach without adapting their teaching to the novice student teachers' knowledge or endeavour to lift their level of knowledge and understanding through their teaching. In accordance with Dickinson and Caswell (2007), the teacher educators in both Norwegian and Pedagogy express concern about the limited time they have, to give the future teachers knowledge in the subject fields of early literacy and children's language learning. Several of the teacher educators say they hope the future teachers will learn how to work with children's early literacy when they start to work as teachers. These viewpoints demonstrate a further need for cooperation between the two academic fields and the field of practical training.

Three of the TEPEs maintain that children's language learning is presented in the curriculum in the subject field of Children's development, play and learning. The other three TEPEs however, underline that this field is not placed under this subject field, but they suppose this is taken care of in the curriculum of Language, text and mathematics. This reveals that in at least three of the six institutions we visited, children's language and early literacy are presented only in one of the six multidisciplinary fields in the Norwegian preschool teacher education.

Conclusions

There is an underlying agreement in both teacher groups that there is a pressure of time throughout the preschool teacher education. All the teacher educators were concerned that children's language learning and early literacy gets too little attention in the curriculums. In particular they express that there is too little time for the student teachers to obtain procedural knowledge ("knowing how") for pedagogical work with children's language learning and early literacy.

There seems to be little cooperation between teacher educators in the subjects of Norwegian and Pedagogy. Both groups seem to be worried about the level of knowledge the student teachers gain concerning language learning and early literacy. Even though this study only reflects the experience of twelve teacher educators, their conceptions and experiences should be taken seriously. A relatively numerous group of children and youths struggle with language in social interactions with peers, and/or in learning how to read and write. In addition, a large group of students drop out of secondary school in Norway. If children get solid language competence in their preschool years, they have a great potential to succeed in learning to read and write and to master different academic fields. However, we know from the last decades' research that we have failed to win the lengthy struggle against reproduction of social differences in school and that this, to a great extent, can be explained by insufficient language support in the early years (Verhoeven & Van Leeuwe, 2008). High quality language environment in preschool will prevent later shortcoming (Dickinson, 2011; Aukrust & Rydland, 2009; Siraj-Blatchford & Manni, 2008).

It is a great challenge to the education of preschool teachers that their educators worry about lack of time to give a thorough education in the field of children's language learning and early literacy. A great challenge is also the lack of cooperation between teacher educators in Norwegian, Pedagogy and the practical training, to ensure adequate knowledge about children's language learning and early literacy. As one of the informants' points out it is also of great importance that preschool teachers without fundamental knowledge on children's language learning and early literacy, easily can be persuaded to use learning programs and tests, without knowing how to fully understand their results. Neither will they know how to support children in need for extra language stimulation. Most of all the children in preschools will benefit from interacting with high quality preschool teachers in the field of children's language learning and early literacy, both in the short run for social life and learning, and in the long run and in the learning for life.

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References

- August, D., Carlo, M., Dressler, C., & Snow, C. (2005). The critical role of vocabulary development for english language learners. *Learning Disabilities Research and Practice*, *20*(1), 50–57. DOI: 10.1111/j.1540-5826.2005.00120.x
- Aukrust, V. & Rydland, V. (2009). Barnehagens kvalitet og skolefaglig læring: en kunnskapsoversikt (Quality of preschool and learning in school: view of knowledge). *Norsk Pedagogisk Tidsskrift, 3,* 178–187. DOI: 10.18261/issn.1504-2987
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, *33*(8), 1–49. DOI: 10.3102/0013189X033008003
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. DOI: 10.1191/1478088706qp063oa
- Cochran- Smith, M., & Zeichner, K. M. (Eds.). (2005). Studying teacher education. *The Report of the AERA panel on research and teacher education*. Mahwah, N.J.: Lawrence Erlbaum.
- Cunningham, A., Perry, K., Stanovich, K., & Stanovich, P. (2004). Disciplinary knowledge of K-3 teachers and their knowledge calibration in the domain of early literacy. *Annals of Dyslexia*, *54*(1), 139–167.
- Cunningham, A., Perry, K., Stanovich, K., & Stanovich, P. (2004). Diciplinary knowledge of K-3 teachers and their knowledge calibration in the domain of early literacy. *Annals of Dyslexia*, 54(1), 139–167. DOI: 10.1007/s11881-004-0007-y
- Dickinson, D. (2011). Teachers' language practices and academic outcomes of preschool children. *Science*, *333*, 964–967. DOI: 10.1126/science.1204526
- Dickinson, D. K., & Caswell, L. (2007). Building support for language and early literacy in preschool classrooms through in-service professional development: Effects on the Literacy Enrichment Program (LEEP). *Early Childhood Quarterly*, 22, 243–260. DOI: 10.1016/j.ecresq.2007.03.001
- Dickinson, D., Golinkoff, R., & Hirsh-Pasek, K. (2010). Speaking out for language: Why Language is central to reading development. *Educational Researcher*, *39*(4), 305–310. DOI: 10.3102/0013189X10370204
- Dickinson, D., & Porche, M. (2011). Relation between language experiences in preschool classrooms and children's kindergarten and fourth-grade language and reading abilities. *Child Development*, 82(3), 870–886. DOI: 10.1111/j.1467-8624.2011.01576.x
- Early, D., Maxwell, K., Burchinal, M., Alva, S., Bender, R., Bryant, D., Zill, N. (2007). Teachers' education, classroom quality, and young children's academic skills: Results from seven studies of preschool programs. *Child Development*, *78*(2), 558–580. DOI: 10.1111/j.1467-8624.2007.01014.x
- Grossman, P., & McDonald, M. (2008). Back to the future: directions for research in teaching and teacher education. *American Educational Research Journal*, 45(1), 184–205. DOI: 10.3102/0002831207312906
- Vatne & Gjems Varhaiskasvatuksen Tiedelehti JECER 6(1) 2017, 148–162.

- Hammerness, K., Darling-Hammond, L., Bransford, J., Berliner, D., Cochran-Smith, M., McDonald, M., & Zeichner, K. (2005). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world. What teachers should learn and be able to do* (pp. 358–389): Jossy Bass: Whiley.
- Hammersley, M. (2008). Questioning qualitative inquiry: critical essays. Los Angeles: SAGE.
- Korthagen, F. (2004). In search of the essence of a good teacher: towards a more holistic approach in teacher education. *Teaching and Teacher Education*, *20*, 77–97. DOI: 10.1016/j.tate.2003.10.002
- Lunenberg, M., & Korthagen, F. (2009). Experience, theory, and practical wisdom in teaching and teacher education. *Teachers and Teaching: theory and practice, 13*(2), 225–240. DOI: 10.1080/13540600902875282
- Ministry of Education and Research. (2003-2009). *National Curriculum for early teacher education*. Oslo, Norway. Retrieved 20.6.2017 from https://www.regjeringen.no/globalassets/upload/kilde/kd/pla/2006/0002/ddd/pdfv/217217-rammepl.foerskole.vasket.bm/opprettet/0704/ny.pdf
- Ministry of Education and Research (2012). Framework plan for the Early Childhood Teacher Education. Oslo, Norway. Retrieved 20.6.2017 from https://www.regjeringen.no/no/dokumenter/rundskriv-f-04-12/id706946/?id=706946
- Ministry of Education and Research (2014). *Preschool teacher education. More coherence, better completeness, more distinct professionalism?* Report no. 2/2015. Oslo, Norway.
- Nelson, K. (2006). Advances in pragmatic developmental theory: The case of language acquisition. *Human development*, 49, 184–188. DOI: 10.1159/000091896
- Neuman, S., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Educational Research Journal*, 46(2), 532–566. DOI: 10.3102/0002831208328088
- Neuman, S., & Marulis, L. (2010). The effects of vocabulary intervention on young children's word learning: A meta-analysis. *Review of Educational Research*, 80(3), 300–33. DOI: 10.3102/0034654310377087
- Polat, N. (2010). Pedagogical treatment and change in preservice teacher beliefs: An experimental study. *International Journal of Educational Research*, *49*, 195–209. DOI: 10.1016/j.ijer.2011.02.003
- Roskos, K., & Neuman, S. (2005). The state of pre-kindergartens standard. Early *Childhood Research Quarterly*, 20, 125–145. DOI: 10.1016/j.ecresq.2005.04.010
- Siraj-Blatchford, I., & Manni, L. (2008). Would you like to tidy up now? An analysis of adult questioning in the English Foundation Stage. *Early Years*, *28*(1), 5–22. DOI: 10.1080/09575140701842213
- Shulman, L. (2004). Those who understand. Knowledge growth in teaching. In L. Shulman (Ed.), *The Wisdom of practise. Essays on teaching, Learning, and Learning to Teach* (pp. 187–216). San Francisco: Wiley.
- Vatne & Gjems Varhaiskasvatuksen Tiedelehti JECER 6(1) 2017, 148–162.

- Tout, K., Zaslow, M., & Berry, D. (2006). Quality and qualifications: Links between professional development and quality in early care and educational settings. In M. Zaslow & I. Martinez-Beck (Eds.), *Critical issues in early childhood professional development* (pp. 77–110). Baltimore: Paul H. Brookes Publishing.
- Vatne, B. & Gjems, L. (2014). Barnehagelæreres arbeid med barns språklæring. *Norsk pedagogisk tidsskrift, 2,* 115–126. DOI: 10.18261/issn.1504-2987
- Verhoeven, L., & Van Leeuwe, J. (2008). Prediction of the development of reading comprehension: A longitudinal study. *Applied Cognitive Psychology*, *22*, 407–423. DOI: 10.1002/acp.1414
- Verhoeven, L., van Leeuwe, J., & Vermeer, A. (2011). Vocabulary growth and reading Development across the elementary school years. *Scientific Studies of Reading, 15*(1), 8–25. 25. DOI: 10.1080/10888438.2011.536125
- Wasik, B., & Iannone-Campbell, C. (2012). Developing vocabulary through purposeful, strategic conversations. *The Reading Teacher*, *66* (2), 321–332. DOI: 10.1002/TRTR.01095
- Wells, G. (2007). Semiotic mediation, dialogue and the construction of knowledge. *Human Development*, *50*, 244–274. DOI: 10.1159/000106414
- Zeichner, K. (2005). Becoming a teacher educator: a personal perspective. *Teaching and Teacher Education*, *21*, 117–124. DOI: 10.1016/j.tate.2004.12.001