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Pedagogy and interdisciplinarity: Research on the reformed kindergarten teacher education (KTE) in Norway

Margrethe Jernes^{1*}, Åse Dagmar Knaben¹, Inger Benny Espedal Tunglund¹ and Marit Alvestad¹

Abstract: In this paper, the objective is to explore the area of pedagogy in the reform of kindergarten teacher education (KTE), which was implemented in 2013 in Norway. The data material is based on semi-structured interviews with 41 educators from six focus groups, and is analysed with a hermeneutical approach. The main findings is presented in three themes; i) *complexity of leadership*, ii) *professional competition* and iii) *fragmentation of a subject*. The principal conclusion highlights that pedagogy, as a subject, is weakened, unclear and less defined within interdisciplinary education. Implication for leadership in Higher Education Educations (HEI) indicates in general the need for a clarification of the content of the term “pedagogy” and particularly its role in the reformed KTE in Norway.

Subjects: Education Studies; Higher Education; Study of Higher Education; Teachers & Teacher Education; Theory of Education

Keywords: pedagogy; interdisciplinarity; kindergarten teacher education; higher education

1. Introduction

In this article, we will present research from the reformed new kindergarten teacher education in Norway. Kindergarten services are a common right for children from ages one to six years old, and the term *kindergarten* was made statutory in 1975. The reform was implemented in autumn 2013. We



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PUBLIC INTEREST STATEMENT

In this article, we explore the area of pedagogy as a subject in the Norwegian reform in Kindergarten Teacher Education (KTE) implemented in 2013. The reform pointed strongly at the interdisciplinarity where the role of pedagogy was to tie it all together. Through semi-structured interviews in focus groups we were able to shed light on the experiences of the reform in some Kindergarten Teacher Education practices. The main findings is discussed as i) complexity of leadership, ii) professional competition and iii) fragmentation of a subject. The study points at that pedagogy, as a subject seems to be weakened, unclear as well as less defined within this new interdisciplinary education. This indicate that there is a need for a clarification of the content of the term *pedagogy* as well as its role in the reformed Kindergarten Teacher Education in Norway.

have investigated educators' experiences with this implementation and studies on the topic of *pedagogy* in areas of knowledge (AK). AK are described as groups of two or three classic subjects from higher education institutions (HEI). The data material revealed several issues; however, in this article, we will specifically address the challenges of how pedagogy as a subject is experienced in relation to the AK following the first phase of the implementation of the reform. There has been a great deal of international research on reforms in HEI in general; however, in terms of kindergarten teacher education (KTE), to the best of our knowledge (in searching databases such as Oria and Eric), only one study has been carried out on KTE in Norway, which investigated feedback and assessment on the subject of pedagogy (Haukenes, 2017). We obtained no hits on the educator's experience of pedagogy in KTE.

A national participatory research group has been following the reform to identify its effect. They have produced five reports (Følgegrupper, 2014, 2015, 2016, 2017a, 2017b). Their work was completed in October 2017¹. In the first report, the main finding was connected to pedagogy as a discipline striving to find its place in the new education (Følgegrupper, 2014, p. 97). To further understand the reform, Sataøen and Trippestad (2015) contributed background information. Later, as part of a supplementary research group, we carried out an additional independent small-scale study to examine experiences with pedagogy in the new kindergarten teacher education (Foss, Fossøy, Fimreite, Alvestad, Jernes, Tunland, Vatne, Nordvik, Økland, Sataøen, & Ødegaard, 2015). As part of this group, Nordvik and Vatne (2017) evaluated the text used in the exam in the reform and compared it to the previous exam. Furthermore, how pedagogy emerged in relation to some of the AK in the curriculum has been studied (Foss et al., 2015, p. 122). The aim of the current study is to examine how educators experience pedagogy in the new reform, especially in relation to the AK. The following research question drives the text: *What are educators' experiences of pedagogy as a discipline in the AK?* The design is focus group interviews within a qualitative paradigm. Furthermore, in this article we will refer to the educators as informants. In the next section, we will present the Norwegian context for kindergarten teacher education and the current reform.

1.1. Norwegian context

The first kindergarten teacher education (KTE) was established in 1935 and in 1980 was extended by two years to become an undergraduate three-year bachelor's degree study. From 1935 to 2010, there have been several reforms in kindergarten teacher education (KTE). The curriculum has also developed from being supervisory to being instructional. Traditionally, the curriculum has consisted of 45 credits of pedagogy and 105 credits that were shared between seven other subjects (see examples in Table 1). With the specialization of 30 credits in the last year, this undergraduate education included a total of 180 credits (Ministry of Education and Research, 2003). A national evaluation was carried out in 2010 (Hagesæther et al., 2010), which offered several recommendations to enforce and develop the KTE. One recommendation was that the curriculum should be less structured, less detailed and include the possibility of organizing education thematically (Hagesæther et al., 2010, p. 106). The evaluation also recommended making the education more challenging for students (Hagesæther et al., 2010, p. 110), thereby further underlining the professional perspective (Hagesæther et al., 2010, p. 108). A central recommendation was to make *pedagogy the common core subject throughout all three years of training* (Hagesæther et al., 2010, p. 113).

The ministry for HEI responded to this evaluation in 2012 by initiating a reform, namely, the "National Curriculum Regulations for Kindergarten Teacher Education", which was implemented in 2013. The regulation emphasized that pedagogy should now be a central, connective and recurrent subject incorporated into the AK (see Table 1 for an overview). The reform stated that pedagogy should have a particular responsibility to ensure progression and make it profession oriented. Hence, pedagogy should be an integrated part of each of the seven constructed AK. The AK, as well as the specializations, should be research-based and rooted in a research-active professional community. They should be structured and assessed as integrated modules (Ministry of Education and Research, 2012a, p. 4).

This table illustrates pedagogy's interconnected position and the centrality of the practices during all three years. The National Guidelines for Kindergarten Teacher Education (Ministry of

Table 1. The structure of the Kindergarten Teacher Education (KTE) as illustrated in § 3 in the current Act

Year of study		Pedagogy	Practice	Study credits
Years 1 and 2	Area of knowledge: Children's development, play and learning	Integrated in all areas of knowledge	Minimum 100 days integrated in all areas of knowledge. 75 days in the first two years and 25 days in the last year of study	20 study credits
	Area of knowledge: Society, religion, beliefs and ethics			20 study credits
	Area of knowledge: Language, text and mathematics			20 study credits
	Area of knowledge: Art, culture and creativity			20 study credits
	Area of knowledge: Nature, health and movement			20 study credits
	The institutions should heighten focus on one or two of the areas of knowledge in the first two years of study			20 study credits
Year 3	Area of knowledge: Leadership, co-operation and development			15 study credits
	Specialisation			30 study credits
	Obligatory bachelor thesis			15 study credits

Education and Research, 2012b) elaborate that *pedagogy* shall specifically contribute to the students' building (formation) process, personal growth and development, analytical skills, integration of theory and practice, insight into scientific thinking and ethical reflection (Ministry of Education and Research, 2012b, p. 10). This approach can be seen as a major challenge for a bachelor's degree study at HEI. In the next section, we will present theoretical perspectives on pedagogy and certain issues of professionalism and interdisciplinarity in reforms.

1.2. Pedagogy as a multidisciplinary field

The theoretical framework in this article lies within pedagogy as a multidisciplinary field. The concept of *pedagogy* might be understood as *education* in some countries, and there are also several approaches to understanding the term "pedagogy" in education studies. Within this field, the nature of knowledge and concepts of learning are essential both to individuals and in society (Bartlett & Burton, 2016; Säljö, 2016). Pedagogy or education is a young discipline dating from the late 1800s and is based on such disciplines as the history of ideas/philosophy, sociology and psychology (e.g., Kvernbekk, 2001; Larrivee, 2000; Sommer, 2012, 2017; Sommer, Pramling Samuelsson, & Hundeide, 2010; van Oettingen, 2012). In pedagogy, the main objective is to create an educational *bildung* (formation) (Løvlie, 2003; Myhre, 1992). There may be at least three reasons for this. First, insight into pedagogical problems should enable a student to analyse and understand what is happening in an educational situation. Second, knowledge of the richness and inspiration inherent in earlier education will enable the student to make reasonable choices. And third, educational formation (*bildung*) should be expressed through a sense of responsibility and task awareness towards children and adolescents (Myhre, 1992, p. 117). These tasks or demands

are to enable the teacher to perform an effective qualitative *interpretation* in the pedagogical and concrete action and to act reflectively with *guidance*; this approach is the interpretation and guidance dichotomy in the philosophy of pragmatism (Dewey, 2008). This might be a strategy to meet the demands for democracy, which is the main objective of education (Dewey, 1997).

However, pedagogy might have an identity problem (Løvlie, 2003; Stephen, 2010). Pedagogy as a subject has no canon, that is, an authorized collection of writings associated with it, as do other disciplines. Løvlie points out that pedagogy can actually “be studied without the student having seen a single original text from the pedagogical tradition” (Løvlie, 2003, p. 5). Rousseau’s 1762 work *Emile* (2005) is a text in this pedagogical tradition. Students may know it but not have read it. Our position in this paper is that there might be a basic problem concerning pedagogy as a discipline. We find Løvlie’s (2003) views describing four basic elements in the subject of pedagogy to be interesting. First, there should be a dedication to the history of pedagogy, as previously mentioned. Løvlie uses the concept of *initiation*. Second, pedagogy plays the role of *reception*, which is a kind of reconstruction of existing knowledge, or reproduction, as Corsaro (2005) describes how children handle new experience and knowledge in their play. The third aspect of pedagogy, *differences*, points at diversity both in the interpretation of children and in different theoretical perspectives. This aspect is what research and reports highlight when discussing practitioners’ difficulties in verbalizing their pedagogy (Ministry of Research and Education, 2018; Stephen, 2010). Last, the final proposal for content in pedagogy concerns critical perspectives as part of the democratic community, using the notion of *dissent* (Løvlie, 2003). It seems important to acknowledge pedagogy as work on relationships where values will always be discussed, according to Rothuizen & Togsverd (2019, p. 199). In KTE, the subject of *pedagogy* aims to support students’ development to become professional kindergarten teachers.

1.3. Professionalism in pedagogical practices

Institutions in society are dependent on specialized knowledge. These institutions include different professionals who handle this knowledge (Molander & Terum, 2008). Additionally, these different groups of professionals can access numerous resources in society. Professionals also act based on personal assumptions. That is, a professional must possess certain knowledge and skills. In addition, one must have a personal experience of being a professional and be able to connect both the aspects of theory and practice in a coherent way (Heggen, 2008).

Being a professional includes the capacity to contribute to collaborative cultures where the educators might operate as co-workers, participating in planning and teaching (Hargreaves & Fullan, 2012, p. 112). This kind of interdisciplinarity or professional learning communities is effective when the actor’s focus is on trust and relationship. Educators, teachers and leaders build their professionalism when they are aware of seizing “the crucial moment, confront the core problems, present and develop clear alternatives, and turn those alternatives into an energizing reality” (Hargreaves & Fullan, 2012, p. xv). Such a capacity, however, requires a teacher’s theoretical foundations and the ability to handle such situations (Von Oettingen, 2012). Overall, the theory and practice dichotomy is central for students’ understanding of professional work. The concept of *practical syntheses* (Grimen, 2008) indicates the professional combining theories in his or her practical work, which Larrivee defines as “a bag of bricks” (Larrivee, 2000, p. 293). These concepts are developed to explain the relationship between professionals’ areas of knowledge as diverse and that the most important interactions are practical (Grimen, 2008, p. 71), critical (Larrivee, 2000, p. 294) and ethical (Svensson, 2008). The aim is for kindergarten teacher students to realize that the interdisciplinarity of the subjects in their education adds value to their professional interdisciplinary practical work in the classroom. However, a report presenting a review of recent research on the preschool teacher’s role states that KTE has moved in a practice-oriented direction and has a weaker academic approach. Both of these perspectives should be included along with the integration of subject components (Ministry of Education and Research, 2018).

1.4. Interdisciplinarity and reforms

In the new reform of 2013, the idea of AK and interdisciplinarity was clearly connected to the complexity of the profession of kindergarten teacher. Moreover, in this framework, pedagogy should be a central and connective subject incorporated into all AK in the kindergarten teacher's education. However, the different notions of the concept interdisciplinary might be a challenge to establishing a common understanding of this issue. Various definitions of the concept have been discussed in terms of professional interaction, joint disciplines, and pluri/trans/multidisciplinary (Chettiparamb, 2007; Klausen, 2011a). A discipline can be understood as a knowledge area within science and in academia, while one can describe a specific subject that "has a knowledge base which can be easily constructed into a programme of knowledge acquisition and, perhaps most importantly, of quantitative assessment" (Parker, 2002, p. 374). However, even disciplines are not static: they are continually developing and still retain "characteristics that make them identifiable as disciplines" (Chettiparamb, 2007, p. 7). This might be a challenge for the different stakeholders of subjects and disciplines such as, e.g., pedagogy in the reformed KTE in HEI.

Successful and innovative institutions seem to be those managing interdisciplinarity (Bruner, 1999; Chettiparamb, 2007). However, recent research has shown that the interdisciplinary approach has had advantages and faced challenges in HEI, in teaching, cooperation and research (Chettiparamb, 2011; Troelsen, Zeuner, & Jensen, 2015). Furthermore, each one of the subjects can play an important role in how one can understand the interdisciplinary context (Troelsen et al., 2015, p. 90). Given this background, there are challenges to the coherency in the description of the relationships between various types of knowledge (Heggen, Smeby, & Vågan, 2015). It seems important to learn the basics of a subject before attempting broader interdisciplinary work (Troelsen et al., 2015, p. 80). In addition, for educators to collaborate requires time, trust and respect (Hargreaves & Fullan, 2012). Furthermore, without time, trust and respect, one risks an artificial or arranged collaboration, what Hargreaves and Fullan call *contrived collegiality* (Hargreaves & Fullan, 2012, p. 118).

Interdisciplinarity might require the impulse to get started in developing a deep collaboration. The same applies to achieving benefits from reform work. Key questions here concern who *initiates* the reform, how it is *implemented* and the impact of *institutionalized reform* (Fullan, 2007). As mentioned earlier, the evaluation of the KTE (Hagesæther et al., 2010) was the impetus to the reform. However, it is unclear who carried out the reform's visions (Senge, 1990) that might meet challenges when the reform is being implemented and institutionalised.

In the next section, we will present the methodology that was used to obtain the results in the article.

2. Methodology and methods

This study falls within a qualitative empirical paradigm (Cresswell, 2007). An analytical hermeneutic approach was utilized in the data research (Gadamer, 2006). The study was based on data from six focus group interviews (Kvale & Brinkmann, 2015). A focus group is a qualitative method whereby a group of people gathers to discuss a given topic and offer different viewpoints rather than seek agreement (Krueger & Casey, 2000; Puchta & Potter, 2004). A group such as this "can be used strategically to cultivate new kinds of interactional dynamics and, thus, access new kinds of information" (Kamberelis & Dimitriadis, 2005, p. 903). The researcher plays a key role as the moderator in the focus group interview. His or her role is to obtain an effective dialogue and interaction in the group and try to maintain them (Gulliksen & Hjordemaal, 2011). The group moderator plays a central role in facilitating topics that will be discussed so that as many views as possible are allowed to emerge (Kvale & Brinkmann, 2015, p. 179). The interviews were carried out and conducted by four researchers from our research group consisting of eleven members. As mentioned in the introduction, our research group undertook a small-scale study to support the evaluation research that followed the reform (Følgegruppaa, 2015; Foss et al., 2015).

We invited six institutions giving Kindergarten Teacher Education from all parts of Norway to participate and they selected themselves the informants for the interviews. In each of the six interviews, two researchers collaborated as moderators. Altogether, 41 informants participated and most held a master's or PhD degree in education, see overview in Table 2.

The time spent in the interviews varied from two to three hours each. These interviews were taped and transcribed, resulting in 141 pages of text. A semi-structured guide, consisting of two main themes, was developed for these interviews. Such an interview guide is useful when one wants to obtain everyday perspectives on topics that we, as researchers, can interpret and understand (Kvale & Brinkmann, 2015, p. 46). The first theme focused on pedagogy as a subject in the new education. The purposes were to i) outline the educators' understanding of national guidelines, ii) describe how to implement these reforms, iii) present their vision for education, and iv) discuss different structures of responsibility for education as a common and central subject in areas of knowledge (AK). In addition, the informants were asked what they perceived as the challenges and opportunities in the coming years. The second main theme focused on pedagogy as a subject and its knowledge base. The essence was to obtain the informant's views of how they think the undergraduate students acquired knowledge and skills through the subject of pedagogy in education. Further, the informants were asked about how the new structure strengthened or reduced the students' learning. Finally, the informants were asked how their institutions might help to reinforce pedagogy in the new education.

The analyses were carried out within the research partnership. The study was approved by the Norwegian Centre for Research Data (NSD), and ethical guidelines were followed throughout the process, such as informed consent, anonymization, and information on the use of the data (NESH, 2016). In the following section, the results will be presented and discussed.

3. Results and discussion

The research question driving this study is as follows: *What are educators' experiences of pedagogy as a discipline in the AK?* In this section, we will present analyses results under three broad descriptive themes: i) *complexity of leadership*, ii) *professional competition* and iii) *fragmentation of a subject*. When we refer to the informants, the notation *no.* refers to the interview number and the notation *p.* refers to the page number.

Table 2. Overview of the informants from interviews conducted by four researchers in pairs (1,2,3 and 4,5,6). The research field is educational science (pedagogy)

No of institution	Informant with mainly administrative function	Educators with different subjects	Educators in pedagogy	
1	1	3 (language, music)	1	5
2	3	3 (physical education, drama,	2	8
3	2	3 (language, social studies)	3	8
4	4	2 (drama, social science)	1	7
5	2	3 (physical education, music, social science)	1	6
6	2	2 (religion, music)	3	7
			Altogether	41

3.1. The complexity of leadership

In the current reform, the demand for interdisciplinary collaboration and the role of pedagogy as a subject was highlighted (Ministry of Education & Research, 2012a). The demand for interdisciplinary collaboration and the role of pedagogy, however, seems to have created some tensions in both responsibility and leadership in the areas of knowledge (AK). In the light of the foundation of organizations, with the effective balancing of leadership, the workers, the responsibility and freedom (Hargreave & Fullan, 2012; Senge, 1990), the leadership seems to have been challenged. In the interviews, one informant spoke about how they have been struggling to determine who will decide the content of the AK and which role pedagogy should play. She wonders “[...] who is defining what pedagogy is going to teach in the area of knowledge? [...] might it be myself as the leader of the AK who decides that or should a person from pedagogy inform us about what they want to contribute to [...]. Who is the one who decides?” (no. 4, p. 5). As we interpret this, the individual heads of the different institutions might have had some difficulties in allocating responsibility for the various AK in the reformed education. The difficulties seem to be connected to the development of the design for the roles of the different subjects in general and education in particular. All AK require some kind of leadership or coordinator. This lack of clarity seems to generate frustrations and weakens the collaboration in the AK. Perhaps the director requires a kind of fearful respect from the academic staff, since traditionally there is a strong individual culture in HEI. This might also lead to the lack of a quite explicit mention of the visions of the reform among the different staff cultures. As we interpret this, the leadership at any level is important to bringing about a crucial common discussion of visions in the reform and for the KTE into the public arena (Senge, 1990).

The analyses of the interviews give some indication of the multiple views about what is required to be a kindergarten teacher educator. In one of the interviews, the informants talked about the positive effects of the reform: “*The positive [effect] of the new framework plan is that it emphasizes the subject’s professional position. Not all academics have a kindergarten teacher background*” (no. 2, p. 12). We understand this to mean that having a background as a kindergarten teacher might strengthen the *professional aspects*. Further, the importance of gaining an understanding of practical work in kindergarten is emphasized. Some informants suggest the interdisciplinary collaboration in AK as a supporting issue. The need to experience coherence seems to be strong (Heggen, 2008; Heggen et al., 2015).

However, the academic staff seem quite conflicted on this issue; in addition, at the third institution, the staff made an extraordinary choice: their own initial profession was camouflaged, and they introduced themselves to the students as educators for the profession. One informant stated that, “*One approach we took in the area of knowledge, i.e., Society, Religion, Beliefs & Ethics, was not to introduce ourselves as educators of one subject. We were going to teach the different topics within this area, and this we were certain about*” (no. 3, p. 9). We believe that bringing their own specialized knowledge into the HEI is a problem for various academics (Molander & Terum, 2008). However, to develop coherence, we believe it is valuable to distinguish between the different aspects of the profession of knowledge in terms of the kindergarten teacher. The professional kindergarten teacher might feel more self-assured when she/he has a profound knowledge in her/his subject. This will contribute to their performing the practical synthesis by themselves in their direct practical work. The professional work is connected to norms and ethics (Larrivee, 2000; Svensson, 2008), and it seems to be of great importance to know about the foundation of the profession and about the norms connected to it. As we interpret this, where the different subjects collaborate and communicate their various competences, innovation in reform might succeed (Bruner, 1999; Chettiparamb, 2007; Troelsen et al., 2015; Klausen, 2011).

As for resources, we found that there was no extra funding to implement the new education reform except for some minor local funding; however, all in all, it was not very much. This might have generated some miscalculated consequences for the implementation and educational quality and might explain utterances such as “*The disagreement has often been about structure*”

(no. 3, p. 8). To restructure an educational system from within requires time and respect which ought to be channelled into financial resources. The discrepancy between content and structure, the struggle for the defining power in KTE and the lack of vision, seems to have been some of the unfortunate results. In one institution, the informants discussed the lack of a common understanding of content in education. One informant stated that “[...] *there has been too little management of the content in the subject [...]. How visionary do you want to be? Both in terms of teaching and assessment? [...] Your question is related to management, and it is in line with what Ann says about management needing to be much clearer on track when it comes to professional processes. To grab us and give us some direction. The question about the vision struck me like a punch in the stomach; we do lack this completely*” (no. 2, p. 13). This is in line with, Senge’s philosophy of changing organizations, for example, where the *vision* must be expressed and shared within the partnership (Senge, 1990).

3.2. Professional competition

There seems to be a tension among the staff members working in the different AK. Multiple views on what pedagogy is or should be have been discussed within the groups of informants. Historically, pedagogy was the central subject in KTE, with 45 credits obtained during the three years of education; however, is now weakened as an academic discipline in KTE, as the professional orientation of the programme is largely attached to the subjects (Ministry of Education and Research, 2018, p. 211). However, the discussion among the informants in the new reform was only about the role of pedagogy in the new KTE. One of the informants said that “*Maybe this might be like swearing in church; but some might want to break up some of the hegemony of pedagogy? Pedagogy has had a strong tradition in kindergarten teacher training and may have had too much power [...]*” (no. 2, p. 12). The issue of having a central position in teacher education might have been a source for several discussions. The informant wondered how this position would continue or if it should have less power. The informants behind the different subjects seemed to struggle for their own position, instead of discussing the aim of education, as this statement illustrates: “*Because we all have some kind of competition in a way [...] between the different subjects and pedagogy as a subject, and this has become even stronger now*” (no. 2, p. 12). Perhaps the reform is revealing some underlying tensions that were not verbally expressed earlier. We can understand this using Hargreaves’s concept of school improvements, whereby the issue of balkanization is understood when various groups or subjects are set against each other, though not deliberately (Hargreaves, 1994; Hargreaves & Fullan, 2012).

Educators have less interdisciplinary collaboration in the new reform. This is interesting, since one of the crucial aims was to increase collaboration. In the interviews, there were discussions on the negative effects on AK with regard to collaboration. In the regulation, the subjects are defined within the AK, and the educators interpret this as reducing the possibilities for interdisciplinary collaboration. Working outside the AK seems difficult to accomplish. One informant says, “*I would like to emphasize the importance of splitting the AK. We had good projects before the reform [started], which is not possible now with new regulations with the AK. Now there is only one area of knowledge that will dominate the projects; this has weakened the education*” (no. 2, p. 19). We might understand this problem both in the light of who initiated the reform (Fullan, 2007) and of the challenges in anchoring the disciplines (Troelsen et al., 2015). In both cases, the problem seems to be connected to the individuals behind the disciplines and their professional affiliation. If the academic staff have a traditional affiliation with faculties, the collaboration is challenging their subjects. On the other hand, if the affiliation is within a profession’s specific education, such as, e.g., nursing, teaching, or the police, the academic staff might have another perspective on the holistic way of thinking about education. The reception of the reform might have been more open and accepting. The informants also discussed the challenges involved in doing projects with different subjects outside the AK: “*The regulations prescribed more cooperation, but in fact they only demanded more arenas for working together*” (no. 6). We interpret this as showing that they lack increased real collaboration yet have more arenas they are obliged to attend. This is a paradox and might be experienced in line with what Hargreave and Fullan (2012) call *contrived collegiality*, meaning an arranged collegiality initiated from the outside. If central issues of time, trust and respect (Hargreaves & Fullan, 2012, p. 117f) are not

seen to, collaboration might develop into competition among subjects more than authentic collaboration among them (Chettiparamb, 2007; Klausen, 2011b). On the other hand, the notion of *practical syntheses* (Grimen, 2008) has been used to understand how the various subjects are to be connected in the performance of practical work and might not necessarily be learned in clusters at the HEI.

In addressing the discussion of disciplines versus interdisciplinary (Chettiparamb, 2007, 2011), we can ask if pedagogy might be reduced to a didactic subject, i.e., a tool for the remaining subjects, while the pedagogy in education is tied to *bildung* (formation), humanity and democracy (Dewey, 1997; Myhre, 1992). This important issue warrants further investigation using Løvlie's (2003) understanding of pedagogy as the subject for culture and *bildung* (formation).

3.3. Fragmentation of a subject

The analyses show that the informants in HEI view their experiences about subject pedagogy as more fragmented within the new and reformed education. The content of pedagogy seems to be unclear and incoherent. One informant stated that “We have a big fragmentation in pedagogy” (no. 6, p. 7). In another institution, an informant was quite clear when talking about the content in pedagogy: “[...] pedagogical themes are now taught in a fragmented manner within the areas of knowledge; educators in pedagogy do not manage to go in depth” (no. 5, p. 21). The third voice we will bring in is also clear: “The result is fragmentation [...]. If I think about pedagogy as a connected or joining subject in the KTE, I think about a tree; then I think one should start with the trunk and then the branches. But here, we started with the branches and they are not connected to the trunk” (no. 2, p. 5). In our interpretation, there might have been a problem with the lack of a certain impulse for the work (Fullan, 2007; Hargreaves & Fullan, 2012). It seems that educators did not spend enough time in preparing for the reform's implementation, with only general formulations of AK being present in the curriculum. When the content in pedagogy was unclear, the implementation also became unclear. We wonder if this might not stem from a general problem of identity in the discipline of pedagogy (Løvlie, 2003; Stephen, 2010).

Pedagogy seems, as we see it, to be quite blurred as a subject, and the informants discuss the discrepancy between pedagogy as an independent subject with its own curriculum and the didactic aspect within pedagogy that might be useful for the other subjects in the different AK. In the sixth institution, the academic staff discussed this dilemma: “[...] to know about the role of pedagogy and what pedagogy as a subject should do; it is so big and we must have this dual thought —yes, we are professional didactics in the pedagogy, but at the same time we also depend on one professional tradition in a more distinctive way than on other professional didactics and can contribute there too” (no. 6, p. 7). When content from the pedagogy as discipline is not described, pedagogy seems to become a disappearing subject in kindergarten teacher education. This seems to parallel the Danish reform, where the subject of pedagogy has been weakened during a reform lasting over 20 years (Rothuizen & Togsverd, 2019, p. 17). The speed of the Norwegian reform work challenged the binding function of the subject pedagogy. Addressing, e.g., historical and philosophical aspects as perspectives on man/humanity, play and learning (Rousseau, 2005) requires immersion, dwelling on a subject. In the same discussion, one informant stated that “We must be very aware that we mustn't mess it up too much, because this is an education that requires deep subject competence, too” (no. 6, p. 7). Furthermore, the education requires immersion into psychology to obtain knowledge of children's development and learning, individually, in groups and in different relations (Sommer, 1997, 2012, 2014, 2017; Sommer et al., 2010). Here, the informants are talking about the practical and didactic consequences of deep knowledge: “If we thought of pedagogy as a subject ... then it is one, and indeed the educational aspects in the subjects” (no. 5, p. 21). However, the knowledge content still appears to be blurred: “Pedagogy isn't something only the people at an institute for pedagogy are working with; you and I also draw on the pedagogical knowledge we carry” (no 4, p. 17). In our interpretation, this illustrates the challenge for pedagogy as a discipline. People in general might have an understanding of themselves as effective pedagogues, which they surely can be. Nevertheless, to teach pedagogy as a subject within the

discipline, we will emphasize the requirement of having qualified and educated pedagogues with knowledge based on philosophy, psychology and sociology (Bartlett & Burton, 2016; Dewey, 1997). The informants addressed this challenge when they talked about the necessity of having deep knowledge in kindergarten: “[...] do they get enough tools in leadership [in kindergarten] versus what was [taught] earlier [before the reform]? At that time they had the opportunity to dwell further. [...] Topics in pedagogy are being addressed in so fragmented a way that they don’t go into depth (no. 5, p. 21). The ongoing call for going into depth is a challenge. Individual students must invest in very difficult work in reconstructing existing knowledge, developing critical reflection and shaping new perspectives on the profession together with their teachers and other students (Corsaro, 2005; Løvlie, 2003). However, to exist in a continuously changing world also demands a fundamental belief in a professional aim and vision (Larrivee, 2000, p. 304).

4. Concluding comments

In this study we have investigated *educators’ experiences of pedagogy as a discipline in the AK*. To answer the research question, we have conducted a qualitative analysis of six focus group interviews with educators in higher education institutions (HEI) in Norway with regard to pedagogy as a discipline in the areas of knowledge (AK) in the new reform of kindergarten teacher education (KTE) of 2013. The purpose of the reform was to make pedagogy more central in KTE in terms of the structure, the content and the processes and strengthening of education in a holistic manner. The attainment of the objective of the reform is not evident in the results of this study. Results from our study is been presented in tree themes. First, the results show that educators experience that there is a *complexity of leadership* in KTE, which do not always support reforms or innovation, and in our case, do not support the pedagogy in KTE. A challenge might have been that the initiative to the reform did not come from the participants in KTE, but from the government (cf. Fullan, 2007). Second, the educators express experiences of *professional competition* between the pedagogy and the other subjects when the ideal is to work interdisciplinary. With this understanding, pedagogy plays a role as the subject that takes up too much space despite the intention that pedagogy should permeate all areas of knowledge in the new KTE (cf. Hagesæther et al., 2010, p. 113). The third experience indicate an experience of *fragmentation of a subject*, which we think is necessary to reflect more closely on. In our interpretation, students need to learn the depth of every subject before the themes will be developed into the multidisciplinary understanding for the professional practice as concept of the practical syntheses (Grimen, 2008) and a bag of brick (Larrivee, 2000) demonstrates. If the subject pedagogy should support the educational formation, there is a great need to study in depth the different aspects of the subject as philosophy, sociology and psychology (cf. Kvernbekk, 2001; Larrivee, 2000; Sommer, 2012, 2017; Sommer et al., 2010; Von Oettingen, 2012).

Based on our study, we suggest that the HEI community develop a strong, shared vision with regard to the structure, the content and the processes of what pedagogy in KTE should be. A lack of a shared vision appears in tensions between subjects and in uncertainty as to who decides what. In such situation, pedagogy as a subject become indistinct and unclear. The basic structure of AK should therefore be critically evaluated. There are great challenges both organizationally and academically, in addition to the fact that the subjects’ position as a science subject and research environment has been neglected (Ministry of Education and Research, 2018, p. 10).

As contribution from this study, we suggest some implications for politics and the continuous reforms in Kindergarten Teacher Education. First, make sure that all parties involved know what the subject of pedagogy is and the role it should play for the students building (formation) process, personal growth and development, analytic skills, integration of theory and practice, insight into scientific thinking and ethical reflection, according to the Ministry of Education and research (2012b, p. 10). . Second, institutional management must make sure that they will help with time and resources so that educators are able to discuss issues relating to the new reform. Finally, both management and educators must be able through processes to develop and share a vision of how reforms will be implemented.

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There are no need for declaration of interest statement, hence the study will rather contribute to the continuous work for improving the Kindergarten Teacher Education (KTE).

Limitations of the study and suggestions for further research

The analyses were carried out strictly on the basis of the transcribed data. Since the authors of the article did not conduct direct interviews with the informants, this may be considered a limitation. However, the data is accessible for further research, and it would be of great interest to explore other aspects by the KTE expressed by the informants.

Consistent abbreviations in this article

AK = areas of knowledge
HEI = higher education institutions
KTE = kindergarten teacher education

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Note

1. <http://blu.hib.no/om/rapporter/>.

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