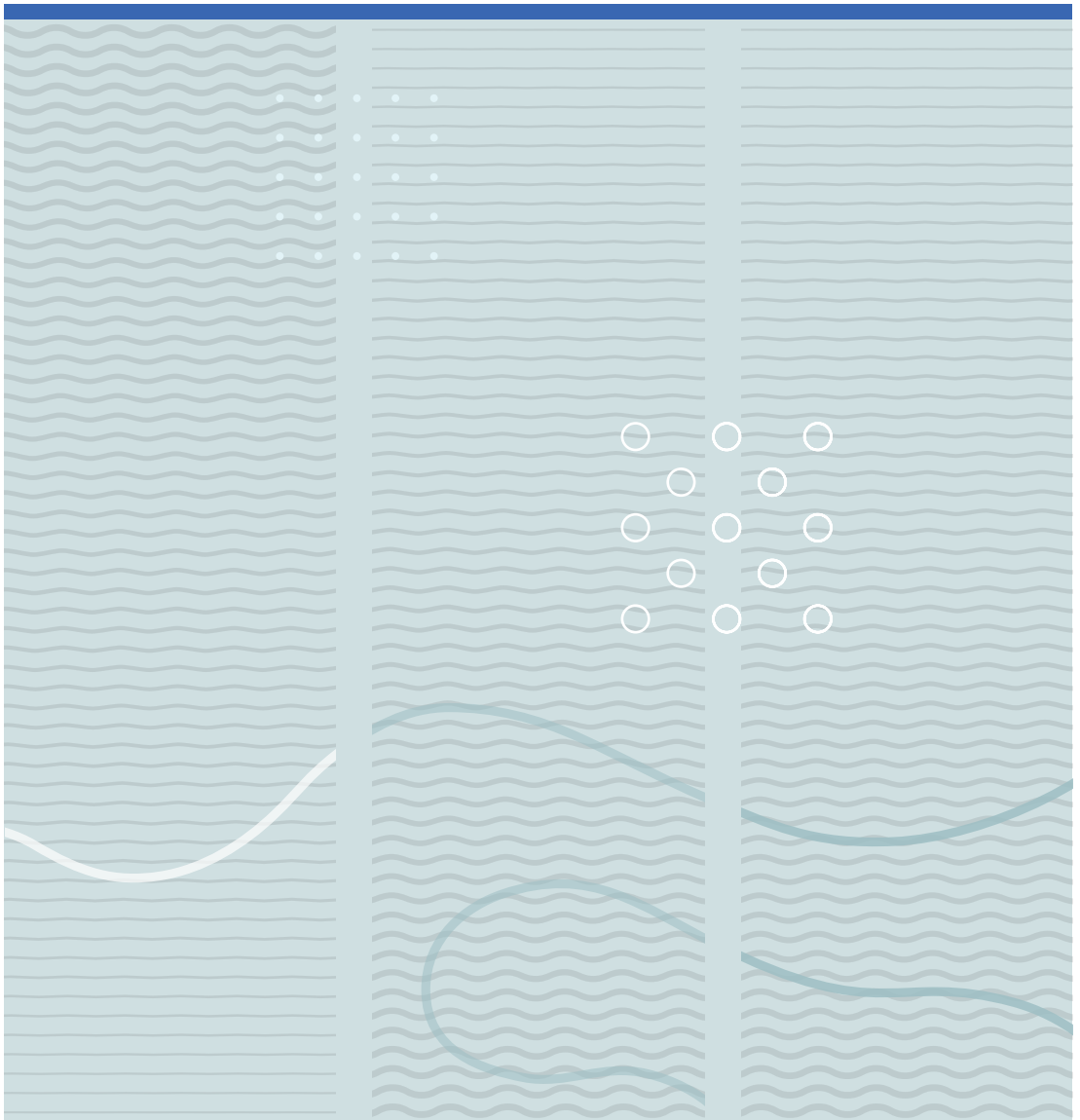


Anna Rigmor Moxnes

# Sensing, Thinking and Doing Reflection in Early Childhood Teacher Education





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# **Sensing, Thinking and Doing Reflection in Early Childhood Teacher Education**

A PhD dissertation in

**Pedagogical Resources and Learning Processes in Kindergarten  
and School**

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## Sammendrag

Det du nå leser er en avhandling som består av fire artikler der refleksjon i klasseromsundervisning i norsk barnehagelærerutdanning utforskes ulikt. Det overordnede spørsmålet som belyses i avhandlingen er: *Hvordan er refleksjon sanset<sup>1</sup>, tenkt og aktivert i universitetsklasserom i barnehagelærerutdanningen?* I kappeteksten sammenfattes artiklene i lys av den overordnede problemstillingen.

Den første artikkelen i avhandlingen genererer kunnskap om refleksjon ved å undersøke hvordan konseptet er aktivert i annen forskning og i lærebøker knyttet til utdanningen. De tre neste artiklene bygger på empiriske studier av refleksjon i universitetsklasserom. Den empiriske studien ble gjennomført ved seks forskjellige høyskoler / universiteter i Norge. Forskningsmaterialene består av intervjuer med pedagogikk-lærere, observasjon av klasseromsundervisning, filmopptak av barnehagelærerstudenter når de deltar i gruppearbeid og oppfølgingsintervjuer med de samme studentene kort tid etter observasjonene. Kappeteksten viser hvordan argumenter fra artiklene bidrar til kritisk engasjement rundt begrepet refleksjon, og hvordan metodene som brukes til innsamling av empiri settes i spill og drøftes som grunnlag for de ulike tilnærmingene i prosjektet.

Det ble tidlig klart at studien er abduktiv. Det er fordi refleksjon som begrep settes i sentrum og knyttes inn i både kjente og uventede tilnærminger til undervisning. Å være åpen for ny kunnskap om refleksjon i barnehagelærerutdanningen innebar å ikke vite på forhånd hvor prosjektet ville lede. Forskningsspørsmålet var dermed i stadig utvikling. Abduktive tilnærminger åpnet også muligheter for å kunne undersøke et vidt spekter av kunnskap og teoretiske perspektiver om refleksjon. Nærstudier av teori eksponerte dermed studien for ulike ontologiske og epistemologiske tilnærminger som igjen påvirker utdanningsforskningen på dette feltet. De fire artiklene speiler disse teoretiske forståelsene ulikt, noe som understreker betydningen av å krysse tradisjonelle kunnskapsskinner og åpnet for utflatende perspektiv på forskning. Prosjektet vokste

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<sup>1</sup> Her har jeg valgt å oversette 'sensed' med sansing, siden sansing inneholder å føle, fornemme, kjenne og sense (kilde: Ordnett.no) og er slik mest beskrivende for den forståelsen som anvendes her.

etterhvert inn i en ethico-onto-epistemologisk<sup>2</sup> tilnærming der feministiske og ny-materialistiske perspektiver ble aktivert.

Gjennom de valgte teoretiske tilnærmingene åpnes det for at en flat ontologi kan etterstrebes i analyser av bidrag fra artiklene, og dette legger til rette for argumenter knyttet til refleksjon som sanset, tenkt og som handling i barnehagelærerutdanningen. Diskusjonen foregår på flere nivåer. Først gjennom en meta-syntese av bidrag fra hver av artiklene der poenget er å diskutere bidragene og å drøfte hvordan disse peker på hva refleksjon som sansing, tenkning og handling omhandler. Videre er diskusjonen rettet mot hva refleksjon og diffraksjon<sup>3</sup> kan bidra med i utdanningen. Her undersøkes også betydningen av materialitet i forskning. Avslutningsvis diskuteres sansing, tenkning og handling som uatskillelige praksiser i immanens<sup>4</sup>. I diskusjonen understrekes det at refleksjon blir forstått og opplevd som kroppslige, relasjonelle, materielle sammenbindinger, og avslutningsvis initieres det at ved å rekonfigurere refleksjon blir det mulig å foreslå at barnehagelærerutdanningen har rom for en *diffraktiv pedagogikk*.

Avhandlingen inviterer til en mulig rekonfigurering av pedagogikk, slik at en flat ontologi mellom det menneskelige, ikke-menneskelige og mer-enn-menneskelige<sup>5</sup> kan sidestilles. Innenfor denne rammen fungerer diffraktiv pedagogikk som en kraft, en åpner for forskjeller hvor materialitet og omverden tar aktivt part i å danne et utdanningens 'her og nå'. Avhandlingen bidrar også til feltet ved å invitere til overveielse av dominerende ideer om refleksjon, og foreslår diffraktiv pedagogikk som en følgesvenn til refleksjonsbegrepet. Sammen kan kritisk refleksjon og diffraktiv pedagogikk anvendes for å belyse feltet, og åpne opp for og å undersøke det 'ennå ikke kjente' i utdanningen av barnehagelærere.

**Emneord:** Refleksjon, Diffraksjon, Refraksjon, Studenter, Materialitet, Klasserom

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<sup>2</sup> Ethico-onto-epistemologi, se kapittel 4

<sup>3</sup> Diffraksjon er et av avhandlingens hovedbegreper og er forklart i 1.2.1, 2.5 og 3.2.

<sup>4</sup> Immanens, se kapittel 3.3

<sup>5</sup> Mer-enn-menneskelig viser til det som oppstår mellom mennesker, ting, dyr, verden osv. Se artikkel 3, 4 og Osgood and Giugni (2015); A. Taylor, Pacinini-Ketchabaw, and Blaise (2012).

## Abstract

What you hold in your hand or read on your device is a dissertation composed of four articles, within each I explore reflection in classroom teaching of Norwegian Early Childhood Teacher Education (ECTE<sup>6</sup>), differently. The overarching question that the dissertation seeks to address is: *how is reflection sensed, thought and activated in university classrooms in ECTE?* This kappe<sup>7</sup> summarises the articles in relation to the overarching question.

The first article generates knowledge about reflection in ECTE, by investigating how the concept is put to work in other research and in ECTE-textbooks. The following three articles are built upon the empirical study of reflection in ECTE. The empirical work took place in six different university colleges/universities located across Norway. The research materials consist of interviews with teacher educators, observation of classroom teaching, filmed observations of student-teachers engaged in groupwork and follow-up interviews shortly after the observations. The kappe-text offers an articulation of the ways in which the theoretical influences shaping arguments put forward in the articles, in turn contribute towards a critical engagement with the concept of 'reflection', and how the methods used to gather the research material in the articles informed the different approaches taken.

Early on, it became clear that the research was an abductive study, because reflection as a term is central and pursued via both familiar and unexpected approaches to classroom teaching. Working abductively, also resulted in a research question that continuously evolved. Being open to new knowledge about reflection in ECTE meant that it was not possible to know in advance, where the project might lead. Abduction also opened possibilities for drawing upon a vast range of knowledge and theoretical perspectives about reflection. An intensive study of theories about reflection exposed the wide array of ontological and epistemological stances that are taken in educational research on the

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<sup>6</sup> ECTE = Early Childhood Teacher Education. In this thesis both ECTE and kindergarten teacher education is in use, both referring to the same education.

<sup>7</sup> Kappe is the Norwegian concept for cape, gown, mantel or rope. In an academic dissertation, a 'kappe' describes the meta-text that is used to tie the different studies in a dissertation by publications together.



issue. The four articles address this differently, and highlight the importance of going across and beyond traditional knowledge boundaries. As the study progressed, it insisted upon an ethico-onto-epistemological<sup>8</sup> engagement in research framed by feminist and new materialist concerns.

A flattened ontology is pursued in the analysis of the contributions from the articles; this facilitates an argument that reflection is something that is sensed, thought, felt and encountered in ECTE. The discussion takes place at multiple levels. First through a meta-synthesis of contributions from each of the articles. Here the point is to discuss contributions, and how they point to what sensing, thinking and doing reflection is about. Next concerns about what reflection and diffraction<sup>9</sup> do for ECTE provides the focus of discussion. Here the importance of how materiality comes to matter in research is scrutinized. The inseparability of sensing, thinking and doing is discussed as a practice in immanence<sup>10</sup> in the final discussion. This discussion stresses that reflection becomes understood and experienced as bodily, relational, material entanglements, and finally I conclude by suggesting that by reconfiguring 'reflection' it becomes possible to imagine a place for *diffractive pedagogy* in ECTE.

The thesis invites a reconfiguration of pedagogy, which privileges flattened ontologies between the human, non-human and more than human<sup>11</sup>. Within this frame, diffractive pedagogy works as a force, opening for differences where materiality and the outside world play active parts in forming the here and now in education. It also contributes to the field of ECTE by inviting a reconsideration of dominant ideas about reflection and proposes diffractive pedagogy as a companion theory. Critical reflection and diffractive pedagogy can work together to illuminate the field; open up investigations to the not-yet-known about the education of becoming kindergarten teachers.

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<sup>8</sup> See Chapter 4

<sup>9</sup> Refraction is a central thesis-concept and is explained in 1.2.1, 2.5 and 3.2.

<sup>10</sup> See Chapter 3.3

<sup>11</sup> More-than-human points to what occurs between humans, things, animals, the world etc. See article 3, 4 and Osgood and Giugni (2015); A. Taylor et al. (2012).

**Keywords:** *Reflection, Diffraction, Refraction, Student-teachers, Materiality, Classrooms*



## List of original publications

This thesis consist of a kappe and the following publications:

### Article 1

Moxnes, A. R. (2016). Refleksjon i barnehagelærerutdanningen [Reflection in Kindergarten Teacher Education]. *Tidsskrift for Nordisk Barnehageforskning*, 12. doi: 10.7577/nbf.1563 (An English translation is provided in the appendix)

### Article 2

Moxnes, A. R. (2017). "Det er alltid ulike perspektiver" - En studie av hvordan undervisere i pedagogikk arbeider med refleksjon i høgskoleklasserommet. [‘There are always different perspectives’ – A study of how teacher educators teaching pedagogy work with reflection in University classrooms]. In: Frers L, Hognestad K and Bøe M (eds) *Metode mellom forskning og læring: Refleksjon i praksis* Oslo: Cappelen Damm akademiske. (An English translation is provided in the appendix)

### Article 3

Moxnes and Osgood (2018) Sticky stories from the classroom: From reflection to diffraction in Early Childhood Teacher Education. *Contemporary Issues in Early Childhood Education*. 19(3), 297-309. Doi:10.1177/1463949118766662  
[Article omitted in the online version.](#)

### Article 4

Moxnes, A. R. & Osgood, J. (Accepted for publication). Storying Diffractive Pedagogy: Reconfiguring Groupwork in Early Childhood Teacher Education (ECTE). In: *Reconceptualizing Educational Research Methodology*.  
[Article omitted in the online version.](#)



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# 1 Introduction

*It matters what thoughts think thoughts. It matters what knowledges know knowledges. It matters what relations relate relations. It matters what worlds world worlds. It matters what stories tell stories* (Haraway, 2016, p. 35)

## 1.1 This thesis narrative

The matters this thesis addresses include thoughts, knowledges, relations and stories regarding reflection in university classrooms in Early Childhood Teacher Education (ECTE). What matters is education, educators teaching pedagogy<sup>12</sup>, and student-teachers studying to become teachers in kindergartens. Attention is given to university and university-college classrooms<sup>13</sup>, and specific attention is paid to matters within these rooms regarding reflection. Reflection remains a prevalent concept in the field of ECTE, and as such, provides a source of continuous curiosity about how pedagogic practices designed to facilitate reflection are currently constituted and how it is encountered in current ECTE programmes. “It matters what stories tell stories” writes Haraway (2016, p. 35) and I wonder what stories we, as teacher-educators are telling, and how we make sense of these stories in our desire to strengthen kindergarten teachers’ professional knowledge and their abilities of doing reflection and judging situations in kindergartens.

As a kindergarten teacher, I am concerned about the ways in which children inhabit kindergartens. Relatedly, the goal for ECTE is to prepare graduate students to work on the floors of kindergartens, and engage in practices of exploring the world with children. Teachers are expected to play, care, learn with, and make use of teacher-skills to create interesting play and learning opportunities. The work of kindergarten teachers requires judgement to be exercised through critical reflection. In contemporary Norway, all children between the ages of 1- and 6-years-old have the right to a kindergarten place. This has been stated as a political priority, and so resulted in nationwide expansion of

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<sup>12</sup> In Norway pedagogy is a subject including psychology, teaching methodology, sociology, children’s play, learning, emotional and social development, leadership (since much of kindergarten teachers work is about leading others), communication and cooperation. In ECTE, teacher-educators teaching pedagogy have a special responsibility to assess the professional progression of student teachers, including ethical reflection.

<sup>13</sup> From here, I use university classrooms, also meaning classrooms in university colleges.

new kindergartens. However, this expansion exposed a chronic lack of qualified teachers and so has inspired a political commitment to prioritise the education of kindergarten teachers. ECTE has more recently employed new *Regulations for National Curriculum Framework for Kindergarten Teacher Education* (Ministry of Education and Research, 2012) and *National Guidelines for Kindergarten Teacher Education* (Stave et al., 2012). The implementation of these regulations and guidelines is seen as a reform engaging in established educational cultures and engaging in cultures of both interaction and organisation of the education (Bjerkestrand et al., 2017b, p. 54). What thoughts think thoughts, matters, says Haraway (2016, p. 35). What student-teachers get to do, and to ponder upon, in university classrooms might influence how they are prepared for future professional practice, and how they go about making decisions on the floor. I wonder how teacher educators and student-teachers are supported to develop capacities for reflection. Furthermore, I wonder whether it is possible to encounter reflection differently and so realise the potential for diffractive<sup>14</sup> modes of engagement through ECTE. Together critical reflection and diffractive pedagogy might enable this workforce to cultivate the skills and sensibilities necessary to engage with children's (and their own) capacities for wonder and curiosity.

## **1.2 The purpose of the thesis, rationale, theoretical and methodological limitations**

This thesis contributes educational knowledge to the field of kindergarten teacher pedagogy. The purpose is to examine reflection, by engaging with how it manifests in classroom teaching in ECTE. In education, reflection has traditionally been seen as a “strategy for developing new knowledge” (Søndenå, 2002, p. 181). However, the understanding of reflection in this project has emerged from a deep engagement with a wide range of different theoretical ideas and perspectives, from Barad (2007); Dewey (1933); Haraway (1997, 2004); Kinsella (2012); Schön (1983, 1987); Søndenå (2002, 2004) among others. Reading widely around the concept exposed reflection as something that

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<sup>14</sup> Refraction is a central thesis-concept and is explained in 1.2.1, 2.5 and 3.2.

is dynamic, and in constant motion. It necessitated a tracing of reflection into classroom teaching, and demanded that its meanings across time, space and place be attended to.

Abduction has become a methodological designation for the thesis, driven by surprises, wonder and breakdowns (Brinkmann, 2014). Surprises, wonder and breakdowns occurred through encounters with differences, both through empirical materials, and through studying different theoretical perspectives (Alvesson & Kärreman, 2011; Brinkmann, 2014). The abductive approach inspired an engagement with various theoretical perspectives to investigate how reflection works, and for studying other, related concepts. Different 'doings' in classrooms and different theories have provided the study with breakdowns, wonder, and "thoughts to think thoughts" (Haraway, 2016, p. 35). The abductive moves forced a consideration of the multiple theoretical contributions that have come to shape understandings of reflection and called for a flattening of how knowledge is produced, by whom, where and when (Marston, Jones, & Woodward, 2005). Barad (2007) promotes an investment in "ethico-onto-epistemology" (p. 185) where the researcher is understood as having a heightened ethical responsibility to how knowledge is produced because of her entangled place within the world. Taking up an ethico-onto-epistemological researcher sensibility creates room for non-hierarchical understandings of knowledge, stories, thoughts and different beliefs. In relation to this specific study, this opens up ways in which to think/sense/do reflection in ECTE.

### 1.2.1 Thesis concepts

Reflection has different meanings in different traditions; some of these differences are drawn upon in the thesis to elucidate *reflection*. An understanding of reflection is constituted from theories within the field of educational philosophy, feminist theories, from physics (light or wave behaviour) and from studies that have worked with physics concepts in educational contexts. I construct an understanding of reflection by working with theories that view it as active, subject to change and difference. Søndena's (2002, 2004) concept *powerful reflection*, and Schön's (1983, 1987) concepts reflection-in and -on-action, and theories constructing other active concepts such as reflexivity, reflectivity

or critical reflection (Kinsella, 2012; Kolle, Larsen, & Ulla, 2017; MacNaughton, 2006) have been helpful. In the philosophy of physics, reflection is connected to *diffraction* (Barad, 2007). Diffraction, points to when waves split after meeting an obstruction; it is a concept for making a difference. Following Haraway (2004, p. 70) diffraction is about mapping interferences not about reproduction. Studying diffraction moved thinking and doing/activating reflection in new directions, directions that demanded attention was paid to how interferences of it within teaching are sensed.

Meanwhile, *refraction* describes anything that goes through, or changes shape after meeting an obstruction. Haraway (2004, p. 70) describes refraction as producing the same, as in reproduction. Both Lafton (2016) and Grütters (2011) activate refraction in their work, and open for a view of the concept as something 'changing', or which changes from reflection. In order to study the possible patterns produced, involves questioning what could have been studied differently. Therefore, following a flattened out perspective invites a re-engagement with refraction, which I take up in the theoretical chapter in this thesis.

### **1.3 The purpose of this thesis, research questions and articles**

The thesis responds to an overarching research question, and the aim of the kappe is to provide an on-going discussion of the research question, and how the four articles that the thesis consists of, addresses it.

#### **1.3.1 Research question**

Grappling with the concept of reflection and considering how and what it contributes to classroom teaching in ECTE has provided the focus for this research. The overarching research question:

*How is reflection sensed, thought and activated in university classrooms in ECTE?*

attends to differences in how reflection is produced through processes of teaching. Since reflection is explored as processes and is a central phenomenon in the thesis, 'how' is chosen as a mode of enquiry to investigate the concept of reflection (Creswell, 2013, p.

138). *How* is interrogative and allows for an exploration of the differences presented by the concept, both in the field in ECTE classrooms, but also in different theoretical approaches informing the field. The project takes a qualitative approach to investigate different stories, or events, where thinking, sensing and doing reflection in classroom teaching with student-teachers is at stake.

By undertaking a thorough assessment of the four articles for the meta-synthesis it was striking how *sensed*, *thought* and *activated* constantly re-emerged as central concepts within my research. These three core-concepts are related, but still different and the idea is to point to reflection as something that is emergent, produced, and always in motion. Kalleberg, Malnes, and Engelstad (2009) explain that often, part way through a study it becomes necessary to alter the overarching research question (p. 46). As was the case with this project, the starting place posed questions about which cultural tools might strengthen reflection and function as resources among student-teachers. As the research into reflection progressed, other questions emerged i.e. whether facilitating reflection can strengthen student-teachers' capabilities to exercise professional judgement (Biesta, 2014, 2015a; Grimen, 2008; Kemmis & Smith, 2008). As the study unfolded, I was presented with abductive wonderings about classroom materiality and how critical reflection is produced through diffractive patterns, which then insisted upon other questions that could capture how pedagogy in ECTE is sensed, thought and done.

### **1.3.2 How the articles and kappe are connected**

This kappe is a meta-text, extracted from the four articles contributing to the thesis. The articles contribute knowledge about reflection as sensing, thinking and doing, differently. Each article addresses a sub-question or theme, which collectively contributes to an investigation that addresses the overarching question. In article 1, Moxnes (2016), I ask how is reflection understood and constructed in different academic literature and research literature about kindergarten teacher education. The article is a literature review, and it provides the study with contextual accounts about different understandings of reflection in ECTE. In article 2, Moxnes (2017), I use 'what' as a mode of inquiry, since the aim of the article is to discuss what teacher-educators narrate about

their classroom teaching, and what they do to strengthen student-teachers reflection. This article draws upon interviews with teacher-educators teaching pedagogy in ECTE. In article 3, Moxnes and Osgood (2018), diffraction and diffractive patterns are investigated, and we <sup>15</sup> ask how ideas about reflexivity and professionalism in early childhood education can be opened up by attending to diffractive patterns within ECTE classrooms. The article uses micro-moments (Davies, 2014a) from classroom observations of teaching pedagogy. In article 4, we focus on how materiality and affect interfere in student-teachers' reflective processes when they are doing groupwork in connection to their study. Also, in article 4 Moxnes & Osgood (forthcoming), diffraction is discussed in relation to active learning processes in classrooms and teaching.

In different ways, each article re-tells events/stories; as such, storytelling represents a core method uniting the articles. The first two articles present a multi-faceted approach through an engagement with a range of different research, understandings and opinions. In articles 3 and 4, the focus is on multi-faceted opportunities and readings. All the articles discuss the preparation of student-teachers as future professional practitioners, although there is variation in the theoretical orientation offered within each article. Article 2, represents a crucial turning point, through the writing process I realised that the analysis was not inductive but deductive (Alvesson & Sköldbberg, 2011; Creswell, 2013), clearly inspired by the theoretical approach and research framing article 1. This dissonance forced a re-analysis of the research data, which highlighted the salience of materiality and its profound influence upon teaching. This awareness incited a turn towards other theoretical optics, most notably diffraction, which provides the framing for the last two articles.

Following different theoretical tracks, by reading "data across multiple theorists" (Jackson & Mazzei, 2013, p. 18), opened gateways to feminist researchers such as Karen Barad (2003, 2007, 2011, 2012a, 2012b, 2014), Donna Haraway (1988, 1997, 2004, 2008, 2010, 2015, 2016) and Kari Sjøndenå (2002, 2004, 2007, 2009) <sup>16</sup>. Their ideas build upon

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<sup>15</sup> Article 3 and 4 are written together with Dr. Jayne Osgood.

<sup>16</sup> See chapter 4.1

different epistemological traditions. Trying to decode the core of their theories led to epistemological shifts between the articles. These shifts do not represent a break or abandonment of one way of thinking over another, but rather, they represent significant abductive moves as the study unfolded, which occurred through processes of searching to find ways to understand how reflection in ECTE is produced through material-discursive, sensory processes within the classroom.

Furthermore, both the empirical data and theoretical concepts coalesced in a heightened political and feminist awareness of how ECTE pedagogy transcends the human subject. The participants' ideas, hopes, frustrations and enactments shine through and insisted upon a political engagement within the articles. Conceptualisations offered by feminist researchers have deeply inspired the knowledge production presented within this thesis. Whilst this study is not explicitly about gender it is nevertheless a feminist project, which sought to reach new conceptualisations and practices in a highly gendered occupational field; a field where reflection is shaped by implicitly gendered material-discursive policies and practices.

## **1.4 Structure of the kappe**

The kappe is divided into 7 chapters. This introductory chapter outlines the content of the thesis. In Chapter 2, I discuss the background for the study. Here, I build on Article 1<sup>17</sup> and provide an expanded literature review by including newer research into ECTE in Norway. Then the chapter goes on to offer some critical views and concepts, before a review of diffraction and refraction in ECTE is offered. In Chapter 3, I discuss the core-concepts presented within the thesis. The discussion then shifts to a philosophical discussion, which addresses differences in understandings of immanence and transcendence. Further, into Chapter 4, a discussion of flattened ontologies and the adoption of ethico-onto-epistemology is offered. The abductive approach is outlined in Chapter 5: Methodological choices. Here narratives or stories, micro-moments and multi-faceting is explained, before I discuss methods and strategies for gathering and analysing

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<sup>17</sup> The article are available in the appendix



research materials. In Chapter 6, I further analyse the contributions the articles make. Here I aim to look critically into the contribution of each, specifically in relation to: sensing, thinking and doing reflection. Then in the final chapter, Chapter 7, the contributions of the study are discussed, and the project is debated in its entirety through two themes:

- *How is reflection sensed, thought and activated in ECTE, and*
- *How can knowledge from this study contribute to future teaching practices of student-teachers in ECTE?*

Finally, some concluding thoughts are presented. The interconnection between articles and research processes, which form a coherent project, is explained in each section. A reprint of each article (published or under peer-review) are included after the bibliography. Norwegian publications are also presented in translated form.

## **2 Background and research field of the study**

In this section, I outline what has informed this study. Studying reflection is a widespread field of enquiry. Therefore, this background chapter is limited to research elucidating the field of this study; ECTE in Norway and reflection in ECTE. I start with a short historical introduction to ECTE. Article 1 is a review article discussing reflection. This chapter is a continuum of article 1, introducing some contemporary Norwegian research, and research that attends to critical reflection. Through the critique, the contour of diffraction and refraction appears, and paves a way to discuss how research representing a wide range of ontological and epistemological approaches can work together through abduction and an onto-epistemological approach in research.

### **2.1 A short historical introduction to ECTE in Norway**

There is a long history in Norway of Kindergartens and ECTE fighting for the political rights of educated kindergarten teachers (Greve, Jansen, & Nordbrønd, 2013; Greve, Jansen, & Solheim, 2014; Korsvold, 2005). The first Norwegian kindergarten education was founded in Oslo in 1935 at 'Barnevernsakademiet' (Korsvold, 2005, p. 139). From its inception, and as the field of ECTE grew, there was clear female leadership. The content of ECTE was rooted in traditions of social science, and largely involved training in various practical skills considered necessary for further professional practice, and for the continuation of existing practises (N. R. Birkeland, Aasebø, Nome, & Wergeland-Yates, 2016).

ECTE has been regarded the responsibility of government since 1971, when the first national guidelines were implemented. From the 1970s, theoretical knowledge, (i.e. developmental psychology) was prioritised at the expense of woman and family-related knowledge (Korsvold, 2005, p. 159). Since then, ECTE has gone through three changes in curriculum; the first in 1995, the next in 2003; and most recently new Regulations (Ministry of Education and Research, 2012) and new Guidelines (Stave et al., 2012) from August 2013. This last implementation is a reform that engages in established educational cultures (N. R. Birkeland et al., 2016; Bjerkestrand et al., 2017b; Høydalsvik, 2017; Sataøen & Trippestad, 2015). One of the most remarkable changes is a restructure of the

program content from ten disciplines to six multidisciplinary subjects (Høydalsvik, 2017; Ministry of Education and Research, 2012). In this new model, pedagogy is proposed as a central interconnected subject which is part of all areas of knowledge, with a special responsibility for progression and professionalization of ECTE (Ministry of Education and Research, 2012). In addition, pedagogy is charged with contributing to students' professional development, personal development, analytical skills, ethical reflection and integration of theory and practice (Stave et al., 2012).

## **2.2 An introduction to some newer Norwegian research**

This chapter extends article 1, first by introducing some newer Norwegian research, and then by looking into some of critiques of reflection in education.

### **2.2.1 Contributions from the review article**

The purpose of Article 1 (Moxnes, 2016) was to examine different understandings of reflection in ECTE and to give an overview of knowledge that informed the field. It also intended to draw attention to what activates reflection in classroom teaching and what reflection does for student-teachers on their way toward becoming educationally wise practitioners (Biesta, 2015a). In the article, I draw upon research published in different international and national journals. 111 articles and textbooks were analysed, and in the analysis process, three categories become prominent. 1: reflection regarding the area of theory and practice, 2: reflection as change and new recognition, and 3: educational wisdom through ethical and critical reflection. The article discussion draws on these three categories and the formation processes of student-teachers in ECTE.

I introduce more current research because it offers other perspectives than those presented in article 1. However, the focus here is restricted to Norwegian research (2015 to 2018) concerning ECTE as a field, and/or reflection in ECTE.

### **2.2.2 Current research about the field of ECTE**

Research by Bjerkestrand et al. (2014, 2015, 2016, 2017a, 2017b) followed the implementation of the new ECTE in Norway. These studies have culminated in four annual

reports that discuss various aspects of the implementation process, plus a final report. In the final report, the authors stress that the reform impacts upon established cultures for teaching; that a tighter financial framework results in more joint lectures for the entire student population; and recommend that there is a need to address the conditions for pedagogy as a subject (Bjerkestrand et al., 2017b, p. 26). The authors also raise the issue that institutions must support employees teaching pedagogy to develop it as a core subject which can contribute to professionalism and reflection (Bjerkestrand et al., 2017b, p. 29).

Meanwhile, Sataøen and Trippestad (2015) discuss some recurring issues based on feedback from higher education institutions. They state that this reform in many respects draws from established educational cultures (p. 440). They also discuss the allocation of scarce resources, which is experienced as a major and profound problem in the sector creating new bureaucracy, layers of coordination, and additional assignments. Limited time and finances to develop multi-disciplinary content presents the risk that teacher-educators continue as usual in teaching and in curriculum development (Sataøen & Trippestad, 2015, p. 446). Furthermore, Høydalsvik (2017) examined how teacher-educators and programme leaders experience their role as curriculum developer in the implementation of new guidelines (p. 76). She points to tensions between individual agency and organisational imperatives, and concludes by requesting more interdisciplinary approaches in ECTE.

Others have paid more interest to specific elements of ECTE. N. R. Birkeland et al. (2016) investigate how the professional understandings of student-teachers are presented through bachelor assignments. Their findings reject assumptions that pedagogy as a discipline invites more theoretical bachelor assignments, and instead found that 80% of the pedagogy assignments were empirical. They also found that the institutional assessment cultures seem to regard academic bachelor projects more positively than those that address practical issues within kindergarten practice (N. R. Birkeland et al., 2016, p. 224). Nordvik and Vatne (2017) attend to issues surrounding the nature of assessment that student-teachers are subjected to. Through an analysis and discussion

of the forms of examinations and assignments in the new ECTE, Nordvik and Vatne (2017) question the extent to which they contribute to an integrated, professional and research-based education. Only four out of nine institutions were found to formulate assignments that allowed student-teachers to apply professional knowledge in ways other than had been possible previously. Meantime, Horverak and Hidle (2017) investigated the extent to which a selection of student-teachers in ECTE learnt to write and discuss text in their previous schooling and concluded that some students were struggling. They urged teacher education should ensure that teachers have the prerequisites to cope with the demands of writing in all subjects.

The above sources are used to draw a picture of the field of research about ECTE in Norway. It underlines that the implementation of the new ECTE has been the subject of a growing body of research that is concerned with the implications of structural changes as well as more specific foci on assessment and teaching practices.

### **2.2.3 Contemporary research about reflection in ECTE**

Within this section, I concentrate on the expectations and features highlighted by research in direct relation to reflection in ECTE, and report on the theoretical rationale for using the concept.

Bøe's (2016) PhD research was framed by a concern for what reflection might do in terms of deepening understandings and knowledge of experienced pedagogical leaders' within informal and everyday staff leadership practice (p. III). Bøe constructs her understanding of reflection by building upon Schön (1983, 1987) and Kinsella (2012). Schön (1983, 1987) and Kinsella (2012) connect reflection to judgement, changeable situations and ethical dimensions, and Bøe (2016) suggests that in ECTE the use of personal narratives from practical training make important contributions to strengthening student-teachers' professional development. Bøe points to a need to investigate how such teaching can strengthen student-teachers' comprehensive approaches to action in kindergarten practice. This requires complex combinations of knowledge, skills, values and practices to

avoid one-sided theoretical dominance in the educational related reflection (Bøe, 2016, p. 130).

More recently Sell and Vala (2017) discuss student-teachers shadowing professional kindergarten teachers in their practical training. Here the student-teachers' experiences with shadowing is at stake. They build on Schön (1983) and Søndenå (2004) to argue that kindergarten teachers act as stakeholders when it comes to depth of student-teacher reflections-on-action (Sell & Vala, 2017, p. 93). In light of this it is interesting to point to Worum (2016) who identifies fractures in the knowledge that underpin plans for practical training of student-teachers and knowledge promoted in the education of kindergarten teachers to become supervisors for student-teachers. Worum (2016) worries that such fractures influence the work of linking theory and practical work, and again the creation of links between educational institutions and the practical field.

Hovdenak and Wiese (2017) find that well prepared, well-read student-teachers have opportunities to use professional reflections in group work and in group discussions. They build on theories about *Phronesis*<sup>18</sup>, and connect phronesis to the ability to reflect. Arneback, Englund, and Solbrekke (2016) focus on how student-teachers reflect on their future identity as preschool teachers. They connect reflection to writing practices, and suggest that discourses of writing need to be reflected in the professional programs. Finally, Sandvoll, Dørum, and Solberg (2017) investigate how scientific staff are reflecting over their teaching practice. The staff reflections are collected through a teaching course for scientific staff, and in the course, they are presented for Mezirow's (1991) ideas about reflection, developed from ideas offered by Dewey and Schön. This is interesting since it provides some information about what theoretical foundations some teacher-educators are working from when facilitated for student-teachers' reflections.

Reflection, as conceptualised in these studies, mainly focuses on the positive effects of it in higher education. Theories underpinning understandings of reflection, are mainly framed by Schön, Dewey, Kinsella, Mezirow and Søndenå. It is important to question how

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<sup>18</sup>Phronesis will be explained in chapter 3.1.2

these theories inform understandings of reflection as it plays out in ECTE, which is followed up in chapter 3. In the next section, I offer a critique of the use of reflection.

## **2.3 Critique of reflection in education**

Researching for article 1 created awareness of reflection as more nuanced and problematic than it was possible to articulate within the article. I will therefore outline some of the foci in some research criticising reflection in higher education and ECTE.

According to Fendler (2003), it is of importance to recognise the contextual and historical specificity shaping different conceptualisation of reflection. Fendler (2003) undertakes a genealogical study of Descartes', Dewey's and Schön's conceptualisations of reflection question whether reflective teaching has become an over-simplified, universalised term. One example is how Dewey's theories of reflection are used to promote technical and instrumental approaches in teacher education, since they "do not promote social reconstructions of system injustice" (Fendler, 2003, p. 16). However, Fendler (2003) is not critiquing reflection itself, but how it is deployed, as if reflection turns into ideology, directing concerns and carrying unintended and undesirable political effects. She challenges ideas behind elaborate programs teaching teachers to be reflective practitioners, since the implicit assumption is that teachers are not reflective without directions from expert authorities (Fendler, 2003, p. 23).

In a review study of reflection in teacher education, Beauchamp (2015) suggests that research reveals persist critiques of reflection. She finds that reflection is debated far more than it is practiced. She points to a growing number of authors that highlight concerns "that the push for accountability in teaching has resulted in forced reflection or in routinization of reflective practice that undermines the notion of reflection as deep thinking" (Beauchamp, 2015, p. 127). However, Hostetler (2016, p. 180) argues that educators should be reflective and thoughtful, but raises concerns about claims that reflection is the most promising means of addressing complex situations in teaching. He compares reflection to the production of arguments and suggests the need for teachers to go beyond reflection and instead develop "perception" (Hostetler, 2016, p. 181). In

perception the main purpose is to be able to do well, and to do well, students need a sense for reading situations.

Søndenå (2002, p. 197) criticises higher education by asking whether reflection result in 'educational mirroring'. She refers to doing 'more of the same', or an immanent practice (Søndenå, 2002, p. 192) where mirroring socialises students into their future profession. Other critique about ECTE in Norway is offered by Halmrast, Taarud, and Østerås (2013, p. 23), who question whether harmony gets produced in meeting-points between educators and student-teachers rather than capacities to challenge and expand differences through respective knowledge and understandings. Gur-Ze'ev, Masschelein, and Blake (2001) are critical of the use of active reflective concepts and focus on change as utopian (s. 94). They write that "reflectivity cannot give birth to transcendence because it is concerned with the apparently self-evident, the positive (Gur-Ze'ev et al., 2001, p. 96). Critical reflection is also critiqued by Stengers (2018, p. 13) who suggests that more attention should be placed on the cultivation of curiosity than critical reflexivity in higher education. Stengers (2018) argues that critical reflexivity is not "engaged by the question of how its own interventions are liable to 'affect the issue'" (Stengers, 2018, p. 126, author's emphasises). Notwithstanding such critique, critical thinking, critical reflection and reflexivity seems to have a solid foothold in ECTE in Norway, an issue that will be pursued further in the next section.

## **2.4 Critical thinking, critical reflection and reflexivity in ECTE**

According to Grindheim (2017, p. 171) to *be critical* is promoted in the national guidelines for ECTE (Stave et al., 2012). Through her analysis, she questions the expectations set for student-teachers outlined in the documents. Grindheim (2017) noticed that critical reflection is described as both skill and competence, as well as a qualification-concept (Grindheim, 2017, p. 178). Grindheim (2017, p. 183) claims that the guidelines reduce criticality to an individual competence. Using Biesta (e.g. 2009, 2011) and the concepts 'socialisation', 'qualification' and 'subjectification' shows that critical competence is not obviously positive. As Grindheim (2017, p. 182) states "there is not much to be gained from having more kindergarten teachers if there is no room for student-teachers to



disturb common sense” (my translation). She highlights that the national guidelines deny space for student-teacher subjectification and independent ethical assessments, which again could contribute to strengthening education (p. 184).

According to Carlsen (2015, p. 14/15) Norwegian kindergarten pedagogy in the late 1970s, early 1980s gathered inspiration from Reggio Emilia’s pedagogical philosophy. The ideas shaping this pedagogy were offered by Malaguzzi, which in turn was influenced by Dewey and Freire among others, where ideas of reflection as critical were central (Carlsen, 2015). In a Norwegian ECTE context, the understanding of critical reflection is influenced by Dahlberg, Moss, and Pence (2002) who inspired the field from a poststructuralist position by questioning whose knowledge is privileged and whose is excluded. Inspired by this, active forms or interpretations of reflections, as reflexivity and critical reflection are frequently made use of in literature informing education (e.g.: Bøe & Thoresen, 2017; Johannesen & Sandvik, 2008; Kolle et al., 2017; Otterstad & Rhedding-Jones, 2011; Åberg & Lenz Taguchi, 2006).

In her Ph.D. Larsen (2015) is concerned with interferences that generate discussion among kindergarten staff when something unforeseen occurs. The intention is to open up multiple reflections, contradictions and discontinuities situated in re-reading of events from practice. She builds on Derrida, and poststructuralist research. Reflection as a concept is constructed as critical, and is inspired by pedagogical documentation from Dahlberg and Moss (2006) and Lenz Taguchi (2010). In her thesis Larsen proposes that interferences might have the power to produce repetitions, in the sense that staff continue to give the event attention through further conversations and reflections (Larsen, 2015, p. 93).

To summarise thus far, different ideas about reflection influence the field of ECTE. These ideas are rooted in contradictory epistemological perspectives. The research in article 1 and further in this chapter identifies nuances in conceptualisations. It also identifies tensions and contradictions such as: reflection as new understandings; reflection as change; or reflection as mirroring the already known. Studies reveal how widespread the use of different reflection-concepts are in ECTE, and invites a curiosity about other lenses

in classroom teaching: diffraction and refraction<sup>19</sup>. The next section elucidates some research regarding these concepts.

## 2.5 Diffraction and Refraction in education

This section attends to research that investigates diffraction and refraction in ECTE and related practises. Lenz Taguchi (2010, 2012) suggests that diffraction offers an alternative methodology to critical reflection. She activates diffraction by introducing an intra-active pedagogy<sup>20</sup>, learning-practices and strategies in teaching. She suggests pedagogical documentation as strategies for student-teachers to gain access to some of what is going on in-between and through materiality in an educational situation (Lenz Taguchi, 2010, p. 137). She also introduces a hybrid-writing process, and wants to “engage in continuous processes of transformation” (Lenz Taguchi, 2010, p. 159) as some of the ways diffraction can make sense in ECTE.

Also Palmer (2011) studied diffraction to question how student-teachers in ECTE constitute their mathematical subjectivity, through their memory stories. Her aim was to illustrate how the understanding of mathematical subjectivity changes through theoretically and methodologically transitioning (Palmer, 2011, p. 3), and diffraction is used “to read with the data”, to open up for new understandings and identify all the intra-activities emerging in-between researcher and data (Palmer, 2011, p. 8). Another example is from Lanås et al. (2015) who investigated how teaching of theoretical reflection was undertaken in teacher education in Finland. They suggest that teacher-educators fail to consistently recognise when students attempt to reflect theories, because students diffract the theory they are grappling with (Lanås et al., 2015, p. 539).

Research connected to kindergarten studies has brought different understandings of how diffraction and refraction operationalise. One example is Davies (2014a, p. 6) who explains that diffractive analysis “cannot be a linear process with a clear beginning and end” where

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<sup>19</sup> During the process of writing article 1, I identified texts where diffraction or refraction was mentioned in connection to reflection (e.g. Grütters, 2011; Lanås et al., 2015; Otterstad, 2012).

<sup>20</sup> Intra-activity as a concept relates to when things take agency and entwine in the knowledge production.

a complicated part of the process is to enable the not-yet-known to emerge in the space of encounter (Davies, 2014a, p. 5). Davies (2014b, p. 734) demonstrates how the agency of the researcher using diffraction lies in making new mappings, in which something new might emerge. Further she shows that differences break up linear thoughts, and open up space for awareness for possibilities of becoming in her study of anger among boys in a Swedish kindergarten (Davies, 2014b, p. 740).

From Norway, Myhre, Myrvold, Joramo, and Thoresen (2017) build on Barad and explore their habitual ways of thinking, by calling attention to the work and play of diffraction, affect and agency, around a 'kitchen-island' in a kindergarten (Myhre et al., 2017, p. 310). Finally, Lafton (2016) contributes with an understanding of reflection connected to physics and the field of optics. Her area of interest revolves around possible actions activated in early childhood practices where technology enacts. She sees technology and other non-humans as actors on equal term as humans. She builds on Latour and ANT<sup>21</sup>, and discusses reflection building on materiality. Lafton (2016) investigates diffraction and refraction as alternative lenses with which to search for differences in understandings. She discusses how reflection takes shape as diffraction when new opportunities for actions spread out, and as refraction when the fractures between words and action create new possibilities in practice (Lafton, 2016, p. 66).

As these studies show, a growing field of research is emerging that seeks to connect diffraction to the field of ECTE and related areas. Lafton (2016) makes use of this in a less hierarchical, flattened perspective, including reflection not as something that does not work, but as potentials, by investigating refractions. As I elucidate here, working with the concepts of diffraction and refraction is influencing the field of educational research. Engaging with the approaches taken by others has presented interesting possibilities about how to activate diffraction in articles 3 and 4, and for how I could further interrogate these concepts within the kappe.

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<sup>21</sup> ANT = actor-network-theory, see Latour or Lafton (2016)

## 2.6 Positioning of the research foci and contributions

Like many of the studies mentioned in the research review, my intention was also to study reflection in ECTE. Article 1 is considered background for the project since the process of writing required a study of different fields of research to map a picture of reflection in ECTE that reveals how it is variously approached, defined and conceptualised. My positionality at the earliest stages of this project was framed by a sociocultural approach to learning. I was striving to hold reflection 'in place'. However, this proved problematic through my attempts at making a system, dividing reflection into categories, as in article 1, and further when discovering the multifaceted impression of ontologies and epistemologies informing research about ECTE.

Reading critical perspectives and furthermore diffraction and refraction-theories disrupted the picture of reflection further. Inspired by Barad (2003) and her ideas that actions "bring to the forefront important questions of ontology, materiality and agency" (p. 802), I claim that intra-actions with reflection challenged my ontological positioning. Furthermore, Barad (2003) criticises traditional approaches to be "caught up in the geometrical optics of reflection" (p. 802/803). She then turns her focus towards questions of diffraction rather than reflection, as followed in some of the research projects shown above. In article 3, and 4, I am also following this turn towards diffraction. Thus in this kappe, all four articles are included which insists upon a re-turn to the foci, on both optic and physical perspectives. Concepts of reflection, diffraction and refraction as optics are included alongside a range of other epistemological, ontological and methodological perspectives.

Abduction is described as a creative process allowing different options to interpret and enable possible understandings (Brinkmann, 2012, p. 46). Different possible understandings of reflection are important to the multiple foci offered in this thesis. Attempting to capture how different researchers explain and presents reflection has demanded shifts. Shifts to unfold, to flatten out reflection, diffraction and refraction. Such shifts have inspired a concern with how non-human and more than human elements, including materiality and affect, intra-act on, or diffract pedagogical

practices<sup>22</sup>. This thesis contends that no single theory of reflection in teaching is superior to another, but rather they work together as companion theories to illuminate the field and allow investigation into the education of becoming kindergarten teachers.

The research question evolved from a curiosity for what is happening in the university classroom, regarding how student-teachers are prepared through reflection to become professional practitioners capable of praxis (Kemmis & Smith, 2008), or exercising educational judgement (Biesta, 2014, 2015a). As the process unfolded new questions emerged and different theoretical explanations, different philosophies of science, different methodologies, different teacher-educators' and student-teachers' ways of dealing with reflection, required the question to be revisited. By staying with reflection as a concept, and following where it might take the project, other possibilities were opened up. Both Alvesson and Kärreman (2011, p. 58/59) and Brinkmann (2014, p. 722) claim that abduction is driven by astonishment, mystery and breakdowns in one's understanding. Staying with astonishment and allowing mysteries to become a force inspired constant questions about what else reflection might produce. What kind of questions can facilitate a deeper engagement with reflection, to work with it from within and underneath hierarchical theoretical borders. This required a change of question, to open out possibilities. The question became: **How is reflection sensed, thought and activated in university classrooms in ECTE?**

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<sup>22</sup> See article 3 and 4, where this is further discussed.

### 3 Theories

The multiplicity described in the review chapter continues in this theoretical chapter. Barad (2008) writes “We do not obtain knowledge by standing outside of the world; we know because “we” are *of* the world” (p. 147, author’s emphasis). The theoretical research-worlds this thesis is of, are multiple. The theoretical discussion starts where the review ends, with drawing on different representations of reflection, diffraction and refraction from the review and the four articles. The intention is to delve more intensely into the main concepts, and consider the contribution they make to ECTE, and to create a foundation for discussing different entrances to sensing, thinking and doing reflection. Exploring the potential of different theoretical approaches to investigate reflection exposed the potential for theory to extend knowledge in the field (Biesta, 2015b, p. 148). In the beginning, theory enabled reflection to be conceptualised as a phenomenon. Later, the interest changed from producing meanings to how reflection and diffraction work and what they produce (Bozalek & Zembylas, 2017; Mazzei, 2013).

Representation carries logic that structures the world around us (MacLure, 2013a). In this chapter, reflection, diffraction and refraction are rethought by considering their various representations within education. The intention is to search for what these concepts offer ECTE. I trace how representations of the concepts are rooted in different epistemological approaches, which in turn requires that attention is paid to philosophical underpinnings of reflection as immanence and transcendence.

To elaborate, in article 4, we point to Haraway (2016) and specifically her practice of string figuring as “a method of tracing, of following a thread in the dark, in a dangerous true tale of adventure” (p.3). In order to work at a reconfiguration of ‘reflection’ in ECTE I needed to get beyond what it represents to how it is connected to and entangled within a string pattern made up of knots, twists and turns. Following threads offered by reflection and introducing threads from diffraction and refraction presents a means to tell other stories than the already known about ECTE. We might get beyond what we think we know and see (about reflection in ECTE) and find ourselves presented with some surprises that hold the potential to stretch ideas and practices in teacher education.

### 3.1 Reflection

The background studies for article 1<sup>23</sup>, 2 and this theoretical foundation, build on research inspired by Dewey (1933), Schön (1983, 1987), and Sørensen (2002, 2004). How these theories are made use of in research and textbooks directly influences how reflection is presented in the teaching of pedagogy, in the education of kindergarten teachers in Norway. In what follows, the theoretical framing of the articles and review-chapter presents the following entrances to reflection: *Freedom to think*, *In and On action* and *Change*, and finally *Sensing, thinking, doing with reflection*.

#### 3.1.1 Freedom to think

First, I briefly introduce some ideas inspired of John Dewey (1933). He defined reflective thinking as “the kind of thinking that consists in turning a subject over in the mind and giving it serious and consecutive considerations” (p. 3). Reflection is seen as a way of exercising the imagination toward future possibilities and Dewey describes it as a chain, where thoughts consist of a succession of thoughts, ideas and consequences. Each step, or phase, is linked to the previous and “[e]ach term leaves a deposit that is utilized in the next term” (Dewey, 1933, p. 5). Reflection and the process of thinking consists of making a series of judgements, in order to reach a conclusion. Freedom, was of Dewey (1933, p. 87) seen as a “power to act and to execute independent of external tutelage”. He describes freedom as something ‘we’ have to achieve, and connects it to reflection, and further to overcome obstacles. Dewey, speaks directly to educators and encourages an appreciation of individual differences, and to resist forcing one model or pattern upon all (Dewey, 1933, p. 228).

When following lines into the multiplicity of the use of Dewey’s ideas, many of the authors included in article 1 and the literature review use Dewey’s ideas as secondary sources for the research as e.g. Lauvås and Handal (2014) refer to Dewey’s discussions

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<sup>23</sup> When writing article 1 I produced a matrix over the chosen text for the study. This matrix also shows the theoretical fundament for reflection used in the articles and textbooks. Here Dewey and Schön are most frequent cited, followed by Korthagen, van Manen and Säljö. The gap between Schön and Korthagen differs with 18 quotations, hence only Dewey and Schön are included in this discussion of reflection.

about problems, or obstacles as a means to release reflection. Other examples include Chang-Kredl and Kingsley (2014, p. 29) and Cherrington and Loveridge (2014, p. 42), both, barely mention Dewey, to position their own work. Others, like Davis (2006, p. 282), combine Dewey, Schön and van Manen's ideas to construct her concept "productive reflection" which she again uses to analyse her pre-service teachers' reflective writing skills. The use of Dewey's theories in the production of models or steps for reflection is somehow ironic, since his work obviously was meant as an alternative to instrumental thinking (Fendler, 2003, p. 18).

Ideas of reflection as an alternative to instrumental thinking, and how education research has transformed the concept into steps or models of doing reflection indicate a rupture in understandings of reflection in education. Hostetler (2016) points to Dewey's interest in virtuosity, and his proposal that reflection acts an indicator of expertise, unlike the novices, who "rush to judgement without really thinking" (Hostetler, 2016, p. 181). The conflicting point for Hostetler (2016) is whether we think about reflection as teach-able and how we see the novice teacher or teacher student, and whether we judge her upon her ability to articulate steps of reflection or her freethinking. However, addressing 'freedom to think' has generated a dichotomy between free thoughts versus instrumental thinking/steps of reflection. This is a point of conflict in education today.

The point of conflict arises from the student-teacher positioning as learner; preparing to become a professional, and ultimately able to perform professional judgement. Being a learner also indicates adapting certain skills and beliefs. Fredriksen (2016) stresses that many student-teachers learn to avoid demanding experiences and instead become what she refers to as: "experts in memorising only what counts in tests" (p.112). The student-teachers' previous learning is, to some extent, in conflict with ideas of a free will, and ideas of being able to exercise professional judgement, as illustrated by the readiness with which student-teachers in article 4 were willing to give up their own ideas in favour of following instructions. The idea of freewill relies on a strong belief in humanist perspectives, and a possible illusion in such beliefs is individual autonomy (Åsberg, 2012, p. 9). When teacher-educators ask student-teachers to reflect, how free are the student-



teachers' verbally articulated reflections? The same teacher-educator is a gatekeeper for the profession, and judges the students' products and qualifications'<sup>24</sup>. By troubling reflection as it presented by Dewey, and taken up by his proponents, reveals it to be a deeply critical concept, that requires questions to be asked about who gets to exercise free thought, and what is free thinking for.

### 3.1.2 In and on action

Concepts including “the reflective practitioner”, “knowing-in-practice”, “reflection-in-action” and “reflection-on-action”, all inspired by Donald A. Schön (1983, 1987) are major influences within teacher education (Beauchamp, 2015; Fendler, 2003). The aim is to exercise “professional artistry”, made possible by professional knowledge, or virtuosity. Schön's use of action indicates a connection between reflection and practical experiences or doing something actively<sup>25</sup>. Reflection-in-action is dependent upon time to reflect in the moment of an activity. However, to reflect on-actions, after the event, creates the potential to go deeper than is possible in the moment. This mode of reflection is dependent on practitioners knowing-in-practice, and reaching into the tacit knowledge of the situation and so strengthening the practitioners further actions (Schön, 1983, p. 62). Schön was concerned to support the practitioner's ability to reflect, in the actual situation, assess her own actions in the situation, and so make insightful choices. He argues for a new epistemology of practice, “one that would stand the question of professional knowledge [...], by taking as its point of departure the competence and artistry already embedded in skilful practices” (Schön, 1987, p. xi).

In the 1970s and 1980s understandings about reflection shifted in Norway, and more radical, practically oriented ideas took root (Dale, 2005, p. 143). Through the 1980s, and influenced by Schön, reflection becomes an accepted strategy in teaching. Promoted by Handal and Lauvås (1983) who introduced strategies to support people to reflect over practical experiences to develop their experience based and theory-based knowledges.

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<sup>24</sup> This discussion is initiated in the articles, and will be followed up in the final discussions in the kappe

<sup>25</sup> Schön is briefly mentioned in article 1, but in article 2, his concepts are used in the analysing process and in the discussions.

Tracing how Schön's concepts are taken up in education reveal it as a tool for supervision of student-teachers practical training (Å. Birkeland & Carson, 2013), and as a framework for shadowing in student-teachers' practical training (Bøe, 2016; Sell & Vala, 2017). Another example is Klemp (2013, p. 43) who explains the heavy influence that the term "the reflective practitioner" (Schön, 1983) had towards the end of the last century in Norwegian school development discourses. Some of the critique against this practical turn, concerns a narrowing of the definition of being a professional as the ability to justify choices (Klemp, 2013, p. 43).

Elisabeth Ann Kinsella (2012) developed Schön's (1983, 1987) ideas on intentional and embodied reflection and theories of reflective practice further. She argues that Schön's theories do not go far enough. Kinsella (2012, p. 35) suggests that reflection should be thought of in the interest of *phronesis*, or how and why to act virtuously. She argues for the importance of receptive reflection and reflexivity in professional practice. Receptive reflection is connected to the contemplative process, where the mind works "like a receptor, receiving ideas, images, and feelings, and being moved by them" (Kinsella, 2012, p. 41). Kinsella is asking how attention to receptive reflection can inform other forms of reflection. She sees reflexivity, as the agent; embedded in cultural, social, linguistic and historical communities. She suggests reflexivity as something that "goes beyond reflection to interrogate the very condition under which knowledge claims are accepted and constructed, and it recognizes the social of the process" (Kinsella, 2012, p. 45). Here the social connects to ethics and exercising ethically based considerations, which is addressed in both articles 1 and 2.

Turning again to the multiplicity in reflection-in/on-action, Beauchamp (2015) highlights the critique of Schön's (1983) concepts and especially the integration of reflection in action. Critics argue that there is a need for a much more holistic, or deeper approach to reflection, which is rarely present in teacher programs (Beauchamp, 2015, p. 132). Kinsella (2012) attempts to connect social, ethical and critical aspects of reflection adds further dimensions to reflection-in/on-action in ECTE, turning the focus towards collective processes; which are close to conceptualisations of critical reflection offered

by Kolle et al. (2017), Larsen (2015), MacNaughton (2006) amongst others. When reflection is integrated into classroom teaching of ECTE, collective and social dimensions influence reflexive processes, which in turn demand that ethical and critical aspects are attended to. Working with reflection in classroom activities demands that ethics are considered regardless of whether, it is explicitly stated within the charter.

Another consideration of 'in' and 'on' action in ECTE is the development of professional virtuosity in judgement. According to Biesta (2015a) the only way is by practising it. He suggests that judgement should be fostered from the beginning of teacher education, and focuses on developing virtuosity through studying others' virtuosity (Biesta, 2015a, p. 20). This includes above time to think through things and to be challenged by others questions, suggestions and opinions. As such it connects the critical-collective (Kinsella (2012), Kolle et al. (2017) and Larsen (2015)) and the holistic approach to reflection promoted by Beauchamp (2015) and Hostetler (2016). Aligned with such flattening perspectives, this thesis stresses the potential for diverse theoretical approaches about reflection to work side by side in ECTE.

### 3.1.3 Reflection and change

The next thread to pull in this string figuring exercise is the concept of change, specifically expressed as *powerful reflection* by Kari Søndenå (2002, 2004). This concept profoundly influenced the theoretical orientations of articles 1, 2 and 3. Based on philosophical ideas inspired by Arendt and de Beauvoir, Søndenå developed the concept powerful reflection, which she explains as the ability to think new thoughts and to locate and understand situations from different perspectives. She writes that: "for educators, it is not only important to act thoughtfully and reflectively. They must also be able to understand the value of reflection and what kind of knowledge they make use of at any given time" (Søndenå, 2004, p. 27, my translation). This again demands that teacher-educators ought to have sound academic, practical and personal insights. According to Søndenå (2002) reflection is powerful when it awakens new thoughts and ideas, and breaks with taken-for-granted 'truths'. It is important to recognise when new thoughts are awakened; challenging 'truths' and taken for granted ideas makes significant demands of teacher-

educators in ECTE-classrooms and complexifies the teaching-learning that takes place. Furthermore, it requires appreciation and recognition of the new in what is spoken, and that teachers avoid condemnation of the new as unrealistic or too radical.

The work of Søndena (2002, 2004, 2007, 2009) inspired Norwegian researchers to develop understandings of reflection (e.g. Bjerkholt, 2013; Høier, 2012; Klemp, 2013; Lafton, 2016; Sell & Vala, 2017; Solstad, 2010, 2013; Steinnes, 2014). Some activated the concept in their research, for example Klemp (2013) recognises the importance of the rupture that Søndena claims is necessary for powerful reflection but goes on to ask whether powerful reflection is sufficient. Klemp (2013) suggests that powerful reflection also requires collective analysis and for experiences to be shared. Others refer to Søndena, mentioning her concept, without discussing or activating it as tool in analyses<sup>26</sup>.

Lafton (2016) expands Søndena's ideas to break with existing truths, when being thrown back as an echo of something that was formulated and pronounced in the past (Lafton, 2016, p. 38). Lafton (2016) considers breaking with ideas of reflection and instead she suggests searching for new forms and connections. She considers practice to comprise linguistic, bodily, material and discursive interconnections, and identifies a paradox wherein reflection and anticipation of an action are more valuable than the action itself (p. 68). This proposition acts to rupture the concept of powerful reflection by questioning whether the ability to think, or reflect over what we do is more important than the doing in itself. Returning to judgements, student-teachers' prestige is more concerned with reflections over actions than what they actually do. There is an identifiable tension between what matters on the floor of the kindergarten i.e. exercising educational judgement (Biesta, 2015a), and the time available to undertake reflections, powerful or not, that follows an event. Therefore, it becomes possible to conceptualise reflection as that which ruptures practical actions, and furthermore that it is a *combination* of practical action and thought that matters. This shift in emphasis detracts attention from the actual happening.

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<sup>26</sup> In article 2, powerful reflection is activated as an analytical tool, but as will be further discussed in chapter 7.1.1, the complexities in the concept was a challenging element.

### 3.1.4 Sensing, thinking, doing with reflection

Different representations of reflection reveal some of the complexities that thinking with it, and doing it, presents. I am anchoring the concept in this thesis to education, to thinking and activity, to change, to doings, to differences. Further, it is also about justifying choices and redirecting the focus away from the happening itself. I draw upon understandings based on Dewey (1933); Kinsella (2012); Schön (1983, 1987); Søndena (2002, 2004). The theoretical perspectives, forming the thesis all promote reflection as active and as something that can lead to enriched professional practices. The variation in epistemological and ontological understandings underpinning the concept offers multiple entry points into reflection in ECTE. Some perspectives also rupture these understandings (e.g. Fendler, 2003; Hostetler, 2016; Klemp, 2013; Lafton, 2016). These, illuminated by professional judgement, contribute to a reconfiguration of reflection's doings in ECTE.

Dwelling upon Dewey's (1933) perspective of reflection, as alternative to instrumental thinking, encourages an appreciation of differences, and refuses the imposition of one model, or pattern upon all (Dewey, 1933, p. 228). Since education is often about modelling others, adapting known patterns, and developing the ability to duplicate or repeat the thoughts of others, Dewey's conceptualisation represents a challenge to Higher Education. Similarly, Søndena's (2002) powerful reflection, which concerns change and transgression, is also in conflict with established ideas about education. A challenge for higher education is whether it is about change/new ideas, or/and adoption of other ideas to create a common understanding, or/and to justify choices, or maybe a combination. When powerful reflection is connected to collective processes (Kinsella, 2012; Søndena, 2004); and when critical reflection allows for the identification of dominant discourses, and the means to interrogate power and to challenge established ideas (Kolle et al., 2017; MacNaughton, 2006) the concept of reflection opens up. Drawing upon multiple perspectives enriches the concept and opens up other lines of enquiry, although *sensing* reflection has hardly been addressed via these perspectives. As summarised in Chapter 2.4, different ideas, rooted in differing epistemological

perspectives influence the field of ECTE, and whilst this complicates the picture, it also invites curiosity for how the concept might be re-activated in teaching. To continue thinking with reflection as an active, dynamic and shifting concept requires that attention is paid to the doings of reflection. This is scrutinized in the following discussion which is concerned to address the possibilities that might lie with refraction and diffraction.

## **3.2 Diffraction and refraction**

Practices of reflection have been of interest to feminist science scholars for some time. Notably, Haraway (1997, 2004) suggested diffraction as a metaphor and a strategy for breaking with the epistemological grounding of reflexivity, and inspired Barad (2003, 2007); Davies (2014b, 2017), Lafton (2016), Lenz Taguchi (2010, 2012), Mazzei (2014) and C. A. Taylor (2016) among others to continue to elaborate upon these concepts. In optics, reflection, diffraction and refraction refer to how waves and electronic particles move in meeting with obstacles. Within this frame, reflection is understood as a form of mirroring or throwing back. Diffraction is the splitting, cutting apart, spreading out and forming of new patterns. Refraction refers to when a wave bends in meeting with an obstruction. Diffraction is a concept that is activated in new materialist theories about life as more than an exclusively human endeavour.

In article 3 and 4 I turn toward Karen Barad (2007) and Donna Haraway (1997, 2004). To engage with their conceptualisations of diffraction and diffractive practices. In what follows, I elaborate on differences through the following entrances: *Diffraction – a material shift*, *Refraction* and *Sensing, thinking, doing with refraction and diffraction*.

### **3.2.1 Diffraction – a material shift**

Diffraction is described as a phenomenon unique to wave behaviour that has to do with the “way waves combine when they overlap and the apparent bending and spreading out of waves when they encounter an obstruction” (Barad, 2007, p. 28). Diffraction is about differences, or more nuanced patterns of differences and the constitution of an alternative methodology to reflection. According to Haraway (1997, p. 16) reflexivity as well as reflection are only “displacing the same elsewhere”. Reflection is in her

understanding about copying an original, in an on-going search for what is authentic. Instead, Haraway calls for differences or something that diffracts and makes differences. Barad (2003) finds inspiration in Haraway's perspectives to argue for moving away from "the representationalist of geometrical optics" (p.803). She claims that social constructivism approaches get stuck in geometrical optics, and encourages a change to diffractive questions through ideas of physical optics (Barad, 2003, p. 802/803).

According to Davies (2017) this can be explained as: "[t]here is, in physical optics, no prior entity with fixed boundaries, but rather a doing and a making of relationality, not between one contained entity and another, but a movement across, and blurring of, boundaries" (p. 267). Diffraction, in these perspectives constitute an alternative to reflexivity, in its on-going change, blurring and through the creation of differences. Barad's concern is sameness, that we find the same things/relations/patterns everywhere when using reflection as a mirror metaphor. She suggest diffractions offer different analytic patterns (Barad, 2011, p. 445). The idea of reflection as a mirror is also described by Søndena (2002) to argue that reflection in ECTE is often about what is already known: "thinking closely related to the original meaning of reflection as mirroring" (p. 192). As explained above, Søndena draws upon other epistemological framings than Barad, but there nevertheless appears to be some congruence in their arguments.

Barad is inspired by Bohr and his work on physical optics, furthermore, Foucault's analysis of power and discourses and Butler's performative elaboration. Barad (2012b) conceptualises materiality as touch, touch between material matters, or electrons intra-acting with each other. This requires accepting everything as particles. Human and matter is part of the world, and the meetings between these are about touch, and how particles sense one another (Barad, 2012b, p. 208). The human is nothing more than particles, and this again flattens out divides between human and non-human and the more-than-human, into molecular, or particle meeting particle. The touch is also the obstacle or obstruction, which again spreads out in new and different patterns. This means that subjects and objects are not opposed to each other, but are together, intra-acting (Barad, 2014, p. 175). It also means that diffractions are always already occurring. To work with

diffractions, concerns meetings between particles, processes of splitting, and the creation of new patterns. The human remains in the frame, but equal weight is given to physical material particles and bodily affects. This allows studies to sense the significance of other (non-, and more-than-human) participants in knowledge production, in ECTE classrooms.

Diffractions are what creates differences, or as Barad (2014) explains: “[d]ifferences are *within*; differences are formed through intra-activity in the making of ‘this’ and ‘that’ within the phenomenon that is constituted in their inseparability (entanglement)” (p.175). Diffraction is as such specifically attuned to differences and their interferences in knowledge-making practices (Bozalek & Zembylas, 2017, p. 112). What is at stake is how differences interfere in the sensing of, and further production of knowledge in ECTE classrooms. Knowledge production in ECTE often relates to how to understand and to make sense of theoretical perspectives. Lanås et al. (2015) suggest that theory is diffracted in the clusters existing in the space “in which the theory is moving” (p. 538). Therefore, requiring student-teachers to reflect in ECTE, with the intention that they should become generators of theory or to re-theorise theories, is fraught with multi-layered complexity.

Intra-activity as a concept relates to the relationship between various particles, or, when things take agency and entwine in the production of knowledge. It relates to how we sense, think about or do something. Intra-action is about how matter makes differences, and according to Lanås et al. (2015), this is what happens to theory in teaching. Haraway (1997) encourages making differences (p. 16) and explains diffractions as difference patterns (p. 34). The making of differences in education, to encourage student-teachers to engage with differences, and to try to understand practical professional actions differently, requires different activities, or doings. Matter is lively (Bennett, 2010, p. 51) in intra-active processes, matter is not a thing but a doing (Barad, 2003, p. 828). The turn towards doings, can recreate classrooms, and turn attention to more than only a focus upon verbal exercises.



Working diffractively captures materiality and affects, and in doing so challenges the privileging of language and cognition (Barad, 2003, p. 201). This is not about ignoring language, but to think language differently (St.Pierre, 2013, p. 650). Barad points to Nietzsche, who warned against the tendency to take grammar too seriously, since it does not represent a prior ontological reality and it is worth questioning its underlying seductive structures (Barad, 2003, p. 202). Alaimo and Hekman (2008, p. 6) suggest a deconstruction of various material dichotomies as one possible way to better understand the position of materiality and language. Such a deconstruction demands that both elements are retained, without privileging either. Material conditions are somehow, already there, figured within linguistic domains, but they acquire the same positioning as language does in today's ECTE. However, there has been a change in research regarding early childhood education, where ideas of physical environment, i.e. the room, as *the third pedagogue*, is paid attention. This was introduced in ECTE debates by e.g. Lenz Taguchi (2004); Nordin-Hultman (2004); Nordtømme (2012, 2016); Seland (2011). However, ideas of the third pedagogue tend to concern young children learning, and has not been the focus of adults learning, in ECTE university classrooms.

### 3.2.2 Refraction

Following flattened out perspectives and an abductive<sup>27</sup> methodology invites an engagement with refraction. While refraction does not find explicit expression in the articles it nevertheless informed the analytic approach taken. Refraction is located somewhere in-between understandings of reflection and diffraction, and therefore it is worth paying attention to here because it provides a connective thread between the four articles. I understand refraction as fractures that appear when a wave alters, changes direction or the border between two substances bends. The change or fracture might also happen from meeting an obstacle (Grüters, 2011; Lafton, 2016). Refractive processes present another string in this theoretical string-figure game. Refraction is not considered as generative as diffraction, and Haraway (2004, p. 70) describes it as producing the same, as a replication or reproduction of something. Barad pays little attention to

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<sup>27</sup> Working abductively, is explained in chapter 5.1.1

refraction. For her refraction has limited value since it merely reproduces the same elsewhere, and in much the same way as reflection, amounts to processes of repetition.

However, Lafton (2016, p. 70) uses socio-material perspectives inspired by ANT (action-network-theory) by Latour, to suggest that refraction, together with reflection and diffraction represent differences, as different tools or optics to use to get closer to or investigate a certain phenomenon. Putting all three optics together produces diversity into the material. Reflection can be understood to take shape as diffraction when new opportunities are spread, and as refractions when the fractures between action and words create new possibilities for action in practice (Lafton, 2016, p. 66). Refraction works back on the practitioner thereby creating new opportunities for acting differently. The entrance to refractions, she suggests, is allowing the three optics to interplay, and so recognise the interconnected processes at work. Refraction is understood as capable of generating change, rather than merely producing more of the same, refraction generates minor differences that work back on practice. Minor differences in ways of talking when sharing moments with others may according to Kofoed and Staunæs (2015, p. 33) “help to bend and differentiate ways of thinking-feeling”, and further, bend and differentiate sensing, thinking and doing reflection.

According to Lafton (2016) refraction is the prolonging or continuation of the process. This enlarges knowledge construction, since refractive fractures create opportunities to uncover elements in what bends off from the obstruction. Grütters (2011, p. 15) positions her research within hermeneutic foundations and explains refraction as displacement, the incomplete, broken, or loss of information. She states that the refracted wave is thus nothing but the source wave, and she illustrates it by the wide range of terms in Norwegian, used for *woman*, all presenting the same but carrying different shades of meaning. Furthermore, Grütters (2011, p. 233) suggests that refraction is a process that allows incompleteness; she sees it as a productive aspect of reflective processes, as an opener for something new. Therefore, refraction can be understood as nuances or shades, not the same (as reflection), not new patterns (as diffraction), something in-between, different shades or something incomplete.

To concentrate upon refractions as something bending off from the obstruction is about searching for items and issues not mirrored, but that somehow have changed direction. Refractions are what never really diffracted, just bent off, and changed direction. To connect these ideas to classroom teaching in ECTE can present more nuanced accounts of what is going on. It opens for other differences than what is mirrored through reflection, or what is split or crystallised through diffraction.

### 3.2.3 Sensing, thinking, doing with diffraction and refraction

Engaging with diffraction and refraction has opened other possibilities to conceptualise reflection in ECTE. In this section, reflection is conceptualised as throwing back thoughts; refraction as different shades of thoughts; and diffraction as the crystallisation and foundation for new patterns, together these three concepts work to open up and flatten difference and reveal nuances in advanced thinking. Together they open for differences and possibilities in teaching. Materiality, affects, bodies, and classrooms together with theories and spoken words, work together as generative obstacles in classroom teaching.

Working with diffraction and refraction in a thesis concerned with reflection provides a more variable vocabulary, but crucially opens the investigation to ask what else is going on when reflection is activated in teaching. Reflection is not the same as diffraction or refraction, and therefore diffraction and refraction do not replace reflection, but allow for an expansion of how it is theorised and researched. Neither Barad (2007) nor Haraway (1997) aim to change reflection, they identify its limitations, and instead work with more generative concepts. To conceptualise diffraction as chaos whereby new patterns find form, and refraction as what bends off, displaces and differs, presents other opportunities to consider what is unfolding in ECTE. What bends off is not something different, and not yet, something known. What bends off offers other ways of studying, sensing, thinking and doing. These other ways represent a shift in educational research, a move away from traditional representational accounts of reflection towards processes of enacting diffraction (Davies, 2017; Osgood, 2016, in press; Osgood & Robinson, 2017).

In what follows, I elucidate the theoretical foundation underpinning the thesis. I discuss immanence and transcendence as philosophical concepts, which allows for differences in understandings of the core concepts: reflection, diffraction and refraction, to be debated.

### **3.3 Transcendence and Immanence**

I revisit concepts outlined in the previous sections: reflection, diffraction and refraction in order to consider how immanence and transcendence might contribute to re-imagining what reflection in ECTE might become. I dwell with immanence and transcendence in a quest to elaborate upon the philosophical grounding of the theories, and to continue to debate the tensions and possibilities that exist between representationalist and diffractive accounts (Davies, 2017, p. 272). Understandings of reflection I have drawn on in this chapter represent both these accounts, and as argued in the review chapter, these ideas exist side by side in ECTE.

Immanence and transcendence are troublesome, due to links with theology, and the contradictions and dichotomies they represent. Immanence is understood as “God is ‘within’”, and transcendence as, “God is ‘above’” or beyond the physical world (Young, 2013, p. 162). According to Moi (2008) transcendence can also be defined as consciousness. She refers to Simone de Beauvoir and suggests that the logic of being conscious is about “throwing oneself forward, into the future” (Moi, 2008, p. 172) and in such a logic only linear projects count (studying, working career etc.), and circular, those being repetitive (like taking care of household), can never hope to be transcendent. Following de Beauvoir (1949/2000) immanence takes form as staying inside, not breaking out from something. To break free, requires a slide between immanence and transcendence, but women are often given conditions where they are torn between freedom and alienation, transcendence and immanence (Moi, 2008, p. 194).

de Beauvoir (1949/2000) points to Hegel and Kierkegaard, and notes that women have no reflection, so she is moving from the immediacy of love to religious immediacy (p. 507). Inspired by de Beauvoir, Søndena (2002) activates feminist realist ideas when connecting immanence and transcendence to reflection. Søndena (2002, p. 184)

describes immanent reflection as mirroring the already known, and transcendence as exceeding something. Transcendent qualities are referred to as powerful reflection. Thus, Immanence represents deep thinking, or ideas of how student-teachers often are socialised into their future profession, by mirroring other practices.

The above ideas are prominent in the first two articles in the thesis, whereby powerful reflection or reflection as transcendence shapes the arguments presented. Immanence was understood as thinking about or mirroring what is known, and transcendence understood as change and new thoughts/ideas. The material shift and ideas of differences from *within* and Deleuze's (2001) ideas of the world as immanent, gave other entrances to sensing, thinking and doing reflection.

However, Deleuze (2001) describes immanence as “not in something, to something; it does not depend on an object or belong to a subject” (p. 26). He continues underlining that immanence is always in its making, and it is life and nothing else. He further claims that transcendence always works as a product of immanence (Deleuze, 2001, p. 31), since immanence is about creating meaning and understanding. Constructing these ideas Deleuze was inspired by Spinoza, and the idea that “immanence is not immanence to substance; rather, substance and modes are in immanence” (Deleuze, 2001, p. 26). Immanence is in this understanding both ‘in’, and ‘in existence with the world, and of being together in or as part in a constant flow (Andersen, 2015, p. 93). This line of argument renders the idea of an outside impossible; there is no outside, and we are always within immanence. This again requires that philosophical thinking and conceptual development is immanent too. Thinking and philosophy are according to Deleuze and Guttari (1996) creative activities, since there is no original or ‘true’ meaning to be revealed. Knowledge, concepts and meaning are constructed, and the construction of meaning takes place on the many planes, or plateaus of immanence.

Immanence is considered as an infinite field, without stable divisions between elements, and where there is nothing to exceed (Sandvik, 2013, p. 48). Immanence involves reconfiguring reflection as something that is sensed, thought, felt through doings in education. This is due to how the subject of reflection restores transcendence (Deleuze

& Guttari, 1996, p. 75). Ideas of differences within immanence rupture the dualist structures in transcendental humanism, and it challenges traditional thoughts of what reflection in education is about. This thesis, in the nature of dealing with different ontological and epistemological views of reflection glides between and crosses over these two foundational ideas: the dichotomy of reflection as mirror versus change and transcendence, into flattened out ideas of human coexistence with the world, a constant production of differences within immanence and of being in flow. It is not about solving paradoxes, but turning things over again, to search for shifts in patterns. Thinking shifts in understandings of reflection, together with diffractions and refractions, offers a perspective that subtracts the differences. If we are in immanence, always already, it is timely to look at differences and change without connecting this to what Braidotti (2013) so generously describes as “delirium of transcendence from the corporal frame of the contemporary human” (p. 197).

To turn from transcendence in reflection towards immanence, differences and diffractions have imposed changes to my understandings of classroom teaching in ECTE through this study. The four articles are examples of how the journey towards other understandings has taken place. From an understanding of transcendence as the ultimate aim for classroom teaching i.e. to foster educationally wise practitioners. Then, abduction creates openings for flattened out perspectives in an immanent philosophy (Deleuze, 2001). In this theoretical outline, the intention was to disrupt different representations, and to offer other, widened out entrances to what reflection is about and how it is possible to sense, think, feel and do in ECTE. This will continue to be discussed throughout the kappe. In what follows, I provide an outline of the meta-perspectives informing the study.



## 4 Ethics, Ontology and Epistemology: Ethico-onto-epistemology

This chapter sits between the theory chapter and an outline of the methodology. It became emergent through the writing process, and it works to further position the dissertation. My engagement with studies about reflection led the inquiry to concerns with transcendence and immanence (de Beauvoir, 1949/2000; Moi, 2008; Søndena, 2002), and to immanence philosophy (Deleuze, 2001; Deleuze & Guattari, 1996), all of which contributed to advancing my understandings of ethics, ontology and epistemology.

Barad (2007) invites a consideration of the relationship between ethics, ontology (theories of being) and epistemology (theories of knowledge and knowing)<sup>28</sup> as entangled within the interdependent relations of mattering and introduces the term *ethico-onto-epistemological*. She further explains ethico-onto-epistemology as:

“an appreciation of the intertwining of ethics, knowing, and being – since each intra-action matters, since the possibilities for what the world may become call out in the pause that precedes each breath before a moment comes into being and the world is remade again, because the becoming of the world is a deeply ethical matter” (Barad, 2007, p. 185).

Barad is inspired by Haraway (1988, 1997, 2004), and ideas about how human, non-human and more-than-human binaries materialize alongside each other. Becoming and knowing are understood as in a state of entanglement and interdependence, meaning that we, human, as well as non-human and more-than-human, are always in on-going co-constitutive processes, affecting each other (Lenz Taguchi, 2012, p. 271). From this understanding, ethics are given a central position, actively intra-acting with knowledge production, wherein knowing, being and ethics (doing things, responsibly) becomes indistinguishable. Within this, I entangle as a researching-body, attempting to articulate

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<sup>28</sup> This explanation of ontology and epistemology is based on Lenz Taguchi (2010); Rhedding-Jones (2005).



what happens and what was possible to sense and think. This again, influences the possible interpretations of the world here and now, in research.

In perspectives that flatten ontologies, knowing, being and ethics become indistinguishable (Palmer, 2016, p. 286). In this study, seeking to flatten ontologies has insisted upon an active questioning of how different perspectives, understandings and ways of seeing the world produce each other. According to Palmer (2016, p. 286) ethico-onto-epistemology is Barad's immanent theory. She clarifies this as the de-centring of human relations and human beings, i.e. that no body or thing is privileged, or stands above others.

Flattened ontologies present serious considerations for how science is understood. Taking up this framework allows this study to reach beyond reductionist, dualist ideas of reflection as either mirror-or-change. Flattening ontologies creates openings for other concepts and ideas about pedagogy in ECTE to find expression. This does not discount the perspectives present through articles 1 and 2, rather, it opens out for other ideas to be included.

Ethics, like diffractions are about seeing, feeling, touching, tasting, smelling, hearing, and otherwise sensing different phenomena with the mind's eye (Barad, 2007, p. 388). Barad's ethics builds upon Levinas' understandings of responsibility, as an obligation and the ability to respond. She expands Levinas' ideas by asking for an "ethic of worlding" (p. 392), and arguing, "Matter itself is always already open to, or rather entangled with, the 'Other'". She continues "Ethics is [...] about responsibility and accountability for the lively relationalities of becoming of which we are a part " (Barad, 2007, p. 393). To illustrate with an example, 'the sticky story' in article 3 became an ethical challenge to write, since to decide to write it challenged my understanding of ethics in research. Thinking with flattened ontologies helped, to dwell with the material elements of the micro-moment changed and widened out both the epistemology and ethics within the stories. The material shift opened for a clearer ethical approach, which opened out the story for multiple understandings of teaching in university-classrooms. Such a shift entailed leaving behind cause-and-effect linear thinking (Blaise, Hamm, & Iorio, 2016, p. 33), and for this

study functioning as a placement of matters, subjects, objects in an agential and material-discursive classroom environment, re-configured my understanding of research.

Reading Haraway offered other perspectives that allowed for ethics to be *sensed*. My reading of Haraway's reveals that she is deeply invested and persistently writing with, about and for ethics. Like Barad, Levinas provides the ethical foundation to Haraway's work but he is never made transparent (Grebowicz & Merrick, 2013, p. 98). Ethics becomes actively at work in Haraway's (2008) on-going negotiations, or as what she describes as "in the whole ontological apparatus, in the thick complexity, in the naturecultures of being in technoculture that join cells and people in a dance of becoming" (p. 138). Her ideas around 'becoming with' are crucial. And especially her call for reconfiguring, instead of merely getting beyond, there is an urgent need to stay with the trouble (Haraway, 2008, p. 17). These ideas have inspired and underpinned the construction of the kappe and have insisted that I revisit, grapple with, and creatively rework ideas about reflection in ECTE in Norway.

#### **4.1 Research: 're'-positioning**

As I claim in chapter 2.6, this project follows reflection into teaching in ECTE. Following reflection opened for flattening out perspectives on research and further to place the project within abduction as a methodological frame, where different theories and research materials are of interest, regardless of the epistemological positions they represent. Therefore, a flattened out ontology also gives room to investigate different theoretical resentments and let them play, intermingle and generate other ways to encounter the world. Together theoretical traditions and concepts work within different immanent plateaus. In the articles and here in the kappe, I have provide examples of a mix of different epistemological and ontological representations and conceptualisations of reflection and diffraction working together.

In chapter 2.6 I write that Barad (2003) turns her focus towards questioning diffraction rather than reflection. As shown both in chapter 2.5 and 3.2.2, also gathers influence from ideas of refraction (from optics) as Lafton (2016) promotes, building on ANT, and

Latour; and further from Grütters (2011) who crafts her research foundation on hermeneutics. When following refraction and diffraction, different knowledge is at play, often constructed by researchers working with feminist, and/or new materialist and/or posthumanist theories. One example is Barad (2007), who positions her research in an agential realist, feminist and posthumanist framework. Bergstedt (2017) describes posthumanism as challenging humanism, problematizing it and further developing it, while humanism is always a constant recurring part of the concept. “Which in turn may mean that ‘post’ can be seen as something more, something added, and thus also develops humanism into something even more human” (Bergstedt, 2017, p. 11, my translation). Also Haraway (2008, 2016) defines her work within a feminist field, and to make this more complex, Haraway, like Barad is drawing upon agential realists’ ideas, but Haraway (2008, 2016), unlike Barad (2007) is not identifying her research within a posthuman positioning.

A critical point with a flattened out, or flowing positioning, is that it allows for an active resistance to aligning too squarely with one theoretical orientation. When arriving at flattened philosophies, and exercising an ethico-onto-epistemology, I am required to constantly question my ability to ethically respond to all aspects of the research I am undertaking. I must persistently grapple with how to enact sensibility in my research endeavours, including the writing of this kappe.

Feminist researchers such as Alaimo and Hekman (2008), Barad (2007), Haraway (1997) Hohti (2016); MacLure (2013b); Osgood (in press); Osgood and Giugni (2015); Sandvik (2013, 2015); C. A. Taylor (2016) among others, refuse the idea that humans are separate from other actors. They explore the ways in which humans relate to non-human, or more-than-humans, such as material, organisational and temporal actors. Such ideas inspired shifts in my epistemological and ontological position when working with research materials. It also inspired an orientation towards feminist perspectives. Feminist thought and philosophy have inspired the positioning of the thesis from the outset, first from historical perspectives on ECTE, as presented in chapter 2.1. Then through feminist lenses offered by Søndenå (2002, 2004). The feminist projects offered by Barad in article 3, and

Haraway in article 4, further strengthened the feminist threads running throughout. This study has been significantly informed by the work of a range of influential feminist scholars.

The different knowledges forming the foundation of the thesis coalesce in places and collide in others, but navigating ways through the multiple approaches to 'reflection' in education has informed both the shape and content. Haraway (2008, 2016) encourages "staying with the trouble"; which I consider to be a call to continuously re-think thick complexities, of reflection, diffraction, refraction, materiality and feminism and of ECTE. In what follows, I rethink the methodology and methods elucidated from the positioning outlined above.



## 5 Methodology

Methodology is a concept activating methods, values and ontology/epistemology and are mainly about choices (Koro-Ljungberg, 2016; Rhedding-Jones, 2005). The purpose of this chapter is to connect meta-theoretical matters from the previous chapters to various methodological and empirical aspects of the research-project. This chapter is not a translation of the theoretical background, but discusses empirical and theoretical aspects as part of methodological questions. This is both to visualize how the shifts in the theoretical framework worked on the material and how it worked on understandings of research strategies.

However, Koro-Ljungberg (2016) stresses that “the methodological work needs to stay in motion and under constant inquiry and questioning” (p. xx). Questioning methodology is about questioning what the research is for, and to re-engage in the research question is a continuous feature of the project<sup>29</sup>. To construct the articles insisted upon a constant questioning about what the research was for, and again through encounters with different theoretical approaches, different analytic approaches, and re-engaging ‘data’ invited an never ending curiosity about what research is and what it does. To employ abduction into methodology questions how we sense, think and do reflection in ECTE, this has been subject to change following encounters with empirical, theoretical, ethico-onto-epistemological and methodological questions and choices. In what follows, I outline abduction, as subsequently guiding reflection and diffraction as both theoretical and methodological concepts. Abduction follows by other methodological concerns as reflexive and diffractive strategies and re-telling of events. I then re-visit methods, research materials and analytic processes in the final section of this chapter. As a kindergarten teacher with some years of experience from teaching pedagogy in ECTE I had experiential and theoretical knowledge of the field I was entering, my positioning in the project is discussed throughout this chapter.

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<sup>29</sup> See Chapter 1 and the discussion in 1.3.1.

## 5.1 Abductive, Reflexive, Diffractive (and) Storytelling

The methodological framework shaping this thesis is underpinned by the following four concepts: abduction, reflexivity, diffraction and storytelling. Together they work to provide an explanation for the various methodological choices. Further, they work to connect the articles, and to tie the study together whilst recognising the significance of shifts in theoretical entrances that shaped the study as it evolved.

### 5.1.1 Abduction

The project cannot be said to be empirically driven (inductive), nor have a clear theoretical drive (deductive) (Alvesson & Sköldbberg, 2011). Abduction is a way of describing the process between the theory, philosophy, methodological approaches, the collection of data, and the following processes analysing data. A kind of material/theory interplay (Alvesson & Kärreman, 2011; Brinkmann, 2014). Abduction can be termed as research logic and understood as the choices coming out of breakdowns, situations when there is no recipe, when theoretical ideas, or empirical findings do not fit and new theoretical extensions can provide new insight. It is not data-driven, nor theory-driven but “breakdown-driven” (Brinkmann, 2014, p. 722). It often occurs when researchers find something abnormal, or different, something that does not fit with what was expected<sup>30</sup>. It is strongly linked to pragmatic theories, and as Pierce (in Project, 1998) claims, “if you carefully consider the question of pragmatism you will see that it is nothing else than the question of the logic of abduction” (Project, 1998, p. 234). As outlined in the introduction and in chapter 4, this research project is not grounded in a pragmatic research tradition. Rather, it involved following lines of curiosity, encountering stumbling blocks and moments of deep wonder at what else (Manning, 2016) might be going on. This approach is reminiscent of the practice of “thinking with theory” offered by Jackson and Mazzei (2013). They argue that thinking with theory is about considering theory, data and method *together*, as “on the move, keep things *becoming*” (Jackson & Mazzei, 2013, p.

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<sup>30</sup> As e.g. the sticky story in article 3 and the micro-moments discussed in article 4. Where the stories about the boy on the beach, and the near-conflict among the students sat in tension with the rest of the film.

270, author's emphasis). To follow lines of curiosity, in a process of *reading with theories* is a situational and ethical practice, with the main objective being to “trouble something in the hopes of making it better” (Nordstrom & Ulmer, 2017, p. 2).

In article 1, I found that different theoretical understandings, findings and discussions in research projects persistently altered and expanded ideas about how reflection works in ECTE. This ruptured my understanding of reflection as something permanent, fixed and residing, and in retrospect can be considered a form of abduction. In article 2, both in constructing the strategies for analysing interviews and the final discussion of the stories was a material/theory interplay, where theories about narratives and reflection inspired the use of interviews differently. Here breakdowns are a central concept. Breakdowns as mysteries, surprises and inputs that do not match the expectations, and forces the researcher to try other strategies and adjust their plans (Alvesson & Kärreman, 2011, p. 19). The abductive approach continued to grow stronger through working with article 3, where a turn towards diffraction, inspired by reading Barad (2007); Lafton (2016), Lenz Taguchi (2010, 2012) and Otterstad (2012) again activated further studies of the concept.

For article 4, abductive faltering inspired me to encounter student-teachers' work in groups differently. Reading Haraway (1997, 2004, 2016) and her SF-philosophy was transformative, and provided the means to study reflection through other and different optics, by focusing on student-teachers as part of a world outside the classroom involved turning to different stories from a carrier-bag-lady practice of storytelling. Working abductively also made me aware of how the analysis process moves differently. Here strings figures and Cat's cradle opened up to collect and activate much more varied empirical material, and the empirical material again inspired me to read theories differently. For the thesis as a whole, abduction has been a way of working methodologically and an opener for following the research. Abduction as a methodological concept has worked to create interdisciplinary possibilities, giving access to combinations of differences in knowledge, ways of seeing the world, ethical decisions and connecting this with activities in university classrooms. It has provided access to



embracing flattened ontologies and therefore viewing/encountering/enacting research in radically different ways.

### 5.1.2 Reflexive and diffractive ‘strategies’

Reflexivity and diffraction were active concepts that were put to work in how the research was undertaken. Whilst working with these concepts provided the focus of the study, they also become productive methods in and of themselves. Reflexivity and diffraction worked as optics for studying different methods and for evaluating my role as researcher. Studying classrooms in ECTE required some deep thinking about how to be a researcher, researching a known field. It made it necessary to turn the lenses backwards. This inspired working to adopt an reflexive methodology, requiring greater effort in how to interpret and reflect over the researcher’s own political, ideological, meta-theoretical beliefs, and how the researcher makes use of and understands language (Alvesson & Sköldbberg, 2011, p. 480). Throughout the work with both article 1 and 2, the focus was on reflecting over methodological questions, methods, theories, my personal beliefs and so on. This meant that experiences of ethical issues provided the framing for the research, because the reflexive lens mirrored my questions back to me. Coming back as the same, or refracted and so offering more nuanced accounts, which forced me to rethink my practice.

Reflection offered entrances both to studying it as a theoretical concept, a concept in action in the classroom, but also as a lens to think through my own, personal interference and the mixing of others ideas and thoughts with my own thought thoughts. Writing article 2, it became necessary to think through whether and to what extent what I discovered through my analysis was the same, i.e. good practice, based on personal experiences. I forced myself to re-analyse, in an attempt to avoid grouping research materials into what I recognised as good practice, and instead searching for differences in the material: re-thinking (Haraway, 2008), become an ethical strategy.

Becoming with, as a philosophical argument of diffraction also became a methodological strategy since it is specifically attuned to differences and their effects in knowledge-making practices (Bozalek & Zembylas, 2017, p. 112). It inspired me to think differently

about analytic patterns (Barad, 2011, p. 445), and it generated practices of trying to track differences and where differences start to form new patterns. The shift in theoretical foundation in articles 3 and 4, and the placement of diffraction in the project, underscore how the researchers positioning has changed. Working with a diffractive methodology, and turning the gaze towards materiality and affect was helpful in re-thinking reflection in ECTE-classrooms. Diffraction as a lens for research opens for other, less human-centred accounts. My understanding of diffraction and diffractive patterns are constantly evolving and mutating through encounters of working with it. It challenges the position of data, and what counts as data (Lather & St.Pierre, 2013), and forced me to understand it as “a constitutive force, working with and upon me” (Lenz Taguchi, 2012, p. 274). Through such diffractive patterns, my experienced-based knowledge become less interesting, less certain and open to reappraisal. I turned from a focus on representations of the known, and worked to force myself to let go of certainty, linearity and structure and instead allow materiality and affects to tell other stories as I allowed myself to become with.

### 5.1.3 Re-telling events

A fascination with storytelling and the potential for narratives to function within research worked as a force pulling and pushing the project in various directions. Narratives or stories can according to Tamboukou (2015) be described as force, as crucial for opening up and offering possibilities. In the construction of article 1, how researchers retold events from gathering empirical material, was crucial to understand how reflection was taken up in different research work. Their narrative performances shaped what I again re-told. When writing article 2, I anticipated the project would be more connected to narrative methodologies. Abductive moves inspired me to experiment with different narrative methods, inspired by a variety of researchers, including: Bruner (2004), Czarniawska (2010), Osgood (2012), Polkinghorn (1995), Riessman (2008) and Souto-Manning (2014). The idea was to undertake a thematic narrative analysis to find identify commonalities and differences in and across the interviews.

Inspired by Deleuze, Tamboukou (2015, p. 96) suggests events, or what stands out from the ordinary and opens up for diversity and new meaning, is interesting to pursue in

narrative research. Starting to study feminist new materialist perspectives, attuned me to lingering over and stumbling across minor events, or what Davies (2014a) describes as micro-moments. Micro-moments further underline connections between the re-telling of events in all four articles. In all four events<sup>31</sup> from the empirical work, as teacher-educators narratives, student-teachers' narratives, researchers' narratives, materiality, and classrooms variously were retold (and reconfigured in the case of the later articles) to shed new light on the concept and practice of reflection in ECTTE.

In an event it is often what is in the middle, or movements in between, that are of interest (Tamboukou, 2015, p. 95). This is discernible in articles 2, 3 and 4. It is not the entire story, but where moments get thick and dense, that is of interest. In article 3, the concept of 'sticky stories' emerged as a means to convey a feminist new materialist approach to reconfiguring stories about reflection in ECTE (Moxnes & Osgood, 2018). Sticky stories refer to dense moments, in the middle of something, where material-discursive-semiotic intra-actions are entangled and produce sticking points with which to grapple. It also refers to how some stories adhere themselves to the researcher, insisting that the affective charges, the curiosity, the peculiarities of that micro-moment be fully attended to. It also alludes to sticky affects (Kofoed & Ringrose, 2012) the sticky knots (Haraway, 2008; Osgood & Giugni, 2015) and the string figuring method offered by Haraway that insists that we stay with the trouble presented by such sticky knots. It is not in search of neat answers, or firm conclusions but rather the goal is to open out our investigations so that 'reflection in ECTE in Norway' becomes an ethico-onto-epistemological adventure that can present surprises about what (else) is going on in the classroom.

Following diffractive lines, to read one event through another, was inspired by Barad (2007, 2014), Lenz Taguchi (2012, 2013), Lenz Taguchi and Palmer (2013) and Jackson and Mazzei (2013). I combed through events from university classrooms in ECTE and in doing so, I was hailed by a series of micro-moments. I re-read and in many senses reencountered these events and micro-moments through different and other events, both inside and outside the classroom. For article 4, the idea was to dive into the in-

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<sup>31</sup> Events = narratives, micro-moments

between in stories. Here SF-philosophy<sup>32</sup> and especially string figures (Haraway, 2004, 2016), and “a carrier bag practice of storytelling” (Haraway, 2004, p. 127) became entrances to study a classroom event and different combinations of events; to study what figured in knots in the on-going game of a Cat’s cradle<sup>33</sup>. The idea is that the story proceeds by letting unexpected partners meet, and search for continuations, instead of endings and beginnings (Haraway, 2004, p. 128). A strength of open-ended stories, are according to Tamboukou (2015, p. 101) the invitations to listen in new and creative ways, that in turn act as channels into open and radical possibilities.

## 5.2 Re-thinking methodological choices

So far, I have discussed the thinking behind and the construction of the methodological foundation. Now I turn towards activation of the methodology, through research materials. This involves the story of how I conducted the empirical study, for further analysed research materials. To provide an illustration of the different methods and voices, spaces and materials involved, figure 1 presents the gathering and processes of research materials:

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<sup>32</sup> Haraway (1997, 2004, 2016) developed the SF-philosophy, and string figuring is one moment here together with *science fiction*, *speculative fabulation*, *speculative feminism*, *science fact* or *so far*. In article 4, this philosophy is considered as both methodological entrance and experimental practices. See article 4.

<sup>33</sup> I elaborate on these philosophical concepts in article 4.

<b>Participators</b>	<b>Methods</b>	<b>Research material</b>	<b>Empirical examples</b>	<b>Where is it used</b>
111 articles, text books, PhD thesis, or book chapters	Text-study	A matrix categorising reflection in education  72 pages of textual analysis	Small stories, theoretical background, methods aims and results	Article 1, (but also in article 2, 3 and 4)
10 teacher-educators in ECTE, myself and an audio-recorder	Interviews	132 pages of transcripts	Excerpts from all interviews used as background for a constructed story of examples of how some teacher educators works with reflection	Article 2
9 teacher-educators, student-teachers, classrooms, materiality in classrooms	Observations	102 pages of transcribed field notes + media-articles + memory 'data'	Some events presented as sticky stories	Article 3
3 student groups (with 4 to 5 student-teachers in each), camera, classrooms, materiality	Video-observations  Recall interviews	385 pages of transcribed text from filming + field notes + film cuts and, and, and (social media, everyday life, dolls, markets)	Some events presented as micro-moments	Article 4

Figure 1<sup>34</sup>

Figure 1 provides an overview, in what follows I discuss the content presented in the table. First, from how methodological choices guided and initiated research methods and what were considered 'research materials'. Thereafter, I discuss the processes with the empirical materials, such as what happened with interviews, observations, filming and recall interviews, after it was collected.

### 5.2.1 Methods

The fieldwork took place during the first two years of the project. University and university college classrooms provided the site for the empirical studies. Ethnography, is often applied to studies of social practice, when cultures are studied, and where the researcher describes the patterns of shared and learned knowledge (Creswell, 2013, p. 90). The empirical material from university classrooms was collected through

<sup>34</sup> Developed inspired of Sandvik (2013, p. 73)

ethnographic inspired fieldwork, and methods including interviews, observations, video observations and re-call interviews (Cherrington & Loveridge, 2014; Haglund, 2003) were the chosen strategies. At this stage, the aim was to investigate tools for reflections in ECTE, and I thought that interviews with teacher-educators, observations of teaching in classrooms and observations of student-teachers when they worked in groups, followed up by re-call interviews could provide insights into tools that activated reflection in teaching.

I studied ethical procedures (NESH, 2013), and tried out the methodological approaches through interviewing a teacher-educator and filming a student group when doing group work followed by a recall interview. The experiences I gathered through the pilot study created awareness of myself as researcher and guided the preparations for later interviews. Centre for Research Data (Norsk samfunnsvitenskapelig datatjeneste, 2017) was helpful with information to construct necessary interview guides, an observation guide, film guide and re-call interview guide, and applications were approved.<sup>35</sup>

The fieldwork took place in six different universities and university colleges across Norway. I interviewed 10 teacher-educators teaching pedagogy, and followed nine<sup>36</sup> of them into their classrooms and observed them when teaching student-teachers. Later, I followed and filmed three student groups; when they were doing study-related tasks, and met up with them for re-call interviews. I intended to recruit participants sending out a request to some possible universities/university college institutions, describing my project and intentions. It turned out to be a complex process. First, to get access to classrooms, involved the cooperation of teacher-educators and later their help to find students willing to contribute. Uncomfortable silence was the response from both groups before successfully negotiating access. The initial plan to film teaching in classrooms, was revised so that I became an observer jotting down as much as possible on paper and in notebooks<sup>37</sup>. The interviews with the teacher-educators, and recall interviews with

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<sup>35</sup> These guides and receipts from NSD is appendix 9.2.

<sup>36</sup> One of the teacher-educators got a long term illness shortly after the interview and before the decided observation, so we never managed to arrange the classroom observation.

<sup>37</sup> Here, the “thing power” (see Bennett, 2010) acted, even without the thing (camera) being present.

student-teachers was semi-structured, as we followed the interview guide loosely. I conducted the interviews depending on what was convenient for the participants.

However, I was not particularly aware when interviewing and observing whether I was looking at their world with them, rather than at them (Haraway, 2015, p. 6). I thought of recall interviews as a means to look at the world, but I was unable to convey these ideas, since student-teachers often cancelled appointments or did not reply when I contacted them. On one occasion, one student-teacher told me that she ‘felt very uncomfortable both when being filmed, and when watching herself on the film, and that she will not come back for our next appointment’ (*research diary note*). Happenings like this inspired me to search for other theories that could help me to understand the situation differently. I needed concepts such as intra-action, to see that the camera and my presence intra-acted to produce uncomfortable affects (MacLure, 2013a).

I understood the situation differently when I started to read about materiality’s vitalism (Bennett, 2010) as it visibly participates beyond what is expected for camera and recording devices to do (Nordstrom, 2015b, p. 397). For myself as a researching body, the first sight of material interferences was to realise how bodily the observation process became. Feeling the benches under me, the pen in my hand, how focused I became on what was possible to hear and see. When filming, the physical shape of rooms and furniture, where sockets were placed, light, temperature etc. actively participated in the research process. The material awareness diffracted my knowledge about observing and interviewing. It made me aware of that I often turned attention towards the camera or the sound-recorder, worrying whether it worked and whether the position of it was good enough (Nordstrom, 2015b, p. 388). This awareness also made me realise that the research question needed adjustment, towards what actually was going on in the classrooms. I was no longer working only with human centred tools for reflection.

When looking at the roles I played when observing in retrospect, I realised that as an observer I always participated. The philosophy of “modest witnessing” (Haraway, 1997) opened for awareness that observations and interviews, in terms of ethical responsibility must be rethought (Blaise et al., 2016; Osgood & Giugni, 2015). My understanding of

being a modest witness is about response-ability, in company with significant others<sup>38</sup> (Haraway, 2008, p. 72), and “to go visiting”, a thinking which enlarges the competences of all players (Haraway, 2015, p. 5). This is again connected to everyday practices and is always about being present (Blaise et al., 2016, p. 22). Haraway (1997) writes that; “reflexivity is not enough to produce self-visibility. Strong objectivity and agential realism demands a practice of diffraction, not just reflection” (p. 268). As moving from being an observer towards modest witnessing, demands awareness of my participation, but at the same time, not making it any grander than it was. For the choice of research methods, modest witnessing means that I first have to recognise that I am there, as an active agent.

### 5.2.2 Research materials

Making use of different research methods generated large amounts of research material. Data is described as one of the key elements in the grand narratives of research (Koro-Ljungberg & MacLure, 2013, p. 219), but it is also a great inspiration for further textual work. Questions about whether data/research materials are accountable or trustworthy, valid and relevant, has also influenced this project, and lead to rigorous, careful and time-consuming processes. Keeping records and wondering whether what I find as research materials are ‘good enough’, ‘relevant enough’ or ‘transparent enough’. Processes with research materials was often repetitive, in form of transcription and re-transcription of field notes, interview-records and films. The repetitiveness was necessary to check if what I wrote corresponds with what was said and happened. I first focused on words. Later, after recognising the significance of the non-human and more-than-human in the classrooms demanded that I re-watch films, and re-read notes to check *what else* was there to trace the mattering of material and register the affective charges. Similarly, Hohti (2016, p. 41) found such rethinking to be necessary in her study to become aware of entanglements. Making lists and keeping records over endless pages<sup>39</sup> was a result of how I understood research materials should be validated. When coding, identifying themes, trying to impose order on the data. I was struck by how resistant the data was

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<sup>38</sup> Haraway (2008) identifies significant others as materials, critters, plants, animals, atmosphere and so on.

<sup>39</sup> See column 3, in figure 1,



to being sifted, sorted and categorised. Nevertheless I ploughed on, by reconsidering the process and restructuring the content several times I realised that regardless of how I approached the task I was beholden to a mode of representational logic that constructs 'data' as analysis of "passive objects waiting to be coded" (Koro-Ljungberg & MacLure, 2013, p. 219). It was not until writing articles 3 and 4 that another logic presented itself via a mode of diffractive inquiry.

However, the core 'data' of this study consisted of 132 pages transcribed text from interviews with teacher-educators, 102 pages of transcriptions of field-notes from observations, 228 pages transcriptions of films of students doing group work and finally, 157 transcribed pages from the filming of re-call interviews<sup>40</sup>. In addition to all the pages from different attempts to analyse the text-materials for article 1. Interviews and observations, films and re-call interviews brought up and awoke different knowledges and affects. The number of transcribed pages does not pay justice to the sensed, thought and activated regards empirical materials. But, the transcribed research materials become helpful to re-awaken memories, affects, sensing's and atmospheres from the many meetings.

### 5.2.3 Analysing research materials

Analysing research materials can be described as re-thinking it, to search for what else is there. To re-think research materials has been as to go visiting (Haraway, 2015) in the research materials, over again. Koro-Ljungberg (2016) suggests as a researcher begins to shift control of data, both data and analysis of data becomes multiple and infinite (p. 45/46), and doing analysis is somehow to start on a never-ending journey.

To choose strategies for analysing were abductive moves, trying different strategies, and again changing strategies in meeting with different materials and theories. For article 1, as a newcomer into textual analysis different 'formula' or strategies were tried out before ending up following Bloomberg and Volpe (2012) suggestions<sup>41</sup>. The stumbling processes

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<sup>40</sup> See figure 1

<sup>41</sup> See article 1

involved finding out how to handle a text review, constantly checking actual journals for fresh research, and following others suggestions was necessary to identify common features and making others' research manageable<sup>42</sup>.

Analysing interview transcripts for article 2 also entailed different coding procedures. Here research materials were systematised on interpretations of participants' ideas and experiences (Souto-Manning, 2014, p. 162). I worked to identify the 'what' of the interviews and to reveal frequent connections between different elements (Czarniawska, 2010, p. 241). Since the contribution was a story based on data from 10 interviews, a choice in the analysis process was to create individual narratives for each of the interviewees. This was done in an attempt to get closer to each contributor's 'voice', and to identify each educator's special contribution to how they work with reflection. Treatment of these individual narratives also attempted to avoid generalising the contributions (Riessman, 2008, p. 60), which I nevertheless seemed to fall foul of. Applying powerful reflection (Søndenå, 2002, 2004) and social processes, through receptive reflection and reflexivity (Kinsella, 2012), worked to analyse the constructed story and to further enquiries into reflection in ECTE. The 'where', 'when' and 'if' of the interviews (Mazzei, 2013, p. 739), and intra-actions of materiality is just briefly considered in the analysis.

For articles 3 and 4, sensing what counts as research materials was much more acutely attended to than had been the case with the earlier articles. When re-encountering research material from observations into written text, the lines between the researcher and data became entangled and forced me to sense, think and do differently (Nordstrom, 2015a, p. 167). The analysis process was characterised by processes of writing, re-reading and re-writing, as an abductive dance between different theories and research materials. The diffractive analysis did not offer any methodological steps to follow, and the analytic process is not possible to give in advance, it is happening through intra-actions (St.Pierre & Jackson, 2014, p. 717). This way of analysing is to stay within the text until something

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<sup>42</sup> Also, the process using these texts to produce lists as explained in the previous section, is considered as part of the analysing process.

started to “gradually grow, or glow, into greater significance than other” (MacLure, 2013a, p. 175). Such an analytic process can throw the researcher into a state of discomfort and uncertainty. The sticky story (article 3) and the micro-moment, forming sticky knots in the string figure (article 4) developed from affective charges. ‘Sticky’ goes some way to explain the analytic process, whilst I was endeavouring to find something in the data (and failing). The affective charges of specific micro-moments, moments that did not immediately appear to have anything to say about reflection in ECTE in Norway, took on a haunting, troubling quality that reverberated and possessed the power to transport me back to that moment, and to thinkfeel deeply. Once the micro-moment stuck to me it became impossible to ignore, it generated unease and curiosity, something that I needed to think about and think with. Pursuing the strings presented within these micro-moments underlined the generative possibilities inherent in registering the power in the non-human and more-than-human elements in research encounters.

The analytic processes unfolded as a discovery of the unexpected, a deep-thinking challenge, due to what was possible to see, and a constant re-doing of analysis. In this process the overarching research-question re-emerged. The analysis changed from a predictable process of categorising words and actions; into sensing, thinking and doing research in a way that mobilises a researchers’ ethico-onto-epistemology – I became entangled in the research in ways that ‘researcher subjectivity’ fails to recognise. When navigating a way through the ‘data’ curiosity for materiality and how worlds get made (Haraway, 2016) became a driving force. It became a search for what could open out ideas about reflexivity and professionalism in ECE<sup>43</sup> differently, by attending to diffractive patterns within ECTE classrooms. ‘Coding’ and a preoccupation to divide, group or measure falls short of what is needed. Research from a new materialist perspective involves actively reading theories, reading field notes and transcripts, thinking deeply about inter and intra-connections, reading the research of peers and experiencing what Hultman and Lenz Taguchi (2010, p. 535) call a diffractive way of seeing<sup>44</sup>. To activate a

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<sup>43</sup> ECE=Early Childhood Education, and is relating to student-teachers in ECTE further field of practice.

<sup>44</sup> Hultman and Lenz Taguchi (2010, p. 535) explains it as: “[w]hen reading diffractively [...] we look for events of activities and encounters, evoking transformation and change in the performative agents involved”.

carrier-bag practice of storytelling (Haraway, 2004, p. 127) invited a different set of analytic processes<sup>45</sup> which allowed unexpected research partners and irreducible details (Haraway, 2004) to find expression alongside more conventional 'empirical data' expressly collected to answer a predefined set of questions. Opening out what 'counts as data' insisted upon a reappraisal of how reflection is produced and what research strategies can be deployed to investigate it.

The gathering of research materials, studying them, writing articles and persistently worrying about misunderstandings has informed this chapter. Staying within the constant need to grapple with research materials, to flow with it, challenge it, and try to re-think is at the heart of this particular research study. Abduction, reflexive, diffractive (and) stories/events are working as theories, methodologies and analytical strategies for the articles. Working with them or with-in them is constantly changing the perspectives on what is studied; how reflection is sensed, thoughts and activated in ECTE.

In what follows, I will shortly present, synthesise and discuss contributions from the four articles.

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<sup>45</sup> See article 4.



## **6 The Articles and their contribution to the field**

This chapter presents the contributions of the study. First, by delving into the themes of the articles where each is a sub study that elucidates the overall research question differently. Here I present some reflections about the contributions each article makes. I discuss the contributions as aggregated, across the articles, through sensing, thinking and doing.

### **6.1 Article 1**

Article 1 *Reflection in Kindergarten Teacher Education* (Moxnes, 2016) questions how reflection is understood and constructed in different academic literature and research literature about kindergarten teacher education. I consider it the first step into abduction as a methodological and analytical concept, due to how it uses research from different theoretical fields, following the aim of searching for different understandings of reflection, and differences in how it is applied in education. Looking back through a diffractive lens, the understandings and reasoning of reflection are spread and opened out to new possible patterns and understandings of the concept. A sign of the spreading out is the use of theories, and research, guided by different philosophies of science. I try to deal with this by dividing the literature into three categories, but this is only ever speculative and a deeper discussion of the categories is not beyond reach – they refuse coding, categorisation – there are leakages and overlaps that hint at the diffractive nature of the literature review that has been undertaken.

The article sets out to question how reflection is understood, and constructed in different literature about ECTE, the aim was to investigate how the concept contributes to teaching. Within the article I suggest several practical approaches to addressing reflection. I describe reflection in ECTE as complex and as something that needs to be deeply understood, in order to reach this deepened understanding I propose different methods to strengthen student-teachers' reflections. As discussed elsewhere, methods can easily be 'step-by-step' recipes for what works. Questioning recipes for reflection is a paradox, since when writing the article I was wedded to ideas that student-teachers

need explanations about what is expected of them when they are told to reflect. In the article I make a distinction between; theory as a tool for reflective practice versus theory as a tool to get meta-views over practical experiences. Here the initial steps to connect reflection to debates of immanence and transcendence<sup>46</sup> occur through the focus on change, exceeding the known, deep thinking, and terms such as ethical and critical reflection. In the final discussions different suggestions for how to strengthen reflection in teaching is connected to the teacher-educators' role preparing student-teachers for their future practices, making decisions, and working on the floor in kindergartens.

## 6.2 Article 2

Article 2, *'There are always different perspectives' – A study of how teacher-educators teaching pedagogy work with reflection in University classrooms* (Moxnes, 2017) addresses the question: What stories do educators in ECTE pedagogy tell about working with student-teachers to develop reflection? In the article a clearer definition of reflection is promoted than in article 1, and it therefore seeks to influence how reflection can be explained as a theoretical concept<sup>47</sup>. Inspired by feminist perspectives reflection is connected to change and new understandings, and further discussed as ethics and educational judgement. The relatively deep analytic and methodological part of the article generates multiple entries to teacher-educators' stories of thinking about, and doing reflection in teaching. The constructed story, 'Stories from Lines teaching', is the creative methodological grip of the article. Apart from this, the article offers descriptions of different teaching methods, and re-told thoughts from different teacher-educators, which again provides inspiration to re-think classroom teaching.

The research question for the article focuses on experiences. In the article, experiences are translated into stories, narratives or teacher-educators' narrations of memories. To combine experiences, as I do in the article is problematic, raising questions about who is represented with what in the text, and all the experiences, which are not retold. In retrospect, it is interesting that materialities, such as suitable teaching rooms and

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<sup>46</sup> See chapter 3.3

<sup>47</sup> See chapter 3.1

student-teachers use of their 'things' occurs. Materiality presents obstacles in teaching and is not used as something to think with. Critique of traditional lecturing and use of PowerPoints as a teaching method are another result of the study. It concludes that it is necessary to challenge student-teacher's perceptions of professional practice in the university classroom. Furthermore, it encourages teacher-educators to show themselves as virtuoso with confidence to display and discuss personal reflections in teaching.

### **6.3 Article 3**

In article 3, *Sticky stories from the classroom: From reflection to diffraction in Early Childhood Teachers Education* (Moxnes & Osgood, 2018), we search for a theoretical foundation which moves the perspectives further towards the significance of materiality in classroom teaching. Ideas of how reflexivity and professionalism in early childhood education might be opened up by attending to diffractive patterns within ECTE classrooms drives the text, and further expands the theoretical perspectives of the entire study<sup>48</sup>. This article attempts a diffractive analysis of events, or micro moments (Davies, 2014a) from observations in university classrooms, to further explore the ways becoming early childhood teachers are prepared for work in kindergartens. In this article narrative strategies are also explored, here micro moments in *sticky stories*, stress how matter comes to matter in surprising ways. Sticky stories are our creative grip, opening up for investigating diffractive patterns (Barad, 2007, 2012a) in teaching.

A critical retrospection is how easy we support Barad (2007), Lenz Taguchi (2012) and Otterstad (2012) in a reduction of reflection as only mirroring, which shuts down potential for change. However, in trying to identify evidence of reflection in the classroom-micro-moments, the limitations of the concept became apparent. To investigate diffractive lines, inspired of sensing of materiality like earphones, laptops, bags and bullet points opened for other readings, and re-thinking of actions in the moments. Such re-thinking inspired the discussion of how classroom teaching prepares students for their further practices in kindergartens. Sticky stories and unfolding

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<sup>48</sup> See chapter 3 and 3.2



diffractive patterns draw attention towards classroom teaching, and teaching tools such as PowerPoints, as something known and predictable. In the final discussion, we suggest that working diffractively can help teachers to exceed traditional patterns. The sticky stories unravel to offer an opened out discussion about how diffraction contributes to recognising educators and student-teachers as always in processes of becoming, in how it expands and alters understandings and views on professionalism.

## 6.4 Article 4

In the fourth article: *Storying Diffractive Pedagogy: Reconfiguring Groupwork in Early Childhood Teacher Education (ECTE)*, we focus on student-teachers and their reflective work in groups in university classrooms. Here we investigate affective flows and material intra-actions that unfold in micro-moments from the observations of student-teachers' groupwork, and how this interferes with reflections and diffractions. These micro-moments are considered through the SF philosophy offered by Haraway, which she developed over the past three decades (1997, 2004 and 2016). Specifically carrier-bag-practices of storytelling and a game of cat's cradle (string figuring) is put to work in this article to emphasise how skills of critical reflection are fostered in ECTE. Here it becomes a paradox that precisely the aims about reflective practice that govern ECTE seem not to be activated through groupwork and other student active working methods. To reach alternative understandings about groupwork the article introduces *diffractive pedagogy, rhythm, and plasticity*.

Introducing diffractive pedagogy, as our creative grip, into debates about ECTE offers a generative rupture; an opportunity to extend conceptualisations and practices. Such active forces generate trouble and uncertainties within a group, as unfolding in the string figure game. A potential strength of groupwork is that there is nobody to live up to, no model to mirror. This is maybe also a critical point, since student-teachers in this study were more unclear when working in pairs, without supervision. Furthermore, we suggest that student-active learning strategies can generate a depth of engagement for messy realities and again strengthen student-teachers ethical responsibilities. We find that the SF-philosophy visualises moments with which to think deeply about ordinary, everyday

happenings, and their interconnections to dramatic worldly events that standard lectures fail to provide. The article ends by asking what education gives student-teachers to think with, and how we support students in activating critical thinking. Before extending some ideas for a diffractive pedagogy that are less certain and more hopeful.

## 6.5 Meta-synthesis of contributions

The above summary offers an account of how each of the articles illuminates reflection in ECTE from different perspectives. 1: text/research, 2: teacher-educators' stories, 3: classroom teaching and finally 4: student-teacher groups. As discussed elsewhere<sup>49</sup> the research question changed throughout the project. Each article investigates a question or theme and these have again generated different knowledges, which have gradually pulled the project and research question in different directions. Scrutinising the articles made it possible to identify three related, but still different core-concepts. These are sensing, thinking and doing. Contributions from the articles is now summarised and opened out to further re-thinking.

### 6.5.1 Summarising sensing

Writing a synthesis of what the articles offers to how reflection is sensed in ECTE is about turning towards complexities. Complexities in what different theoretical understandings of reflection offers, complexities in methods featuring reflection, and complexities in attempts to organise reflection as a multifaceted concept understood from different philosophies of science<sup>50</sup>. Furthermore, sensing punctuates teacher-educators' retelling of experiences and challenges in their work. It pierces through teacher-educators' stories of working as bridge-builders, trying to adapt knowledge to students' individual needs. Sensing somehow also connects with becoming a virtuoso as a teacher-educator; sensing student-teachers, sensing teaching methods and sensing materiality when teaching. Sensing also refers to student-teachers that stumble with becoming professional. The turning point in this study was the sensing of intra-actions from materiality as forces in

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<sup>49</sup> See chapter 1.3.1 and 2.6 and 4.

<sup>50</sup> The articles just pinch out some ideas about different theoretical underpinnings.

teaching. Materiality as participating and enabling exceeds traditional patterns. Viewing materiality as vital and having the capacity to transmit aspects from the outside world into the classroom, through a diffractive pedagogy was a significant rupture in the study. Worldliness (Haraway, 2008) acts with uncertainty and presents endless troubling questions. Conflicts, in themselves offer potentially generative forces; conflict is not only fragile, unclear and confusing. Nevertheless, sensing is also transformation into something through the making, as an ongoing making of sense.

### 6.5.2 Summarising thinking

Reflection as thinking in classrooms-teaching appears in the articles connected to student-teachers' and teacher-educators' professional processes of becoming. Reflection has various functions, which are inspired by different intentions as a thinking tool in research and textbooks as well as in policy papers published by the Norwegian government address ECTE. Different theoretical understandings of reflection have either promoted the concept as pure thinking, or connected other more active, often feminist, forms of reflection to thinking. The teacher-educators' knowledge and competence for how to facilitate student-teachers' reflective thinking, is from different positions viewed as important. Discourses of reflective thinking connect with ideas of teacher-educators challenging student-teachers to think deeply, to undertake ethical considerations and/or think different thoughts. Reflection is both dependent on and distinguished from 'step-by-step' processes to work as a thinking tool in ECTE.

However, SF-philosophy and string figuring practices invite deep thinking about ordinary, everyday happenings and their interconnectedness to dramatic, worldly events. This also involves unpleasant and uncomfortable thoughts. Such unpleasant thoughts challenge thoughts of classroom teaching as known and predictable, and encourages re-thinking of teaching. Re-thinking offers an opened out discussion about a diffractive pedagogy, as a rupture for educators and student-teachers as always in processes of becoming within educational practices.

### 6.5.3 Summarising doing

The articles contribute different ideas about activations or doings of reflection. The multiplicities in teaching methods are abundant in the first two articles. In the third and fourth, the investigations of micro-moments offers deep studies of activation or practical 'doings' of two of these methods. The articles contribute ideas of doings as discussions, nuanced accounts of sharing verbalised thoughts, as questions where different perspectives on a case are discussed, and as activations of reflection into doing critical reflections become a cooperative project.

Doing reflection is expansive, and concerns teacher-educators in the moment, but also long after, in follow up, assessment, pastoral care, and the many other methods used to activate and encourage reflection. It is also about student-teachers interpretations and activations of such doings. Ideas of being in constant change and movement presents other possibilities to negotiate and re-think what is going on in classrooms, and works to exceed and expand traditional patterns. Classroom materiality offers other possibilities as doings, taking part in the teaching, as is discussed through laptops, bullet points, photo images on Facebook and a clicking pen. Student-active learning strategies can again generate a depth of engagement for worldly justice that standard lectures fail to provide. Doings of reflection are, according to article 4, in danger of being cut out from classroom teaching in the face of more cost-effective teaching options. The on-going changes to the materiality of ECTE offers a generative force, offering resistance to cost effective, neoliberalist perspectives on ECTE.

In what follows, the contributions and results from the articles will be in use into the discussions.



## 7 Discussion

The four articles have contributed differently to address the research question of this study; *how is reflection sensed thought and activated in university classrooms in ECTE?* In this chapter, I will sharpen the contributions from the articles through discussing

- 1) How is reflection sensed, thought and activated in ECTE, and
- 2) How can knowledge from this study contribute to teaching of student-teachers in ECTE in future practices?

The following discussion outlines the new knowledge to the field of ECTE this study offers. The discussion follows the logic of abduction, combining elements from different articles, and different approaches from the above chapters.

### 7.1 How is reflection sensed, thought and activated in ECTE

Here the contributions are further re-thought and sharpened, as a means to address the overall research question. In the discussion, I further investigate reflection through thinking, sensing and doing, and in the last part of this discussion, I invite a reconfiguration of pedagogy, where diffractive pedagogy works as a force, opening for differences where materiality and the outside world play active parts in forming the here and now in education.

#### 7.1.1 Sensing Thinking Doing reflection in the university classroom

Since embarking upon the PhD, a multiplicity of theoretical perspectives and methods for reflection in teaching has shaped the project. Studying the national guidelines for ECTE (Stave et al., 2012)<sup>51</sup> and how reflection is made use of established a detailed understanding of the concept, and also highlighted that multiple theoretical perspectives inform the field. In chapter 3, I introduced theories of reflection through three different concepts; freedom to think; in and on action; and reflection as change. Furthermore, I

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<sup>51</sup> See article 1, 2 and chapter 2

introduce diffraction and refraction into the debate. Various conceptualisations of immanence and transcendence underpin the ways in which the different concepts are put to use. In this section, these perspectives are in used to elucidate reflection in classroom teaching. I endeavour to nuance the theoretical concepts with the core-contributions from sensing, thinking and doing, only some theoretical concepts will be in use when discussing each perspective.

**Sensing** is summarised as complexities, virtuosity, retelling of experiences, sensing of teaching methods and materiality and the outside world. Further, I propose sense as a force, as on-going change or a constant re-making of sense. Barad (2007) refers to sense-making as mattering, and the material discursive. According to Bozalek and Zembylas (2017) matter is about head, heart and hands and are “engagement with care, social justice and seeing oneself as part of the world” (p.116). Bringing these thoughts into the classroom, sensing materialises as material matter and as being of the world. As the articles suggests, both material matters and sensing of the world is present in the classroom, taking part as active agents informing the practical implementation of pedagogy. A question inspired by article 4, is whether what is taught is connectable to worldly matters of today. St.Pierre (2013, p. 650) urges that language should be encountered differently, and this leads to questions about the extent to which teaching of pedagogy also is too much about language. What is needed are possibilities to articulate the sensed. Sensing is here re-written as complexity. To articulate complexities is a verbal challenge to fit in and explain nuances, but again it might open up possibilities to study these differences necessary to do diffraction in teaching through verbalised different analytic practices (Barad, 2011, p. 445), As constantly on-going re-makings of sense in a diffractive pedagogy, as a creative activity of immanence.

Feminist researchers providing the thematic foundation to conceptualisation of reflection is critical. These scholars connect reflection to mirroring the known, modelling others, adapting known patterns, and/or duplicating the thoughts of others (Barad, 2007; Haraway, 1997; Søndena, 2002). Further, concepts such as powerful reflection are offered as something to think with (Søndena, 2002). In article 2, powerful reflection is

activated as an analytical tool. The complexity of the concept was a challenge, based on the questions in the interview guide and on how teacher-educators replied in interviews<sup>52</sup>. From 'data' and research material, I tried to point to powerful reflections, without seeing it there in transcripts, extracts from narratives and in what in article 2 is called 'Stories from Line's teaching'. I did not dare to follow what I sensed as powerful reflection. Looking at the story in retrospect, and re-thinking what Line is telling about her use of different teaching methods; activates wonderings about whether there is something else, behind her use of teaching methods that might be suggestive of powerful reflection? Line is actually recounting her shortcomings and how she has changed her teaching, and ways of considering teaching. Sensing is heavily involved; in sensing how teaching methods work and are appreciated, and in how teaching is altered to better facilitate more powerful or critical reflection. Here ideas of transcendence, as breaking free from something (de Beauvoir, 1949/2000) or as change (Søndenå, 2002) might have worked to represent transcendence as something visible – as a visible change.

Becoming a virtuous kindergarten teacher on the floor, making decisions there and then, is also about sensing. Studying "the virtuosity of others" (Biesta, 2015a, p. 20) can be connected to sensing through student-active teachings, in classrooms. Through this thesis, student-teachers' engagement has worked as an indicator of how reflection works in teaching. This involves how student teachers express what they sense in the moment. In article two, this is expressed through the teacher-educators' storying. Article 4 elucidates it, through the discussion of how the outside world and materiality intra-acts with the student-teachers, and intra-acts on the student-teachers' group encounter. The discussion of the sticky-stories in article 3, gives another impression of sensing, where teaching methods fail to engage students or in some way prevents them from engaging. This again inspires questions about how judgement is conveyed and understood in teaching reliant upon PowerPoint.

Going deeper into 'sensing', underscores the significance of human relationality with materiality and affects in teaching. Materiality as always present; always being sensed

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<sup>52</sup> See article 2



and making sense. In interviews, materiality mainly occurred as problematic; wrong type of room, wrong furniture, noisy, or not working equipment etc. As article 2, 3 and 4 show, materiality was always already present in classrooms. Affects, as what starts or motivates sensing, or as touch that “moves and affects what it effects” (Barad, 2012b, p. 208), was always present. A touch is material-affective, as meetings between molecules, and how particles or molecules sense one another (Barad, 2012b, p. 208). This flattens out and mutates between human, non-human and the more-than-human, since it is all about the molecular and particle meeting particle. Sensing an affect is sensing a touch, the feeling of a chair supporting a body, the heat of a sunray through a classroom window, the touch from keyboard meeting fingers, the touch from the body sitting next to yours, the touch from an audio-visual expression, all particles. This is about “embodied sensibility in an encounter with the world” (Lenz Taguchi, 2013, p. 1107) forcing thoughts to come through. This is where the sensed diffracts teaching. In this thesis an understanding of how what is sensed works within and beyond teaching-methods and theoretical perspectives, has been crucial for studying how reflection is activated in ECTE.

Turning to **thinking**, the meta-synthesis reflection occurs as pure thinking, or thinking in meeting with challenges, differences, the unpleasant and uncomfortable, diffractive thoughts and finally, re-thinking teaching as always in processes of becoming. Presenting again the concept of powerful reflection (Søndenå, 2002, 2004), and reflection as freedom to think, free will, or a freedom ‘we’ have to achieve to think (Dewey, 1933). Through this thinking turned into professional practice and becoming virtuoso as student-teacher or being virtuoso as teacher-educator in the university classroom. Again, transcendence underpins the understanding of the education as a metamorphosis, where the student-teachers’ thinking exceeds into other levels. A curiosity rupturing the thesis manifested as questions about whether freedom to think is about student-teachers’ reflections as free to take up positions as virtuoso in their role as student-teachers. Individual autonomy, is according to Åsberg (2012, p. 9) an illusion. The role of being a student-teacher is as much about being a learner, where what is being assessed is their abilities to mirror the already known. As mentioned in the theoretical chapter, a conflicting point for Hostetler (2016) is whether we think about reflection as teach-able

and how we see the novice teacher or teacher student, and whether we judge them upon their abilities to articulate steps of reflection. According to the teacher-educators, in article 2, they appreciate and welcome student-teachers' thoughts and participation, and worked to try to activate this. The sticky story, in article 3, the PowerPoint-teaching that included only a few students, is constructed based on several observations, showing that educators welcomed activity. Student-teachers' different ways of showing engagement, or what can be seen as lack of, is also about using power to act differently. Some actively participated, answering and asking questions, others were quietly watching, and others seemed to isolate themselves from the teaching, disappearing into their devices. Claims that student-teachers previous schooling has taught them to avoid demanding experiences might also explain this scenario (Fredriksen, 2016). The groupwork in article 4 worked differently. Its force propelled the students to participate in various ways and share their thoughts within a group<sup>53</sup>.

However, Barad (2012b) emphasises that "[t]hinking has never been a disembodied or uniquely human activity" (p.208). Through the focus on diffraction, the advanced thinking-processes involve other forces including materiality and affect. Diffraction moves or breaks away from repetitions or ideas of reflection as mirroring also expands the thinking of reflection and opens out for differences. Diffractions work with ideas of immanence, on an immanent plateau, as always in its making (Deleuze, 2001, p. 31). In article 4, this is illustrated in the active participation of a photo image. It participates and diffracts the student-teachers' reflective thinking, and inspires a discussion of the 'pastpresent' presence, or the past, future and ongoing worldly matters as already present (Haraway, 2010) in teaching. The intention with the string figuring metaphor was to weave together pedagogy and arresting images from the world around and through student-teachers' utterings of thoughts. A diffractive pedagogy was suggested as slippery, contingent, relational, emergent, speculative and less certain than critical reflection. These ideas concern interruptions and diffract thinking, including that which is uncomfortable or unpleasant. Unpleasant and uncomfortable thoughts also acted in

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<sup>53</sup> I also find such engagement in the other films of groupwork, which are not used in article 4.

article 2 and 3, and through these, ideas of the unpleasant as a generative force with the ability to diffract the known were developed.

However, **doing** reflection is summarised as student-active learning strategies, sharing thoughts, methods, different perspectives, follow up, assessment, prioritising time, being in constant change and movements. Doing reflection connects to ideas of reflection-in-action and on-action (Schön, 1983, 1987), and through critical reflection (inspired of: Kollé et al., 2017; Åberg & Lenz Taguchi, 2006). According to Kinsella (2012, p. 45), reflexivity goes beyond reflection and interrogates the conditions for constructing knowledge. She highlights the social in such processes. The classroom is social, and as such suitable for collective processes and critical reflection. In this thesis, the social started to work differently. In article 3, there are some examples when the routinisation of teaching is discussed. The teacher-educators and the student-teachers seem to follow well-known patterns, doing more of the same. More shooting of bullet points, more disengagement. More mirroring of known behaviour. Different things: computers, mobile phones etc. attract students' interest, sometimes more than the subject of the teaching. The always-available equipment took part in constructing knowledge, but different knowledge than was intended in the teaching. By paying attention to materiality as active agents participating in diffractions and refractions, flips the picture, and offers opportunities to discuss such contributions as generative forces for change in social classroom encounters.

Reflection as practical doings is expressed in the articles as experienced materially, bodily, relationally through entanglements. Doing reflection involved bodily activities and material intra-actions such as a clicking pen in a hand or a flashing computer screen. In articles 1 and 2 methods for doing reflection in teaching is described as demanding, time-consuming processes. Time therefore also seems to influence how reflection is activated as doings in ECTE. One example is that in the interviews all the teacher-educators talked about the importance of doing activities that required student-teachers' reflection; in the observations such activities was practiced in 5 out of 9. As indicated in article 3, classroom-teaching can tend to follow traditional teaching patterns, instead of active

processes among student-teachers where differences can expand thoughts. Lafton (2016) identifies a paradox where the ideas about reflection and thoughts of doing it often holds more value than the actual act of doing reflection (p. 68). This paradox ruptures ideas of becoming a virtuoso (Biesta, 2015a) on the kindergarten floor, where actively exercising professional judgement is central, rather than an investment thinking about it. Uniting the multiple perspectives on reflection is a shared concern that it requires a combination of practical actions, sensing and thoughts.

In what follows sensing, thinking and doing reflection will be discussed as inseparable forces within a diffractive pedagogy.

### **7.1.2 Sensing thinking and doing diffractive pedagogy**

Through the articles and the kappe a reconfiguration of pedagogy, which privileges flattened ontologies between the human, non-human and more than human has been presented. Working abductively considers what a flattened out ontology in research might mean. In this case, it has been to re-think reflection, and be open to other ideas, particularly considering the possibility of diffraction and refraction as companion perspectives, working in ECTE together with reflection. This is not to consider diffractions as more important than refraction, reflection or critical reflection - but how these concepts might work together in ECTE.

Refraction in classroom teaching is about minor differences, or what bends off, displaces and differs<sup>54</sup>. This gives other opportunities, since when letting reflection, refraction and diffraction intermingle, not only differences but also the fractures between action and words create new options for practice (Lafton, 2016, p. 66). Refraction works back on the practitioner to give new opportunities where differences in understandings and actions are slightly different from those mirrored. Refraction is acceptance for nearly unremarkable differences that allows what is incomplete or misleading, but also what again can be productive (Grüters, 2011, p. 233) or generative, in a diffractive pedagogy.

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<sup>54</sup> See Lafton's (2016) further argumentation for refraction.

Sensing, thinking and doing are all different sides of how reflection elaborates in teaching. A flattened ontology makes each as important as the next and removes differences by opening up to consider them as intertwined: sensing/thinking/doing. They are always already there in the classroom as mirroring something, diffracting or refracting it - together. As different bodily experiences on what is going on and in interpretation of different knowledges.

Reflection as mirroring, as part of learning to understand a field, is to some extent to adapt to a practice without thinking through why certain practices are done as they are. Mirroring occurs in university classrooms, teaching practices are repetitive, with little challenge or questioning. As when student-teachers repeat being-student-in-classroom-practices without reconsidering it, or adapt theoretical perspectives or practices without reflecting over and re-thinking it. The hope is that a diffractive pedagogy might challenge the prominence of mirroring the known in education, and offer a much less certain teaching.

Flattening makes room for critical reflection and diffractive pedagogy to work together to illuminate the field and be open to the not yet known of education. New materialist theories work to widen out perspectives on teaching, and to challenge the human centred focus in education. The intention was never to remove the human, but to push some limits, and see what it brings back to the field (Bergstedt, 2017). The human is still there, present, no longer only in the foreground. What it brought back in this thesis was a material shift, ideas of differences from *within* in an immanent world, both 'in' and 'in existence with' the world (Deleuze, 2001). These entrances to teaching permit the sensing/thinking/doing of reflection, as one move, inside or within teaching. Ideas of a diffractive pedagogy that works within immanence, is open to differences and permits materiality and the outside world to play active parts in forming the here and now of education.

This is provocative because it requires teacher-educators to engage with materiality differently and to open out their teaching for other, worldlier engagements than what is on their schedules. Also for student-teachers, a teaching that opens for the not yet known

will be demanding and more unpredictable and uncertain. At the same, a diffractive pedagogy will contribute to give the student-teachers other capabilities to experience and exercise professional judgement, through sensing, thinking and doing diffractive pedagogy actively in university classrooms. A diffractive pedagogy in a sense flattens and re-enlivens perspectives including what is already there and at the same asking what is not there, what else it can be, and to constantly re-think teaching and offer different capacities to sense/think/do pedagogy. “We have to trust that we can make a difference”, writes Stengers (2018, p. 156). In the trust lies a hope, a hope for changes and curiosity.

## **7.2 How knowledge from this study can contribute to research and to teaching student-teachers in ECTE in future practices**

The thesis offers ECTE different understandings of classroom materiality as intra-acting in teaching. Furthermore, theories of diffraction connect educational issues to the outside world, and inspire different thoughts about student-teachers’ future professional life as kindergarten teachers. The ‘outside world’ is already piercing itself through the classroom-shelter and interferes with students’ educational related tasks, through students’ internet connected devices. As suggested in article 4, worldly matters are necessary to grapple with for the future generations of children; we have to think differently about the world, also inside the university classroom when teaching pedagogy. A suggestion for future research is to investigate what teaching worldly matters might contribute - and how it can further develop classroom teaching and education.

A concrete challenge for ECTE is the suggestion that classroom teaching is known and predictable for student-teachers, as they bring experience from their earlier education<sup>55</sup>. Another paradox is that groupwork and other student active learning strategies, are not considered an important space for reflection, regarding the relatively low priority it has in ECTE (Bjerkestrand et al., 2016). A potential strength of groupwork is that there is

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<sup>55</sup> See article 3 and Fredriksen (2016).

nobody to live up to, no model to mirror. Student-teachers seem to be more unclear and uncertain when working together, which presents generative forces in teaching<sup>56</sup>.

Following reflection into ECTE, theoretical influences from epistemological traditions other than sociocultural theories as Worum (2016, p. 103) underpin Norwegian teacher education<sup>57</sup>. There is potential then, to explore more fully the possibilities of working with new materialist approaches in ECTE that works with a wide range of theoretical entries to reflection. This creates room for investigating and discussing reflection across theoretical divides. This can also be taken up in other core subjects in ECTE to avoid the predominance of only certain theoretical and epistemological influences.

Finally, a diffractive pedagogy contributes to the field of ECTE by inviting a reconsideration of dominant ideas about reflection and proposes diffractive pedagogy as a companion concept to already existing theories.

### **7.3 In conclusion – A call for a diffractive pedagogy.**

Summing up the matters of this thesis; reflection is a complex, multi-layered and multiply theorised concept, influenced and activated in different philosophical and theoretical paradigms differently. Furthermore, there exists different beliefs about what it contributes to education, what purposes it should fulfil, and ideas for methods or tools that could strengthen it. Then, methods for reflection, in use in classrooms, sustain multiple images of reflexive learning processes. Reflection in teaching is often promoted as complex and demanding, but also considered important for student-teachers to strengthen their professional knowledge. Ideas of difference within immanence challenge traditional thoughts of what reflection in education is about, and opens up for both diffraction and refraction as generative forces in knowledge productions. Finally, by suggesting a diffractive pedagogy this dissertation connects reflection, refraction and

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<sup>56</sup> See article 4

<sup>57</sup> See article 1

diffraction to classroom teaching as ongoing processes, as complementary companion perspectives.

In the thesis, thinking, sensing and doing reflection has been materialised through theories and through student-teachers and teacher-educators ideas, worries and hopes, all of which has insisted that the overall research question was addressed. Each article makes an active contribution to diffracting reflection. If one sentence should demonstrate what the thesis is bringing back to education, it must be: awareness of reflection in teaching is complex and insists that materiality and affects participate in sensing, thinking and doing classroom teaching. However, the thesis is also an invitation to think differently about pedagogy, to re-think it, towards a diffractive pedagogy. A pedagogy needed to re-think teaching and to construct practices where mirroring and sameness is questioned through refractive and diffractive lenses. The multiplicity in student active teaching methods, this study reveals, still exist in some classrooms in Norway, but they appear to threaten neoliberal, cost-effective imperatives in education. The hope is that multiplicity in teaching and student active methods open for a sustainable pedagogy for the children of tomorrow's kindergartens.

This kappe starts by quoting Haraway (2016):

“It matters what thoughts think thoughts. It matters what knowledges know knowledges. It matters what relations relate relations. It matters what worlds world worlds. It matters what stories tell stories” (Haraway, 2016, p. 35).

Mattering's as known and unknown knowledge's, related relations, worldly worlds, told stories and stories to tell is what this thesis has engaged with. It also promotes a call for a diffractive pedagogy, a pedagogy taking material matters and worldly matters seriously in teaching of kindergarten teachers for kindergarten floors of the future. To call for a diffractive pedagogy is a call for a hopeful, generative pedagogy full of surprises, curiosity and new lines of thought.





## 8 Bibliography

- Alaimo, S., & Hekman, S. J. (2008). Introduction: Emerging models of materiality in feminist theory. In S. Alaimo & S. J. Hekman (Eds.), *Material feminisms*. Bloomington, Indiana: Indiana University Press.
- Alvesson, M., & Kärreman, D. (2011). *Qualitative Research and Theory Development*. London: SAGE Publication Ltd.
- Alvesson, M., & Sköldberg, K. (2011). *Tolkning och reflektion: Vetenskapsfilosofi och kvalitativ metod* [Interpretation and reflection: Philosophy of science and qualitative method]. Lund: Studentlitteratur.
- Andersen, C. E. (2015). *Mot en mindre profesjonalitet: "Rase", tidlig barndom og Deleuzeoguattariske blivelser* [Towards less professionalism: "Race", early childhood and Deleuzeoguattarian aspirations]. Department of Child and Youth Studies Stockholm University.
- Arneback, E., Englund, T., & Solbrekke, T. D. (2016). Writing in and out of control - A longitudinal study of three student teachers' experiences of academic writing in preschool teacher education. *Nordic Studies in Education*(03), 211-228.
- Barad, K. (2003). Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter. *Signs: Journal of Women in Culture and Society*, 28(3).
- Barad, K. (2007). *Meeting the universe halfway: quantum physics and the entanglement of matter and meaning*. Durham: Duke University Press.
- Barad, K. (2011). Erasers and erasures: Pinch's unfortunate 'uncertainty principle'. *Social Studies of Science*. doi:0306312711406317
- Barad, K. (2012a). Intra-actions. *interview by Adam Kleinman, Mousse*, 34(81), 76-81.
- Barad, K. (2012b). On touching - The inhuman that therefore I am. *differences*, 23(3), 206-223.
- Barad, K. (2014). Diffracting Diffraction: Cutting Together-Apart. *Parallax*, 20(3), 168-187. doi:10.1080/13534645.2014.927623
- Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflective Practice*, 16(1), 123-141. doi:10.1080/14623943.2014.982525
- Bennett, J. (2010). *Vibrant matter : a political ecology of things*. Durham, N.C: Duke University Press.
- Bergstedt, B. (2017). Inbjudan til posthumanistisk pedagogikk [Invitation to post-human pedagogy]. In B. Bergstedt (Ed.), *Posthumanistisk pedagogik. Teori, undervisning och forskningspraktik* [Posthuman Pedagogy. Theory, teaching and research practice]. Malmö: Gleerups Utbildning.
- Biesta, G. J. J. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21(1), 33-46. doi:DOI: 10.1007/s11092-008-9064-9
- Biesta, G. J. J. (2011). The ignorant citizen: Mouffe, Rancière, and the subject of democratic education. *Studies in Philosophy and Education*, 30, 141-153.
- Biesta, G. J. J. (2014). *Utdanningens vidunderlige risiko* [The Beautiful Risk of Education]. Bergen: Fagbokforlaget.

- Biesta, G. J. J. (2015a). How Does a Competent Teacher Become a Good Teacher?: On Judgement, wisdom and Virtuosity in Teaching and Teacher Education [How Does a Competent Teacher Become a Good Teacher?: On Judgement, wisdom and Virtuosity in Teaching and Teacher Education]. In R. Heilbronn & L. Foreman-Peck (Eds.), *Philosophical Perspectives on Teacher Education*. Blackwell: John Wiley & Sons.
- Biesta, G. J. J. (2015b). No paradigms, no fashions, and no confession. Why researchers need to be pragmatic. In A. M. Otterstad & A. B. Reinertsen (Eds.), *Metodefestival og øyeblikksrealisme - eksperimenterende kvalitative forskningspassasjer* [Methodfestival and Instant Realism - Experimental Qualitative Research Passages] (pp. 133-149). Bergen: Fagbokforlaget.
- Birkeland, N. R., Aasebø, T. S., Nome, D., & Wergeland-Yates, M. (2016). Bacheloroppgaven som møteplass mellom praktisk og teoretisk profesjonsforståelse i barnehagelærerstudiet. *Uniped(03)*, 211-227.
- Birkeland, Å., & Carson, N. (2013). *Veiledning for barnehagelærere*. Oslo: Cappelen Damm akademisk.
- Bjerkestrand, M., Fiske, J., Hernes, L., Pramling Samuelsson, I., Sand, S., Simonsen, B., . . . Ullmann, R. (2014). *Frå førskulelærer til barnehagelærer. Den nye barnehagelærerutdanninga. Mulegheiter og utfordringar. Rapport frå Følgjegruppa til Kunnskapsdepartementet. RAPPORT NR.1* [From pre-school teachers to kindergarten teachers. The new kindergarten teacher education. Opportunities and challenges. Report from the Follow-up Group to the Ministry of Education]. Retrieved from <http://www.hib.no/siteassets/bilder-sentre/suf/pdf/rapport-fra-foelgjegruppe-blu-2014.pdf>.
- Bjerkestrand, M., Fiske, J., Hernes, L., Pramling Samuelsson, I., Sand, S., Simonsen, B., . . . Ullmann, R. (2015). *Barnehagelærerutdanninga. Meir samanheng, betre heilskap, klarare profesjonsretting ? Rapport fra følgjegruppa for barnehagelærerutdanningen* [Kindergartenteacher education. More connections, better whole and clearer professionalism? Report from the follow-up group for kindergarten teacher education]. Retrieved from <http://blu.hib.no/wp-content/uploads/2015/09/Rapport-2.pdf>.
- Bjerkestrand, M., Fiske, J., Hernes, L., Pramling Samuelsson, I., Sand, S., Simonsen, B., . . . Ullmann, R. (2016). *Barnehagelærerutdanninga. Rapport frå Følgjegruppa for barnehagelærerutdanning til Kunnskapsdepartementet. RAPPORT NR.3* [Kindergartenteacher education. Report from the Follow-up Group for kindergarten teacher education to the Ministry of Education.]. Retrieved from <https://www.google.no/search?q=Barnehagel%C3%A6rarutdanninga+Tilbakeve ndande+utfordringar+og+upr%C3%B8vd>.
- Bjerkestrand, M., Fiske, J., Hernes, L., Pramling Samuelsson, I., Sand, S., Simonsen, B., . . . Ullmann, R. (2017a). *Barnehagelærerutdanninga. Ei reform tek form? Rapport frå Følgjegruppa for barnehagelærerutdanning til Kunnskapsdepartementet. RAPPORT NR.4* [Kindergartenteacher education. A reform took shape? Report from the Follow-up Group for kindergarten teacher education to the Ministry of Education]. Retrieved from

- <https://www.regjeringen.no/contentassets/0efc6554255647b1b138e4a2507f0c17/sluttrapport-fra-folgjegruppa-for-barnehagelararutdanning.pdf>.
- Bjerkestrand, M., Fiske, J., Hernes, L., Pramling Samuelsson, I., Sand, S., Simonsen, B., . . . Ullmann, R. (2017b). *Barnehagelærerutdanningen, Styrker, svakheter og gjenstridige utfordringar. Sluttrapport frå Følgjegruppa for barnehagelærerutdanning til Kunnskapsdepartementet* [Kindergartenteacher education, Strengths, weaknesses and stubborn challenges. Final report from the follow-up group for kindergarten teacher education to the Ministry of Education]. Retrieved from <http://blu.hib.no/wp-content/uploads/2016/10/RAPPORTSAMLE-versjon11.10.pdf>.
- Bjerkholt, E. (2013). *Åpning av lukkede rom : en kvalitativ studie av innholdet og dialogene i veiledningssamtaler mellom nyutdannede lærere og lokale veiledere* [Opening of Closed Rooms: a qualitative study of the content and dialogues in "veiledning" talks between graduate teachers and local supervisors]. (nr. 168), Oslo: Det utdanningsvitenskapelige fakultet, Universitetet i Oslo.
- Blaise, M., Hamm, C., & Iorio, J. M. (2016). Modest witness (ing) and lively stories: paying attention to matters of concern in early childhood. *Pedagogy, Culture & Society*, 31-42. doi:10.1080/14681366.2016.1208265
- Bloomberg, L. D., & Volpe, M. (2012). *Completing Your Qualitative Dissertation. A Road Map From Beginning to End*. London: SAGE.
- Bozalek, V., & Zembylas, M. (2017). Diffraction or reflection? Sketching the contours of two methodologies in educational research. *International Journal of Qualitative Studies in Education*, 30(2), 111-127. doi:10.1080/09518398.2016.1201166
- Braidotti, R. (2013). *The Posthuman*. Hoboken: Wiley.
- Brinkmann, S. (2012). *Qualitative Inquiry in Everyday Life. Working with Everyday Life Materials*. London: SAGE.
- Brinkmann, S. (2014). Doing Without Data. *Qualitative Inquiry*, 20(6), 720-725. doi:10.1177/1077800414530254
- Bruner, J. (2004). Life as Narrative. *Social research*, 71(3), 691-711.
- Bøe, M. (2016). *Personalledelse som hybride praksiser : et kvalitativt og tolkende skyggestudie av pedagogiske ledere i barnehagen* [Management of staff as a hybrid practice: a qualitative and interpreting shadowing study of pedagogical leaders in kindergarten]. (2016:143), Trondheim: Norges teknisk-naturvitenskapelige universitet, Fakultet for samfunnsvitenskap og teknologiledelse, Institutt for pedagogikk og livslang læring.
- Bøe, M., & Thoresen, M. (2017). *Å skape og studere endring* [To create and study change]. Oslo: Universitetsforlaget.
- Carlsen, K. (2015). *Forming i barnehagen i lys av Reggio Emilias atelierkultur* [Art in kindergarten in light of Reggio Emilia's studio culture]. Åbo Akademis förlag, Åbo Akademi, Pedagogiska fakulteten.
- Chang-Kredl, S., & Kingsley, S. (2014). Identity expectations in early childhood teacher education: Pre-service teachers' memories of prior experiences and reasons for entry into the profession. *Teaching and Teacher Education*, 43(0), 27-36. doi:10.1016/j.tate.2014.05.005

- Cherrington, S., & Loveridge, J. (2014). Using video to promote early childhood teachers' thinking and reflection. *Teaching and Teacher Education, 41*, 42-51. doi:10.1016/j.tate.2014.03.004
- Creswell, J. W. (2013). *Qualitative inquiry & research design*. Los Angeles: Sage.
- Czarniawska, B. (2010). Narratologi og feltstudier [Narratology and field studies]. In S. Brinkmann & L. Tanggaard (Eds.), *Kvalitative metoder : en grundbog* [Qualitative methods: a basic book] (pp. 239-262). København: Reitzel.
- Dahlberg, G., & Moss, P. (2006). *Ethics and politics in early childhood education*. London: RoutledgeFalmer.
- Dahlberg, G., Moss, P., & Pence, A. (2002). *Fra kvalitet til meningskapning - morgendagens barnehage* [Beyond quality in early childhood education and care]. London: Routledge.
- Dale, E. L. (2005). *Kunnskapsregimer i pedagogikk og utdanningsvitenskap* [Regimes of knowledge in pedagogy and science of education]. Oslo: Abstrakt forlag.
- Davies, B. (2014a). *Listening to children: being and becoming*. London & New York: Routledge, Taylor & Francis Group.
- Davies, B. (2014b). Reading Anger in Early Childhood Intra-Actions: A Diffractive Analysis. *Qualitative Inquiry, 20*(6), 734-741. doi:10.1177/1077800414530256
- Davies, B. (2017). Animating Ancestors. *Qualitative Inquiry, 23*(4), 267-275. doi:10.1177/1077800416686372
- Davis, E. A. (2006). Characterizing Productive Reflection among Preservice Elementary Teachers: Seeing What Matters. *Teaching & Teacher Education: An International Journal of Research and Studies, 22*(3), 281-301. doi:10.1016/j.tate.2005.11.005
- de Beauvoir, S. (1949/2000). *Det annet kjønn* [The second sex]. Oslo: Pax Forlag.
- Deleuze, G. (2001). *Pure immanence*: Zone New York.
- Deleuze, G., & Guattari, F. (1996). *Hvad er filosofi?* [What is philosophy]. Haslev: Gyldendal.
- Dewey, J. (1933). *How we think*. New York: Dover Publications, inc.
- Fendler, L. (2003). Teacher Reflection in a Hall of Mirrors: Historical Influences and Political Reverberations. *Educational Researcher, 32*(3), 16-25.
- Fredriksen, B. C. (2016). Attention on the edge: Ability to notice as a necessity in learning, teaching and survival. *Visual Inquiry: Learning & Teaching Art, 5*(1), 105-114. doi:10.1386/vi.5.1.105\_1
- Grebowicz, M., & Merrick, H. (2013). *Beyond the Cyborg: Adventures with Donna Haraway*. New York: Columbia University Press.
- Greve, A., Jansen, T. T., & Nordbrønd, B. (2013). Barnehagelæreren - en politisk aktør [Kindergartenteacher - a political actor]. In A. Greve, S. Mørreaunet, & N. Winger (Eds.), *Ytringer om likeverd, demokrati og relasjonsbygging i barnehagen* [Meanings about equality, democracy and building of relationship in kindergarten]. Bergen: Fagbokforlaget.
- Greve, A., Jansen, T. T., & Solheim, M. (2014). *Kritisk og begeistret: barnehagelærernes fagpolitiske historie* [Critical and enthusiastic: the disciplinary history of kindergarten teachers]. Bergen: Fagbokforlaget.

- Grimen, H. (2008). Profesjon og kunnskap [Profession and knowledge]. In A. Molander & L. I. Terum (Eds.), *Profesjonsstudier* [Studies on Profession] (pp. s. 71-86). Oslo: Universitetsforlaget.
- Grindheim, L. T. (2017). Barnehagelærerutdanning med rom for kritiske studenter? [Kindergarten teacher education with room for critical students?]. In H. Blaafalk, M. Solheim, & G. Aaserud (Eds.), *Barnehagelæreren som politisk aktør* [The Kindergarten teacher as political actor] (pp. 153-170). Bergen: Fagbokforlaget.
- Grüters, R. (2011). *Refleksjon i blogg: En hermeneutisk studie av refleksjon og dens tekstlige og retoriske manifestasjoner i en ny type skrive- og arkiveringsteknologi* [Reflection in Blog: A hermeneutic study of reflection and its textual and rhetorical manifestations in a new type of writing and archiving technology]. (PhD), Trondheim: Norges teknisk-naturvitenskapelige universitet, Det humanistiske fakultet.
- Gur-Ze'ev, I., Masschelein, J., & Blake, N. (2001). Reflectivity, Reflection, and Counter-Education. *An International Journal*, 20(2), 93-106.  
doi:10.1023/A:1010303001871
- Haglund, B. (2003). Stimulated Recall. Några anteckningar om en metod att generera data. [Stimulated Recall. Some notes about a method of generating data]. *Pedagogisk forskning i Sverige*, 8(3), 145-157.
- Halmrast, G. S., Taarud, R., & Østerås, B. (2013). Bruk av praksisfortellinger for å skape sammenheng mellom praksis og teori i førskolelærerutdanningen. [Use of narratives to create a connection between practice and theory in pre-school teacher education]. *Norsk pedagogisk tidsskrift*, 97(01), 17-27.
- Handal, G., & Lauvås, P. (1983). *På egne vilkår. En strategi for veiledning med lærere* [On your own conditions. A strategy for guidance with teachers]. Oslo: J.W. Cappelens forlag.
- Haraway, D. J. (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575-599.  
doi:10.2307/3178066
- Haraway, D. J. (1997). Modest\_Witness@ Second\_Millennium. FemaleMan „\_Meets\_OncoMouse%. In. New York: Routledge.
- Haraway, D. J. (2004). *The Haraway reader*. New York: Routledge.
- Haraway, D. J. (2008). *When Species Meet*. Minneapolis & London: the University of Minnesota Press.
- Haraway, D. J. (2010). When species meet: Staying with the trouble. *Environment and Planning D: Society and Space*, 28(1), 53-55.
- Haraway, D. J. (2015). A Curious Practice Preface. *Angelaki-Journal of the Theoretical Humanities*, 20(2), 5-14. doi:10.1080/0969725X.2015.1039817
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene*: Duke University Press.
- Hohti, R. (2016). *Classroom matters. Research with children as entanglement*. University of Helsinki: Department of Teacher Education, Research Report 387.
- Horverak, M. O., & Hidle, K.-M. W. (2017). Mangelfull opplæring i grunnleggende skriveferdigheter - en studie av barnehagelæreres forkunnskaper for argumenterende skriving i samfunnsfag. [Inadequate training in basic writing

skills - a study of kindergarten teachers' knowledge of argumentative writing in social studies]. *Uniped*, 40(2), 155-169. doi:10.18261/issn.1893-8981-2017-02-05

- Hostetler, K. D. (2016). Beyond Reflection: Perception, virtue, and teacher knowledge. *Educational Philosophy and Theory*, 48(2), 179-190. doi:10.1080/00131857.2014.989950
- Hovdenak, S. S., & Wiese, E. (2017). Fronesis: veien til profesjonell lærerutdanning? [Fronesis: The Road to Professional Teacher Education?]. *Uniped*, 40(02), 170-184. doi:10.18261/issn.1893-8981-2017-02-06
- Hultman, K., & Lenz Taguchi, H. (2010). Challenging anthropocentric analysis of visual data: A relational materialist methodological approach to educational research. *International Journal of Qualitative Studies in Education*, 23(5), 525-542. doi:10.1080/09518398.2010.500628
- Høier, J. (2012). Samspill mellom utdanning og praksisfelt: Fra videreutdanning til praktisk-pedagogisk arbeid i barnehagen. [Interaction between education and practice: From further education to practical pedagogical work in kindergarten]. *Norsk pedagogisk tidsskrift*, 96(04), 282-292.
- Høydalsvik, T. L. (2017). Co-Operation Is Not Enough: Teacher Educators as Curriculum Developers in Times of Change *International Journal of Higher Education*, 6(5). doi:10.5430/ijhe.v6n5p76
- Jackson, A. Y., & Mazzei, L. A. (2013). Plugging One Text Into Another: Thinking With Theory in Qualitative Research. *Qualitative Inquiry*, 19(4), 261-271. doi:10.1177/1077800412471510
- Johannesen, N., & Sandvik, N. (2008). *Små barn og medvirkning* [Small children and participation]. Oslo: Cappelen akademisk forlag.
- Kalleberg, R., Malnes, R., & Engelstad, F. (2009). *Samfunnsvitenskapenes oppgaver, arbeidsmåter og grunnlagsproblemer* [Tasks, working methods and basic problems of social sciences]. Oslo: Gyldendals Akademiske.
- Kemmis, S., & Smith, T. J. (2008). *Enabling Praxis. Challenges for Education*. Rotterdam/Taipei: Sense Publishers.
- Kinsella, E. A. (2012). Practitioner reflection and judgement as phronesis: A continuum of reflection and considerations for phronetic judgement. In E. A. Kinsella & A. Pitman (Eds.), *Phronesis as Professional Knowledge. Practical Wisdom in the Profession*. Rotterdam: Sense Publishers.
- Klemp, T. (2013). Refleksjon - hva er det, og hvilken betydning har den i utdanning til profesjonell lærerpraksis? [Reflection - what is it and what does it mean in the education to professional teacher practices]. *Uniped*(1), 42-58.
- Kofoed, J., & Ringrose, J. (2012). Travelling and sticky affects: Exploring teens and sexualized cyberbullying through a Butlerian-Deleuzian-Guattarian lens. *Discourse: Studies in the Cultural Politics of Education*, 33(1), 5-20. doi:10.1080/01596306.2012.632157
- Kofoed, J., & Staunæs, D. (2015). Hesitancy as ethics. *Reconceptualizing Educational Research Methodology*, 6(1), 24-39. doi:<https://doi.org/10.7577/rerm.1559>
- Kolle, T., Larsen, A. S., & Ulla, B. (2017). *Pedagogisk dokumentasjon* [Pedagogical Documentation]. Bergen: Fagbokforlaget.

- Koro-Ljungberg, M. (2016). *Reconceptualizing Qualitative Research. Methodologies without Methodologies*. Thousand Oaks: SAGE.
- Koro-Ljungberg, M., & MacLure, M. (2013). Provocations, re-un-visions, death, and other possibilities of "data". *Cultural Studies? Critical Methodologies*, 13(4), 219-222. doi:10.1177/1532708613487861
- Korsvold, T. (2005). *For alle barn. Barnehagens framvekst i velferdsstaten* [For all children. The growth of kindergartens in the welfare state]. Oslo: Abstrakt forlag.
- Lafton, T. (2016). *Refleksjoner og handlinger i barnehagens møter med teknologi. Sosio-materielle teorier som optikk for (re) konstruksjoner av barnehagepraksiser* [Reflections and actions in kindergartens meetings with technology. Socio-material theories as optics for (re) constructions of kindergarten practices]. (PHD), Oslo: Universitetet i Oslo.
- Lanas, M., Rautio, P., Koskela, A., Kinnunen, S., Viljamaa, E., & Juutinen, J. (2015). Engaging with theoretical diffraction in teacher education. *Discourse: Studies in the Cultural Politics of Education*, 1-12. doi:10.1080/01596306.2015.1126917
- Larsen, A. S. (2015). *Forstyrrelers paradoksale kraft. En studie av hvordan forstyrrelser kan virke produktivt i pedagogisk arbeid i barnehagen* [The paradoxical power of disturbances. A study of how disturbances can work productively in pedagogical work in kindergarten]. Trondheim: NTNU.
- Lather, P., & St.Pierre, E. A. (2013). Post-qualitative research. *International Journal of Qualitative Studies in Education*, 26(6), 629-633.
- Lauvås, P., & Handal, G. (2014). *Veiledning og praktisk yrkest teori* ["Veiledning" and practical vocational theory]. Oslo: Cappelen Damm.
- Lenz Taguchi, H. (2004). *In på bara benet: En introduktion till feministisk Poststructuralism* [Down into bare bone: An introduction to feminist poststructuralism]. Stockholm: HLS förlag.
- Lenz Taguchi, H. (2010). *Going Beyond the Theory/Practice Divide in Early Childhood Education. Introducing an intra-active pedagogy*. London: Routledge.
- Lenz Taguchi, H. (2012). A diffractive and Deleuzian approach to analysing interview data. *Feminist Theory*, 13(3), 265-281. doi:10.1177/1464700112456001
- Lenz Taguchi, H. (2013). 'Becoming molecular girl': transforming subjectivities in collaborative doctoral research studies as micro-politics in the academy. *International Journal of Qualitative Studies in Education*, 26(9), 1101-1116. doi:10.1080/09518398.2013.816886
- Lenz Taguchi, H., & Palmer, A. (2013). A more 'livable' school? A diffractive analysis of the performative enactments of girls' ill-/well-being with(in) school environments. *Gender and Education*, 25(6), 671-687. doi:10.1080/09540253.2013.829909
- MacLure, M. (2013a). Classifications or Wonder? Coding as an Analytic Practice in Qualitative Research. In R. Coleman & J. Ringrose (Eds.), *Deleuze and Research Methodologies*. Edinburgh: University Press.
- MacLure, M. (2013b). Researching without representation? Language and materiality in post-qualitative methodology. *International Journal of Qualitative Studies in Education*, 26(6), 658-667. doi:10.1080/09518398.2013.788755



- MacNaughton, G. (2006). *Doing Foucault in early childhood studies: applying poststructural ideas*. London: RoutledgeFalmer.
- Manning, E. (2016). *The Minor Gesture*. Durham: Duke University Press.
- Marston, S. A., Jones, J. P., & Woodward, K. (2005). Human geography without scale. *Transactions of the Institute of British Geographers*, 30(4), 416-432. doi:10.1111/j.1475-5661.2005.00180.x
- Mazzei, L. A. (2013). A voice without organs: Interviewing in posthumanist research. *International Journal of Qualitative Studies in Education*, 26(6), 732-740. doi:10.1080/09518398.2013.788761
- Mazzei, L. A. (2014). Beyond an Easy Sense A Diffractive Analysis. *Qualitative Inquiry*, 20(6), 742 –746. doi:10.1177/1077800414530257
- Ministry of Education and Research. (2012). *Forskrift om rammeplan for barnehagelærerutdanningen av 4. juni 2012* regjeringen.no Retrieved from <https://lovdata.no/dokument/SF/forskrift/2012-06-04-475?q=Forskrift%20om%20rammeplan%20for%20barnehagel%C3%A6rerutdanning>.
- Moi, T. (2008). *Simone de Beauvoir. The Making of an Intellectual Woman*. New York: Oxford University Press.
- Moxnes, A. R. (2016). Refleksjon i barnehagelærerutdanningen. [Reflection in Kindergarten Teacher Education]. *Tidsskrift for Nordisk Barnehageforskning*, 12. doi:10.7577/nbf.1563
- Moxnes, A. R. (2017). "Det er alltid ulike perspektiver": En studie av hvordan undervisere i pedagogikk arbeider med refleksjon i høgskoleklasserommet [‘There are always different perspectives’ – A study of how teacher educators teaching pedagogy work with reflection in University classrooms]. In L. Frers, K. Hognestad, & M. Bøe (Eds.), *Metode mellom forskning og læring: Refleksjon i praksis* [Method of research and learning: Reflection in practice]. Oslo: Cappelen Damm akademiske.
- Moxnes, A. R., & Osgood, J. (2018). Sticky stories from the classroom: From reflection to diffraction in Early Childhood Teacher Education. *Contemporary Issues in Early Childhood*, 19(3), 297-309. doi:10.1177/1463949118766662
- Myhre, C. O., Myrvold, H. B., Joramo, U.-W., & Thoresen, M. (2017). Stumbling into the ‘kitchen island’: Becoming through intraactions with objects and theories. *Contemporary Issues in Early Childhood*, 18(3), 308-321. doi:10.1177/1463949117731024
- NESH. (2013). *Forskningsetiske retningslinjer for samfunnsvitenskap, humaniora, juss og teologi*. In. Retrieved from [https://www.etikkom.no/globalassets/documents/english-publications/60127\\_fek\\_guidelines\\_nesh\\_digital\\_corr.pdf](https://www.etikkom.no/globalassets/documents/english-publications/60127_fek_guidelines_nesh_digital_corr.pdf)
- Nordin-Hultman, E. (2004). *Pedagogiske miljøer og barns subjektskaping* [Pedagogical environment and the construction of children's subjectivity]. Oslo: Pedagogisk forum.
- Nordstrom, S. N. (2015a). A data assemblage. *International Review of Qualitative Research*, 8(2), 166-193.

- Nordstrom, S. N. (2015b). Not So Innocent Anymore Making Recording Devices Matter in Qualitative Interviews. *Qualitative Inquiry*, 21(4), 388-401. doi:0.1177/1077800414563804
- Nordstrom, S. N., & Ulmer, J. (2017). Editorial: Postqualitative Curations and Creations. *Reconceptualizing Educational Research Methodology. Special Issue*, 8(3), 1-15. Retrieved from <https://journals.hioa.no/index.php/rerm>
- Nordtømme, S. (2012). Place, space and materiality for pedagogy in a kindergarten. *Education Inquiry*, 3(3), 317-333. doi:10.3402/edui.v3i3.22037
- Nordtømme, S. (2016). *På vei mot en rom (s) lig pedagogikk: En fortolkende studie av barns lekeerfaringer med rom og materialitet* [On the way to a "rom(s)lig" pedagogy: An interpretative study of children's educational experiences with space and materiality] (Vol. Doktorgradsavhandling nr 1. 2016). Høgskolen i Sørøst-Norge: Fakultet for Humaniora og utdanningsvitenskap.
- Nordvik, G. K., & Vatne, B. (2017). Eksamensoppgaver i barnehagelærerutdanningen i lys av formålet om en integrert, profesjonsrettet og forskningsbasert utdanning. [Examinations in kindergarten teacher education in light of the purpose of an integrated, professional and research-based education]. *Nordisk Barnehageforskning*, 16, 12-12.
- Norsk samfunnsvitenskapelig datatjeneste. (2017). Norwegian Centre for Research Data. Retrieved from <http://www.nsd.uib.no/nsd/english/>
- Osgood, J. (2012). *Narratives from the nursery: negotiating professional identities in early childhood*. London: Routledge.
- Osgood, J. (2016). Postmodernist theorising in ECEC: making the familiar strange in pursuit of social justice. In T. David, K. Goouch, & S. Powell (Eds.), *The Routledge international handbook of philosophies and theories of early childhood education and care* (pp. 157-164): New York: Routledge, Taylor & Francis Group.
- Osgood, J. (in press). Materialised reconfigurations of gender in early childhood: Playing Seriously with Lego. In J. Osgood & K. H. Robinson (Eds.), *Feminists Researching Gendered Childhoods: Generative Entanglements*. London: Bloomsbury.
- Osgood, J., & Giugni, R. R. S. M. (2015). Putting posthumanist theory to work to reconfigure gender in early childhood: When theory becomes method becomes art. *Global Studies of Childhood*, 5(3), 346-360. doi:10.1177/2043610615597160
- Osgood, J., & Robinson, K. H. (2017). Celebrating pioneering and contemporary feminist approaches to studying gender in early childhood. In *Feminism (s) in Early Childhood*, 35-47. S.L: Springer.
- Otterstad, A. M. (2012). Hva er forskningsbasert barnehagelærerutdanning?: en kritisk diskursiv analyse av forskningsmetodologi og barnehagepedagogikkens posisjon [What is research-based kindergarten teacher education?: a critical discursive analysis of research methodology and kindergarten education]. In A. M. Otterstad & N. Rossholt (Eds.), *Barnehagelærer-utdanningens kompleksitet. Bevegelser i faglige perspektiver*. [Complexity of the kindergarten teacher education. Movements in professional perspectives], 138-163. Oslo: Universitetsforlaget.
- Otterstad, A. M., & Rhedding-Jones, J. (2011). *Barnehagepedagogiske diskurser* [Kindergarten pedagogical discourses]. Oslo: Universitetsforlaget.

- Palmer, A. (2011). "How many sums can I do"?: Performative strategies and diffractive thinking as methodological tools for rethinking mathematical subjectivity. *Reconceptualizing Educational Research Methodology (RERM)*, 1(1), 3-18.
- Palmer, A. (2016). 'Is this the tallest building in the world?' A posthuman approach to ethical dilemmas in young children's learning projects. *Global Studies of Childhood*, 6(3), 283-298. doi:10.1177/2043610616665035
- Polkinghorn, D. E. (1995). Narrative configuration in qualitative analysis [Narrative configuration in qualitative analysis]. In J. A. Hatch & R. Wisniewski (Eds.), *Life History and Narrative* (pp. 5-23). London-Washington D.C.: The Falmer Press.
- Project, P. E. (1998). *The Essential Peirce : Selected Philosophical Writings (1893-1913)*. Bloomington, IN: Indiana University Press.
- Rhedding-Jones, J. (2005). *What is research?* Oslo: Universitetsforlaget.
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Los Angeles: Sage Publications.
- Sandvik, N. (2013). *Medvirkning og handlingskraft I småbarnspedagogiske praksiser: Horisontalt fremforhandlet innflytelse. Avhandling for graden philosophiae doctor* [Participation and action in pedagogical practices with young children: Horizontally negotiated influence]. Trondheim: Norges teknisk-naturvitenskapelige universitet Fakultet for samfunnsvitenskap og teknologiledelse Norsk senter for barneforskning (NOSEB).
- Sandvik, N. (2015). Posthumanistiske perspektiver - Bidrag til barnehageforskningen [Posthuman perspectives - Contribution to kindergarten research]. In A. M. Otterstad & A. B. Reinertsen (Eds.), *Metodefestival og øyeblikksrealisme - eksperimenterende kvalitative forskningspassasjer* [Methodfestival and Instant Realism - Experimental Qualitative Research Passages] (pp. 45-62). Bergen: Fagbokforlaget.
- Sandvoll, R., Dørum, K., & Solberg, M. (2017). Vitenskapelig ansattes refleksjoner om utvikling av egen undervisning. [Scientific employee's reflections on developing own teaching]. *Uniped(04)*, 284-298. doi:10.18261/issn.1893-8981-2017-04-02
- Sataøen, S. O., & Trippestad, T. A. (2015). Den nye barnehagelærerutdanninga ; bakgrunn, iverksetjing og reformutfordringer. [The new kindergarten teacher education; background, implementation and reform challenges]. *Norsk pedagogisk tidsskrift*, 99(6), 434-448.
- Schön, D. A. (1983). *The reflective practitioner: how professionals think in action*. Aldershot: Arena.
- Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco, Calif: Jossey-Bass.
- Seland, M. (2011). *Livet i den fleksible barnehagen: muligheter og utfordringer i en barnehage i endring* [Life in the flexible kindergarten: opportunities and challenges in a kindergarten in change]. Oslo: Universitetsforl.
- Sell, I. S., & Vala, H. Ø. (2017). «Å åpne øynene fra flere kanter» Studentperspektiv på skygging som metode for lederopplæring i praksis ['Open your eyes from multiple edges' Student perspective on shadowing as a method of leadership training in practice]. In L. Frers, K. Hognestad, & M. Bøe (Eds.), *Metode mellom*

- forskning og læring: Refleksjon i praksis* [Method of research and learning: Reflection in practice]. Oslo: Cappelen Damm Akademiske.
- Solstad, A. G. (2010). Praksisnær teori og teorinær praksis - den nødvendige relasjonen. [Practical theory and theoretical practice - the necessary relationship]. *Norsk pedagogisk tidsskrift*, 94(03), 203-218.
- Solstad, A. G. (2013). Profesjonsorientert refleksjon i praksisopplæringen - en utfordring for lærerutdanningen. [Job oriented reflection in practice training - a challenge for teacher education]. *Norsk pedagogisk tidsskrift*, 97(02), 97-108.
- Souto-Manning, M. (2014). Critical narrative analysis: the interplay of critical discourse and narrative analyses. *International Journal of Qualitative Studies in Education*, 27(2), 159-180. doi:10.1080/09518398.2012.737046
- St.Pierre, E. A. (2013). The posts continue: becoming. *International Journal of Qualitative Studies in Education*, 26(6), 646-657. doi:10.1080/09518398.2013.788754
- St.Pierre, E. A., & Jackson, A. Y. (2014). Qualitative Data Analysis After Coding. *Qualitative Inquiry*, 20(6), 715-719. doi:10.1177/1077800414532435
- Stave, G., Tollefsrud, M., Sand, S., Aukrust, V. G., Børke, B., Halvorsen, P. K., . . . Aamodt, G. (2012). *Nasjonale retningslinjer for barnehagelærerutdanningen: rapport fra utvalg oppnevnt av Kunnskapsdepartementet 2. februar 2011* [National guidelines for kindergarten teacher education: report from the committee appointed by the Ministry of Education, Science and Technology]. regjeringen.no Retrieved from [https://www.regjeringen.no/globalassets/upload/kd/runndskriv/2012/nasjonale\\_retningslinjer\\_barnehagelaererutdanning.pdf](https://www.regjeringen.no/globalassets/upload/kd/runndskriv/2012/nasjonale_retningslinjer_barnehagelaererutdanning.pdf).
- Steinnes, G. S. (2014). *Profesjonalitet under press? Ein studie av førskulelærarar si meistring av rolla i lys av kvalifiseringa til yrket og arbeidsdelinga med assistentane* [Professionalism under pressure? A study of preschool teachers's mastery of their role in light of qualification for the profession and in division of tasks with assistants]. Oslo: Høgskolen i Oslo og Akershus.
- Stengers, I. (2018). *Another Science is Possible. A manifesto for slow science*. Cambridge: Polity press.
- Søndenå, K. (2002). *Tradisjon og transcendens: ein fenomenologisk studie av refleksjon i norsk førskulelærerutdanning* [Tradition and transcendence: a phenomenological study of reflection in Norwegian pre-school education] (Vol. 175). Göteborg: Acta Universitatis Gothoburgensis.
- Søndenå, K. (2004). *Kraftfull refleksjon i lærerutdanninga* [Powerful reflection in teacher education]. Oslo: Abstrakt forlag.
- Søndenå, K. (2007). Refleksjonen, dialogen og demokratiet [Reflection, Dialogue and Democracy]. In T. Krogsmark & K. Åberg (Eds.), *Veiledning i pedagogisk arbeid* ["Veiledning" in pedagogical work], 210-222. Bergen: Fagbokforlaget.
- Søndenå, K. (2009). Absolutt veiledning - om ontologisk kvalitet og elastisk refleksjon [Absolute "veiledning" - on ontological quality and elastic reflection]. In M. Brekke & K. Søndenå (Eds.), *Veiledningskvalitet* ["Veiledning" quality]. Oslo: Universitetsforl.

- Tamboukou, M. (2015). Narrative as force [Narrative as force]. In M. Livholts & M. Tamboukou (Eds.), *Discourse and narrative methods* (pp. 93-103). Los Angeles: SAGE.
- Taylor, A., Pacinini-Ketchabaw, V., & Blaise, M. (2012). Children's Relations to the More-Than-Human World. *Contemporary Issues in Early Childhood*, 13(2), 81-85. doi:10.2304/ciec.2012.13.2.81
- Taylor, C. A. (2016). Close Encounters of a Critical Kind A Diffractive Musing In/Between New Material Feminism and Object-Oriented Ontology. *Cultural Studies↔ Critical Methodologies*, 16(2), 201-212. doi:0.1177/1532708616636145
- Worum, K. S. (2016). Spor av sammenhenger og brudd i kunnskapssyn i veiledning ved lærerutdanningen. [Traces of contexts and breaches of knowledge in the "veiledning" on teacher education]. *Norsk pedagogisk tidsskrift*, 100(2), 103-114.
- Young, E. B. (2013). *The Deleuze and Guattari Dictionary*: A&C Black.
- Åberg, A., & Lenz Taguchi, H. (2006). *Lyttende pedagogikk* [Pedagogy of listening]. Oslo: Universitetsforlaget.
- Åsberg, C. (2012). Läskunnighet bortom humanioras bekvämlighetszoner. En inledning [Literacy beyond the humanities' comfort zones. An introduction]. In C. Åsberg, M. Hultman, & F. Lee (Eds.), *Posthumanistiska nyckelstexter* [Posthuman key texts]: Studentlitteratur.

## 9 Appendix

### 9.1 The articles

#### Article 1

Moxnes, A. R. (2016). Refleksjon i barnehagelærerutdanningen. *Tidsskrift for Nordisk Barnehageforskning*, 12. doi: 10.7577/nbf.1563

English translation is attached after original: Reflection in Kindergarten Teacher Education

#### Article 2

Moxnes, A. R. (2017). "Det er alltid ulike perspektiver" - En studie av hvordan undervisere i pedagogikk arbeider med refleksjon i høgskoleklasserommet. In: Frers L, Hognestad K and Bøe M (eds) *Metode mellom forskning og læring: Refleksjon i praksis* [Method of research and learning: Reflection in practice]. Oslo: Cappelen Damm akademiske.

English translation is attached after original: "There are always different perspectives" – A study of how teacher educators teaching pedagogy work with reflection in University classrooms

#### Article 3 (omitted in the online version)

Moxnes, A. R. & Osgood, J. (2018) Sticky stories from the classroom: From reflection to diffraction in Early Childhood Teacher Education. *Contemporary Issues in Early Childhood Education. Contemporary Issues in Early Childhood*, 19(3), 297-309. doi:10.1177/1463949118766662

#### Article 4 (omitted in the online version)

Moxnes, A. R. & Osgood, J. (Submitted version). Storying Diffractive Pedagogy: Reconfiguring Groupwork in Early Childhood Teacher Education (ECTE)



## Article 1

Moxnes, A. R. (2016). Refleksjon i barnehagelærerutdanningen [Reflection in Kindergarten Teacher Education]. *Tidsskrift for Nordisk Barnehageforskning*, 12. doi: 10.7577/nbf.1563

English translation is attached after original



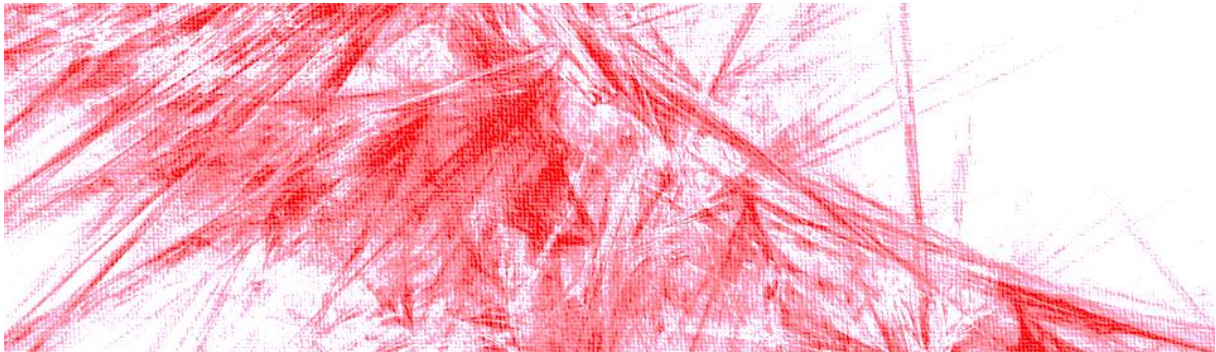
## Refleksjon i barnehagelærerutdanningen

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*Abstract:* The purpose of this article is to discuss the use of reflection in both educational- and research literature regarding Early Childhood Teacher Education. When reading the literature, I find that reflection is linked to theory and practice, to change and new knowledge and to ethical and critical reflection. The understanding of reflection as a concept varies, however personal change and new knowledge is a common denominator. My research reveals reflection as a multifaceted and complex concept. A consequence of this complexity is that in order to give reflection importance in teacher education, it will require thorough preparations for reflection and comprehensive monitoring of students.

*Key words:* Reflection, Early Childhood Teacher Education, Research, Pedagogical judgment

*Sammendrag:* Hensikten med denne artikkelen er å diskutere hvordan refleksjon anvendes i ulike fag- og forskningslitteratur som omhandler barnehagelærerutdanningen. I studier av tekstene finner jeg at refleksjon knyttes til teori og praksis, refleksjon knyttes til endring og ny erkjennelse og til etisk og kritisk refleksjon. Det varierer hvordan refleksjon forstås, men personlig endring og ny erkjennelse er en fellesnevner. Undersøkelsen viser et mangefasettert og komplekst refleksjonsbegrep. Det framgår også at skal refleksjon ha betydning i barnehagelærerutdanningen, vil det kreve grundige forberedelser og tilrettelegging for refleksjon, og omfattende oppfølging av studenter.

*Nøkkelord:* Refleksjon, barnehagelærerutdanning, forskning, pedagogisk dømmekraft

### **Innledning**

Da jeg var førskolelærerstudent minnes jeg at vi ble bedt om å reflektere. Vi skulle sitte i smågrupper, der vi først skulle reflektere individuelt, for så å dele refleksjonene med gruppen. For meg var dette et uromoment. Jeg ble usikker fordi jeg ikke forstod hva som ble forventet av meg, og hvordan jeg skulle gå fram for å reflektere.

Refleksjon har fremdeles en sentral plass i utdanningen. Begrepet skrives frem i fagbøker, det er i bruk i *rammeplan for barnehagens innhold og oppgaver* (Kunnskapsdepartementet, 2011) og i *nasjonale retningslinjer for barnehagelærerutdanningen* (Kunnskapsdepartementet, 2012). Sentrale begreper, som refleksjon, kan være utfordrende å forholde seg til både som utdanner og student, og det kan diskuteres om oppmerksomheten rundt refleksjon er mer til skade enn til nytte for utdanning (Beauchamp, 2015, s. 135). I fag- og forskningslitteratur eksisterer ulike forståelser av hva refleksjon er, og det finnes motstridende syn på hvilke funksjoner refleksjon skal fylle. Izumi-Taylor, Lee, Moberly og Wang (2010, s. 132) viser for eksempel til forskjeller i syn på hva refleksjon oppfattes som i USA og Japan. De beskriver at japanske barnehagelærerstudenter tolker refleksjon som undersøkelse av egen, tidligere oppførsel, væremåte og selvkontroll, mens refleksjon for amerikanske studenter innebærer deres tanker om mulige fremtidige løsninger på utfordringer og at refleksjon skal føre til *noe*, eksempelvis ny kunnskap. Et annet eksempel er Hostetler (2016, s. 179) som problematiserer framheving av refleksjon som en type kjennetegn på læreres kunnskaper. I styringsdokumenter, fag- og forskningslitteratur fremstilles refleksjon nyansert. I de nasjonale retningslinjene for barnehagelærerutdanningen (Kunnskapsdepartementet, 2012) knyttes refleksjon til praksis, til studentenes dannelsesprosess, begrepsforståelser, forskningsbasert undervisning, og som indikator for kvalitetskjenntegn. Retningslinjene anvender ulike former av begrepet til sammen 23 ganger.

Refleksjon kan knyttes til ulike faglige tradisjoner, der Dewey (1997/1933) Korthagen, Kim og Greene (2013) og Schön (1983) kan ses som representanter for det praksis- og læringsorienterte. Biesta (2014); Kemmis og Smith (2008), og Søndena (2002, 2004) bringer inn mer filosofisk inspirerte stemmer. Kritisk inspirerte stemmer påvirker også forståelsen av refleksjon. Disse inspireres av blant annet sosialkonstruktivistisk tilnærming (eks: Bowne, Cutler, DeBates, Gilkerson, & Stremmel, 2010) og postmoderne tilnærminger (eks: Kroll, 2013; Lanas et al., 2015; Otterstad, 2012). Forventninger og krav til hva refleksjon skal være i utdanning ser ut til å variere, og dette leder til følgende forskningsspørsmål for artikkelen: *Hvordan forstås og framstilles refleksjon i fag- og forskningslitteratur om barnehagelærerutdanningen?* For å besvare spørsmålet, undersøkes først hvordan nyere norske og internasjonale tekster<sup>1</sup>, primært fra barnehagelærerutdanning og førskolelærerutdanning<sup>2</sup>, fremstiller refleksjon. Videre gjør jeg rede for eget forskningsdesign og utvikling av analyseredskap, før jeg drøfter hvordan innholdet i refleksjonsbegrepet knyttes til teori og praksis, endring og ny erkjennelse, og til etiske og kritiske perspektiver. Til slutt drøftes de ulike konsekvensene innholdet som legges i refleksjonsbegrepet får for utdannere i barnehagelærerutdanningen.

### Tidligere forskning og teoretiske perspektiver

Studenter i barnehagelærerutdanningen møter refleksjonsbegrepet både i faglitteratur, i undervisning og i tilknytning til praksisperioder. I praksisperiodene skal studentene få veiledning av praksislærer. Og for praksislærer er det krav om videreutdanning i veiledning på minimum 15 studiepoeng (Kunnskapsdepartementet, 2012, s. 8). I utdanning av veiledere har Lauvås og Handals fagbøker hatt betydning for hvordan refleksjonsbegrepet blir forstått også i barnehagelærerutdanningen. Lauvås og Handal (2014) viser til at hovedhensikten med veiledning er å reflektere over egen praksis. Tilbake i 1990 skriver de: «Det er gjennom en 'reflekterende veiledning' at den uttalte kunnskapen får mening og betydning i konfrontasjon med yrkesutøvelsens problemer» (1990, s. 6). De knytter refleksjon til

<sup>1</sup> Når det videre anvendes betegnelsen tekster er det fag- og forskningslitteratur det viser til.

<sup>2</sup> Utdanningen ble endret fra førskolelærerutdanning til barnehagelærerutdanning høsten 2013. Tekstmaterialet representerer begge utdanningene. I drøftingene bruker jeg konsekvent barnehagelærerutdanningen.

taus kunnskap, kognitiv tradisjon og spenningsfeltet mellom teori og praksis. Hensikten er at veileder stiller spørsmål og åpner for refleksjon framfor å gi svar. Hvordan ideen med å stille spørsmål og la den lærende selv komme fram til egne løsninger på problemer oppstod, er uklar. Lauvås og Handal (1990, 2014) lanserte *refleksjon-i-handling* og *refleksjon-om-handling* som analytiske begreper for å synliggjøre skiller i yrkespraksis. Refleksjon-i-handling er inspirert av Schön (2001) og forklares som individuell, spontan og mindre artikulert, mens refleksjon om handling er refleksjon knyttet til handlinger som skal finne sted eller har funnet sted (Lauvås & Handal, 2014, s. 86). Skagen (2000, s. 29) kritiserer forståelsen av refleksjon i denne veiledningstradisjonen og hevder at den gir studenter frihet til selv å velge hvorvidt teori blir drøftet i veiledning eller ikke. Kvernbekk (2011, s. 24) problematiserer hvilken «jobb» teori skal gjøre overfor praksis. Teori hjelper oss «å beskrive fenomener [...] og forklare sammenhenger», men kanskje viktigst, «vi bruker teori til å se med [...] som en måte å forstå hva som foregår» (Kvernbekk, 2011, s. 24). Hun tar til orde for å la teori ha ulike funksjoner, både som beskrivende og nært knyttet til praksis, og som et distansert kritisk redskap som ikke legitimeres i praksis, men som har til hensikt å «ivareta teoriens egenverdi» (Kvernbekk, 2011, s. 25). Begge tilnærmingene får betydning som redskaper for studenter for både å analysere egne erfaringer og for å utvikle teoretiske forståelser.

Lauvås og Handal (2014, s. 91) påpeker at refleksjon brukes noe tilfeldig i læringssituasjoner, og uten at den som ber andre om å reflektere, har tenkt igjennom hva begrepet bærer med seg. Både Izumi-Taylor et al. (2010) og La Paro, Maynard, Thomason og Scott-Little (2012) etterlyser opplæring av studenter for å sikre at de forstår hva refleksjon krever. Søndena (2002) undersøkte i sin doktoravhandling hva refleksjon innebærer for pedagogikkfaget i førskolelærerutdanningen. Studien bygger på observasjoner av veiledningssituasjoner, intervju med studenter, praksislærere og pedagogikkklærere, samt studier av relaterte styringsdokumenter. Søndena (2004, s. 23) trekker en markant skillelinje mellom det hun definerer som *dyptenkning*, som ensidig fokuserer på handling, og det hun kaller *kraftfull refleksjon*. *Kraftfull refleksjon* innebærer å se tilbake på hvordan situasjonen ble vurdert, å se situasjonen fra ulike perspektiver og forstå verdien av å reflektere. Hovedfunnene til Søndena (2002, s. 170) er at refleksjon i utdanningen i hovedsak framstår som *dyptenkning*, framfor *kraftfull refleksjon*, og at studentene gjennom utdanningen lærer å tilpasse seg tradisjonene i barnehagen framfor å utvide og overskride egen kunnskap. På denne måten blir tradisjoner opprettholdt på bekostning av refleksjon over ny kunnskap og endringer av praksis. Søndenas bidrag avgrensar refleksjonsbegrepet til *det kraftfulle*, der refleksjon gir ny erkjennelse. Ny erkjennelse i refleksjonsprosessen tematiseres også i internasjonale studier. Akkerman og Bakker (2011, s. 156) finner, i sin reviewstudie, 23 artikler der forskerne viser hvordan refleksjon fungerer som læringsmekanisme i grenseoverganger. Det vil si at studenter opplever ny erkjennelse gjennom å utvide sine perspektiver, og refleksjon ses som krevende mentale prosesser i undervisning.

Beauchamp (2015, s. 137) foreslår å endre syn på refleksjon fra å forstås som redskap i undervisning, til et komplekst begrep der dybde og betydning må arbeides med. Det innebærer at hensikten med, og potensialet i, refleksjon må utforskes med blick på den praksis som studentene trenger for å utøve sin profesjon. For at refleksjon kan finne sted, må undervisningssituasjonen tilføre studenter erfaringer det kan være verdt å reflektere over. Studenter må få tilgang til den spesifikke fagkunnskapen i utdanningstradisjonen, men først og fremst lære å lære av egne erfaringer (Kemmis & Smith, 2008, s. 33). Hvordan studentene griper muligheten til å reflektere betinges av hva undervisningen fylles med og hva studentene blir gitt å reflektere over. Kemmis og Smith (2008, s. 32) viser til at studenter utvikler klokskap gjennom å tilegne seg erfaringer, få anledning til å reflektere over disse erfaringene, og få anledning til å være ansvarlig for egne handlinger. Biesta (2015, s. 20) oppfordrer til å gi anledning til at studenter får utøve pedagogisk dømmekraft fra første dag i utdanningsløpet. Utøvelse av pedagogisk dømmekraft og klokskap knyttes til å stå i praktiske

situasjoner der du må gjøre valg basert på teoretisk, praktisk og etisk kunnskap og erfaring, eller utøve skjønn. Hostetler (2016, s. 188) uttrykker dette slik: «helping people doing well».

I følge Sævi (2014) oppstår det situasjoner som virkelig krever kompetanse i etisk refleksjon i relasjoner mellom barn og voksne. Det er disse relasjonsbaserte situasjonene hun framhever som «den formen for praksis som best ivaretar både den eksistensielle kompleksiteten og den motsetningsfulle forskjelligheten som skaper mening og sammenheng for partene» (Sævi, 2014, s. 257). I følge Sævi (2014, s. 257) kommer spørsmål om hvem studenten er som voksen i møte med det enkelte barn før «spørsmål om kunnskap, læring og resultat». Kritisk gransking av egen rolle og praksis blir forklart som viktig for å kunne revurdere antagelser, sammenlikne erfaringer og for å identifisere gap mellom det studenter gjør i praksis, og hva de blir fortalt at de må være oppmerksomme på og leve opp til (La Paro et al., 2012, s. 226).

De teoretiske perspektivene som er presentert her, har alle betydning for hvordan refleksjon i undervisning kan forstås. De sammenfattes til følgende tre tematiske kategorier: 1: *refleksjon i praksis og teori*, 2: *refleksjon for endring og ny erkjennelse* og 3: *pedagogisk klokskap gjennom etisk og kritisk refleksjon*. Disse tre kategoriene anvendes for å drøfte ulike sider ved refleksjon i undervisning.

### **Beskrivelser av prosess og utvikling av analyseredskaper**

Hensikten med denne artikkelen er å granske ulike forståelser av refleksjonsbegrepet, og å undersøke hvordan det framstilles i nyere fag- og forskningslitteratur. Ifølge Alvesson og Sköldbberg (2008, s. 284) handler gransking om å rette oppmerksomheten mot «asymmetriske maktrelasjoner, mot antaganden och föreställningar som tas för givet». Å drøfte og belyse antagelser og hva som tas for gitt om refleksjon er en gjennomgående drivkraft i dette arbeidet. Jeg har valgt å gjøre dette ved å foreta en reviewstudie av ulike tekster. En reviewstudie har til hensikt nettopp å sammenfatte hva som er kjent på feltet (Ridley, 2012, s. 35), men poenget med å gjennomføre denne undersøkelsen er også å synliggjøre problematiske forhold i fremstilling av begrepet (Alvesson & Sköldbberg, 2008, s. 283). Både innledningsvis i denne artikkelen og i de teoretiske redegjørelsene skrives refleksjon fram som et komplekst og mangesidig begrep. For å navigere i mangfoldet av tekster og komme fram til aktuell forskningslitteratur, følges strategiene Bloomberg og Volpe (2012) anbefaler. Tekstene som er valgt ut for undersøkelsen er funnet gjennom tekstsøk i ulike søkemotorer. Jeg valgte reflek\* og barnehagelærerutdanning eller førskolelærerutdanning som søkeord. I søk etter tekstmateriale på engelsk ble reflac\* og early childhood teacher education brukt som søkeord.

Begreper som refleksjon, reflektere og refleksivitet anvendes hyppig i tekstene, og søket gav stort tilfang av tekstmateriale. Ved å sette en tidsramme for søk til å omfatte tekster fra og med 2010 og frem til 2016 kunne noen relevante review-artikler knyttet til feltet inkluderes. Det viste seg å være begrenset hva jeg fant fra norsk barnehagelærerutdanning. For å få et bredere bilde av hva som preger utdanning i Norge, valgte jeg å analysere og anvende noen forskningsarbeider som omhandlet nyutdannede i barnehagen, lærerutdanningen, høyere utdanning generelt og i praksisopplæringen. 111 tekster er analysert. Analyseprosessen resulterte i et utvalg av 25 tekster som er spesielt undersøkt i denne artikkelen, med utspring i norsk, nordisk eller internasjonal forskning.

Jeg gjennomførte en kvalitativ tekstanalyse av de utvalgte fag- og forskningsartiklene. Analyseprosessen foregikk i tre trinn inspirert av Bloomberg og Volpe (2012): 1) Hver enkelt tekst leses. 2) Teksten analyseres utfra hensikt, forskningsspørsmål, metode, teori og funn. 3) Informasjon som er relevant for å belyse forskningsspørsmålet, framheves og kategoriseres. Samme prosedyre ble fulgt for alle tekstene. I denne prosessen ble det mulig å utpeke noen fellestrekk for hvordan refleksjon framstilles. Fellestrekkene baseres på praktiske eksempler for hvordan det arbeides med refleksjon, ulike forståelser av konsepter, teoretiske perspektiver og erfaringer. Ved å analysere tekstene fant jeg at refleksjon anvendes hyppig i forholdet praksis- og teori, det samme gjelder endring og ny

erkjennelse i studenters profesjonsforståelse, og etisk og kritisk refleksjon. Disse tre tematiske kategoriene fikk igjen betydning for min utvelgelse av aktuelle teoretiske perspektiver og for valg av funn for videre drøfting i artikkelen. Fordi det er norsk barnehagelærerutdanning som undersøkes, blir norsk og nordisk forskning viet større oppmerksomhet enn internasjonal forskning forøvrig. Å vise til eksempler fra internasjonal forskning har vokst fram som et valg for å belyse mangfoldet i hva som gjøres, og for å få fram ulike beretninger om hva refleksjon kan bidra til.

## **Funn og drøftinger**

Ulike funn er i denne artikkelen basert på mine analyser av hvordan fag- og forskningslitteratur presenterer og anvender refleksjon. De ulike funnene blir drøftet fortløpende og knyttes direkte til de tre valgte tematikkene. Denne strategien er valgt for å synliggjøre ulike forståelser. Samtidig gir det å drøfte forståelser og fremstillinger også anledning til å belyse kompleksiteter og kontraster i begrepet. Jeg har valgt å organisere dette på følgende måte: 1. Utvalgte elementer fra tekstene eksemplifiseres og diskuteres under hver av de tematiske kategoriene. Underveis rettes oppmerksomheten mot utfordringer dette får for utdanning av barnehagelærere. 2. I de avrundende drøftingene blir utfordringene gransket «på tvers av» de tre tematikkene. Det gjøres for å problematisere hvordan forskning presenterer og anvender refleksjon og for å kunne belyse ulike konsekvenser for utdannere og undervisning.

## **Drøfting**

### *Refleksjon i praksis og teori*

Refleksjon over teori og refleksjon i praksis er områder hvor det finnes relativt mye forskning. I denne undersøkelsen finner jeg likevel ingen nyere empiriske studier om refleksjon i norsk barnehage-/førskolelærerutdanning. Imidlertid gir forskning om nyutdannede førskolelæreres kompetansebygging første år i barnehagen noen signaler om forholdet mellom teori og praksis som jeg mener kan belyse situasjonen. Blant annet poengterer Ødegård (2011, s. 231) at nyutdannede førskolelærere møter holdninger fra kolleger der praktisk erfaring blir vurdert som mer verdifull kunnskap enn kunnskap om teorier. Hun finner også at de nyutdannede førskolelærerne tilpasser seg den kommunikasjonsformen som preger den lokale konteksten. Steinnes (2014, s. 90) viser til at teoretiske kunnskaper gir et viktig grunnlag for refleksjon over praksis, slik at nyutdannede tenker og handler annerledes enn hva de gjorde før de utdannet seg. Utfordringen er at dette er kunnskap som i liten grad er synlig for andre og som er avhengig av å bli artikulert for at andre skal få innsyn i hvordan den nyutdannede begrunner sine valg (Steinnes, 2014, s. 90). Hvis nyutdannede er bedre i stand til å artikulere sin kunnskap, kan dette muligens også gi større aksept for teoretisk kunnskap i praksisfeltet. Eik (2014, s. 363) etterlyser også en tydeligere artikulering av kunnskap. Hun tolker, på grunnlag av sine empiriske studier av nyutdannedes videre kvalifisering i yrket, at de sjeldent anvender faglige argumenter for å forklare skjønsmessige vurderinger. Forskningen til Eik (2014); Steinnes (2014) og Ødegård (2011) viser samlet den relativt sterke vektleggingen av praktisk erfaring i feltet, og at teoretisk faglig argumentasjon kan se ut til å ha en relativt svak posisjon. Å øve studenter til å dele faglige refleksjoner ser dermed ut til å være et konkret innspill til utdannerne og barnehagelærer-utdanningsinstitusjonene.

I ulik nordisk og internasjonal forskning ser det ut til å være engasjement for hvordan refleksjon forstås i spenningsfeltet teori-praksis. I fag- og forskningsartiklene skriver forfatterne fram ulike tilnærminger til hva refleksjon skal være i utdanning. En forståelse er å betrakte refleksjon som et redskap for å forstå teori (Edwards, 2012; Johansen & Frederiksen, 2013; Lanas et al., 2015). En annen forståelse er teori som redskap for å reflektere over praksis (Garvis & Lemon, 2015; Solstad, 2010; Steinnes, 2014). I noen av tekstene ses teori som beskrivende og nær praksis, i andre tekster er

teori framstilt som et mer abstrakt kritisk redskap, og noen refererer til teori som både abstrakt og nært (Kvernbekk, 2011, s. 25). Eksempler på dette er: studenter må lære å tenke teoretisk (Johansen & Frederiksen, 2013, s. 10), teori som situert i egen praksis (Edwards, 2012, s. 595) til teori som utgangspunkt for å analysere handlinger og øve opp et metablikk (Hjort & Pramling, 2014, s. 12; Solstad, 2010, s. 215). Solstad (2013, s. 98) viser til at lærerstudenter har problemer med å se hvordan teoretisk kunnskap har betydning. Dette bekreftes fra dansk forskning, der Johansen og Frederiksen (2013, s. 10) etterlyser at studenter i pedagogutdanningene må lære å tenke teoretisk, og at det ikke er tilstrekkelig å bare agere i praksis. Solstad (2010, s. 215) viser også at praksislærere kan bidra til å styrke studentenes faglige bevissthet ved å knytte teori til kritisk refleksjon over praksiserfaringer. Refleksjon over teorier og faglige konsepter kan da gi studenter teoretisk forståelse som grunnlag for å øve opp metablikk over handling i praksis.

Å øve opp et metablikk kan by på utfordringer. Eksempelvis erfarte Katsarou og Tsafos (2013) fra lærerutdanning i Hellas at selv om det arbeides systematisk med refleksjoner over teori og praksis, blir teori noe studentene anvender for å vurdere erfaringer og komme fram til en riktig løsning. De fant at usikre studenter lot seg overbevise av sterke argumenter fra medstudenter, noe som igjen begrenser studentenes refleksjoner (Katsarou & Tsafos, 2013, s. 546). Edwards (2012) undersøkte hvordan barnehagelærerstudenter i Australia kan utfordres til å erfare teori som situert, eller mulig å se og anvende inn i deres praksis. Edwards (2012, s. 596) viser at ved å arbeide systematisk med å styrke studenters artikulering av erfaringer, gjort i høgskoleklasserommet, utvikler studentene refleksjon basert på teori og teknologi som igjen utfordret deres teori-praksis barrierer. Et kritisk momentet er hva disse nyanseforskjellene vil innebære for undervisningen, for prosessene som beskrives av Edwards (2012) er omfattende og krever at utdannere arbeider tett på studentene over lengre tid.

Ideen om at teori kan bidra til å øve opp metablikk på erfaringer utfordres også i tekstmaterialet. Solstad (2013, s. 98) viser til at studenter har problemer med å se at teori har betydning for deres framtidige profesjonsutøvelse, og Steinnes (2014, s. 90) viser til at nyutdannede gjør nytte av teori i refleksjoner, men at kunnskapen som reflekteres gjerne er lite synlig for andre. Det er studentene som skal lære å anvende teori som refleksjonsredskap, både ved å anvende den nære, praksisbeskrivende teorien og abstrakte teorier som kan gi metablikk og ny erkjennelse. Lanås et al. (2015, s. 11) viser til at utdanneres frustrasjon over studenters manglende interesse for teori handler om at utdannere ikke evner å gjenkjenne studenters splittede teorirefleksjoner som teori. De poengterer at studenters vektning av teori og praksis ikke handler om at de ser teori som mindre viktig. Men, at studenter forsøker å tilpasse teori til sin individuelle faglige subjektiveringsprosess, og den klarer ikke nødvendigvis utdannere å gjenkjenne. Studien til Lanås et al. (2015) skiller seg fra flere av de andre studiene ved at de retter oppmerksomheten mot utdanneres kompetanse.

Et annet poeng å dvele ved er hvordan refleksjon blir teoretisert og gjort rede for som konsept i ulike fag- og forskningslitteratur. Eksempelvis forklarer Bayat (2010) refleksjon ved å vise til Dewey, van Manen og Schön, mens Katsarou og Tsafos (2013) beskriver refleksjon ved å knytte begrepet til andre begreper som aksjonsforskning og praksis. Ødegård (2011) viser til Søndena (2002) og til hvordan etablerte sannheter dyrkes i praksis, framfor kritisk undring og nytenkning, mens Solstad (2013) knytter sitt refleksjonsbegrep til Dewey, videre til veiledningstradisjonen og blant annet Lauvås & Handal. Ser jeg på faglitteraturen som brukes i utdanningen av barnehagelærere i Norge, er de ulike tradisjoner og forståelser bredt representert. Hvordan begrepet forklares i tekstmaterialet henger også sammen med om refleksjon er et overordnet eller et underordnet begrep i undersøkelsen. Men mangfoldet i bruk av kilder og epistemologiske tilnærminger spiller inn i hvordan begrepet kan forklares, utdypes og tolkes i studenters dannelsesprosesser.

Schön (2001, s. 52) sitt begrep, *refleksjon-i-handling*, er interessant å løfte fram i tilknytning til praksisbegrepet. Deler av det norske tekstmaterialet indikerer at studenter ser ut til å overlates til

selv å reflektere i handlingsøyeblikket, framfor å reflektere over egen handling i veiledning. Solstad (2010, s. 215) illustrerer dette når hun etterlyser praksislæreres bruk av teoretiske perspektiver og tilrettelegging for kritisk refleksjon i veiledning av studenter. Halmrast, Taarud og Østerås (2013, s. 23) finner svakheter ved praksismøter og oppfølging av studenter, fordi dette blir arenaer for støtte og enighet framfor arenaer der etablert praksis kan utfordres. Når studenten overlates til selv å arbeide med å tilegne seg reflekterende og kritisk holdning til praksis blir kritikken Skagen (2000) retter mot refleksjonssentrert veiledning aktuell. Den aktualiseres både ved et fravær av teori og manglende rom for ny erkjennelse. Veiledning er ment for å vekke refleksjon (Lauvås & Handal, 2014). Spørsmålet er om refleksjon i veiledning av studenter ensidig blir knyttet til å gjøre overveielser basert på egne og andres praktiske erfaringer, slik Hjort og Pramling (2014, s. 12) finner i svensk barnehagelærerutdanning. Arbeid med refleksjon over teori og praksis beskrives som omfattende prosesser. Som det pekes på i deler av fag- og forskningslitteraturen, krever slikt arbeid avsatt tid, grundige forventningsavklaringer, oppfølging og tett dialog. Og, som Lanås et al. (2015, s. 11) peker på; å være oppmerksom på egen utilstrekkelighet som utdanner for å kunne gjenkjenne refleksjon i studenters arbeid med teori.

### *Refleksjon for endring og ny erkjennelse*

Utgangspunktet for drøftingene i det følgende er skillelinjen Søndena (2004, s. 23) trekker mellom det hun definerer som *dyptenkning* og *kraftfull refleksjon*. Dette problematiserer ytterligere forståelsen og framstillingen av hva refleksjon i utdanningen skal være. Tekstene i denne granskningen viser hvordan refleksjon forsøksvis arbeides fram ved at studenter, i undervisning og ved hjelp av ulike strategier og metoder, nyanserer sine perspektiver og viser at de tilegner seg ny innsikt. Flere av forskerne bak tekstene beskriver sine undersøkelser som vellykkede i arbeidet med studenters endringer i syn og ny erkjennelse. For å initiere ny innsikt bruker eksempelvis Garvis og Lemon (2015), fra australsk barnehagelærerutdanning, videofilmer av barn under tre år i aktivitet i barnehager i undervisningen av studenter. I følge Garvis og Lemon (2015) gav filmene studentene innsikt i barnas læreprosesser, samt mulighet til å kritisk granske egne holdninger og barnehagelæreres roller i møter med de yngste barna. Felles refleksjoner, der både utdannere og studenter deltok, inspirerte studentene til å reflektere over både teori og praktiske erfaringer. Hvorvidt dette gir grunnlag for mer enn dyptenkning er usikkert, men artikkelen belyser omfattende arbeidsstrategier, og det må kanskje til for å komme et stykke på vei med dyptgripende prosesser der endringer av holdninger er hensikten.

Å prøve ut ulike metoder for igjen å gi studenter nye erkjennelser, ser ut til å være svært aktuelle forskningsprosjekter. Det anvendes eksempelvis deling av skriftlige refleksjonsnotater og filming av studenter i aktivitet med barn for å bevege studenter fra det kjente til det ukjente (eks: Bayat, 2010; Cherrington & Loveridge, 2014; Fulton & Myers, 2013; La Paro et al., 2012). I følge Bayat (2010, s. 169) ser det ut til at det tar tid å styrke studenters analytiske refleksjon og integrering av kunnskap. Bayat (2010) oppfordret studenter til å filme seg selv i ulike praktiske kontekster. I etterkant så studenten på opptaket sammen med medstudenter og utdannere. Både Bayat (2010); Cherrington og Loveridge (2014); Fulton og Myers (2013), og La Paro et al. (2012) konkluderer med at ulike redskaper som: skriftlige refleksjonsnotater, video og/eller stimulated-recall er sterke virkemidler for å få nye perspektiver på-, og å kunne utfordre- egen praksis. Samtidig påpekes det at hvorvidt virkemidlene vil fungere avhenger av relasjoner, og av viktigheten av at prosessen ledes av personer deltakerne har tillit til (Cherrington & Loveridge, 2014, s. 50).

Beauchamp (2015, s. 127) viser i sin review av refleksjon i undervisning at «[o]ther authors, in growing numbers, highlight the concern that the push for accountability in teaching has resulted in forced reflection». Hun stiller denne styrte og tvungne refleksjonen opp som en parallell til dyptenkning, mer enn refleksjon. Refleksjon i høyere utdanning knyttes både til undervisning og til

tekniske ferdigheter som vurdering av studenter. Det er et interessant spørsmål om det er dyptenkning mer enn kraftfull refleksjon som foregår når refleksjon settes som grunnlag for vurdering. Også Klemp (2013, s. 56) drøfter kritisk posisjonen til refleksjon i lærerutdanningen og spør om «annerledeshet gir tilstrekkelig drivkraft i refleksjonsprosesser uten at det samtidig er lagt til rette for kollektiv analyse av erfaringer». Slike kollektive analyser kommer ikke av seg selv. Halmrast et al. (2013), undersøkte hvordan praksisfortellinger kan bidra til refleksjon i møtepunkter mellom førskolelærerstudenter, praksislærer og høgskolens faglærere i Norge. De finner at det kan «diskuteres om praksismøtene i tilstrekkelig grad åpner for meningsforskjeller i en flerstemt dialog» (2013, s. 23). I disse møtene ser det ut til at det er harmoni som etterstrebes, også i situasjoner der ulike meninger ville vært forventet. Dette kan tyde på at tradisjon opprettholdes på bekostning av ny kunnskap (Søndenå, 2002, s. 170). Likevel eksisterer det eksempler der tradisjon utfordres og hvor studenter bidrar til nytenkning og overskridelser. Khaled og Meier (2013) beskriver et prosjekt fra Early Childhood Teacher Education i Palestina, der ressursmangel førte til at studentene selv måtte ta ansvar og utvikle nødvendig materiell for bruk i undervisning av barn (Khaled & Meier, 2013, s. 295). Intervjuer med studentene i denne studien viser at nettopp delaktighet i diskusjoner, og det å få mulighet til utvikling og utprøving av egne læringsressurser ledet til å utfordre etablert praksis, nytenkning og ny erkjennelse.

Å gi studenter anledning til å tilegne seg ny erkjennelse gjennom arbeidet med teori og praktiske erfaringer ser ut til å være selve kjernen i arbeidet med refleksjon i høyere utdanning. Ulike strategier og metoder for å styrke refleksjon gjennom arbeidsprosesser i studiet kan, utfra hva som dokumenteres i tekstmaterialet, utfordre studentens profesjonsfaglige forståelser og føre til endring og overskridelser. Dette arbeidet ser ut til å kreve trygge relasjoner, tid og kunnskap om hva slike dyptgripende læreprosesser innebærer.

#### *Pedagogisk klokskap gjennom etisk og kritisk refleksjon*

Tekstene jeg har sett på viser en felles forståelse av refleksjon som viktig for å kunne gjøre etiske og kritiske vurderinger av handlingsalternativer, og igjen styrke faglig dømmekraft. Biesta (2015) forklarer at pedagogisk dømmekraft og klokskap handler om å stå i praktiske situasjoner der du må gjøre valg basert på teoretisk-, praktisk- og etisk- kunnskap og erfaring. Og Kemmis og Smith (2008, s. 32) poengterer at studenters erfaringer med å handle i praksis, og få reflektere over- og ta ansvar for handlingene under veiledet oppfølging, er vesentlig for å utvikle faglig visdom. Suksessfaktor i undersøkelsen til både Khaled og Meier (2013), La Paro et al. (2012) og Nickel, Sutherby og Garrow-Oliver (2010) var nettopp ansvaret studentene ble gitt og erfaringstilegnelsen de fikk anledning til å oppleve. Nickel et al. (2010, s. 51) beskriver hvordan de håndplukket studenter og plasserte dem i praksisinstitusjoner der personalet manglet formell utdanning. Studentene var godt forberedt og fikk tett oppfølging underveis, men de opplevde likevel perioden som svært krevende. Nickel et al. (2010) hevder at kyndig oppfølging fra utdanningsinstitusjonen er helt nødvendig rundt faglig krevende praksisperioder, da kan denne typen praksis forsterke studenters kritiske refleksjonskompetanse.

Hove (2010) viser at det å være student utplassert i praksis er komplekst, med de skjevheter som gjerne oppstår i maktbalansen mellom praksislærer og student. I slike relasjonelle situasjoner skal studentene utvikle etisk kompetanse. Det er praksislæreren som primært legger premissene, og det er vanskelig for studentene å vite om de skal konfrontere vedkommende «med det de fant uetisk eller underordne seg i rollen som student» (Hove, 2010, s. 402). Hove (2010) viser til at studenter ser, hører og reflekterer over en rekke etiske dilemmaer, men de våger ikke alltid å ta dette opp med praksislærer eller utdanningsinstitusjonen. Dette aktualiserer både relasjonsspørsmålet og utdannerens roller og ansvar. Samtidig belyser Hove (2010) også hvor komplekst arbeid med etisk og kritisk refleksjonskompetanse kan være.



Det er interessant å merke seg hvordan forskning om etisk og kritisk refleksjon noe ensidig knyttes til praksisopplæring og også hvor sjelsettende praktiske erfaringer ser ut til å være for studenter på vei mot å bli skjønnsutøvere. Blant annet undersøker Hjort og Pramling (2014) hvordan svenske praksislærere i veiledning med studenter posisjonerer seg innenfor visse argumentasjonstradisjoner. Via disse tradisjonene signaliserer praksislærerne til studentene hva som er viktige og ønskelige måter å forstå barn, barnehage og barnehagelærerens roller på, gjerne med utgangspunkt i fortellinger fra egen praksis. Studenten overlates til selv å forholde seg til litteratur og teori, uten hjelp fra praksislærer. Solstad (2013) finner i sin studie av norske lærerstudenters erfaring med profesjonsorientert og kritisk refleksjon at disse perspektivene i mindre grad preger praksisopplæringen. Solstad påpeker at den praksisorienterte formen veiledning ofte får kan frata studenter de profesjonsorienterte perspektivene i praksis. Halmrast et al. (2013) viser til at det var utdannere fra høyskolene representert i de møtepunktene de undersøkte, og dermed kan ikke praksisfeltet alene bebreides for ikke å utfordre studenters holdninger og løfte inn meta-perspektiver.

Hjort (2013, s. 235) legger ansvaret på utdanningsinstitusjonene og hevder at utdannere styrker studenters etiske refleksjoner ved å legge til rette for at studenten gjør kritiske erfaringer som utfordrer deres etablerte bilder av seg selv og verden. Hjort (2013) understreker at en del studenter står fast i det hun betegner som «moralsk normativitet [...] hvor bestemte pædagogiske holdninger og handlinger fremstilles som de absolutt riktige» (Hjort, 2013, s. 205). Skal utdanningen gi studenter anledning til å utøve pedagogiske dømmekraft og å utvise klokskap fra dag en i utdanningsløpet (Biesta, 2015, s. 20) må det gjelde hele utdanningen, også klasseromsundervisningen. Studenters kritiske erfaringer må anvendes og utfordres og etablerte syn på praksis må settes på dagsorden for å utfordre moralsk normativitet.

### **Avrundende drøftinger**

Gjennom artikkelen er refleksjon diskutert i lys av teori og praksis, endring og ny erkjennelse og i lys av pedagogisk klokskap gjennom etisk og kritisk refleksjon. Jeg har valgt å presentere refleksjon i undervisning av barnehagelærere som komplekst og nyansert, basert på tilgjengelig forskningslitteratur. Når styringsverktøy, fag- og forskningstekster i varierende grad beskrives hvordan forfatterne tolker og forstås begrepet, kan det være med på å styrke ideer om refleksjon som enkle, oppskriftsbaserte delprosesser. Otterstad (2012, s. 147) viser til at refleksjon i styringsdokumenter for barnehagelærerutdanningen nærmest har status som «løsning på å gjøre profesjonelle etiske – og faglige – overveielser». En diskursiv forståelse av refleksjon som den beste løsningen på å håndtere komplekse problemer problematiseres av Hostetler (2016, s. 188). Han kategoriserer et slikt syn på refleksjon som en avgrenset ideologi. Når refleksjon fremstilles som en teknisk ferdighet blir det viktigste å kunne artikulere prosesser i refleksjon framfor kjernen i arbeidet: «helping people doing well» (Hostetler, 2016, s. 188). Poenget om moralsk normativitet og ideer om absolutt riktige ideer og holdninger blant studenter, kan her løftes fram igjen (Hjort, 2013, s. 205). Skal spørsmål om hvem studenten er som voksen i sitt møte med det enkelte barn (Sævi, 2014, s. 257) være kjernen i refleksjon i barnehagelærerutdanningen, så fordrer kanskje dette at studentenes praktiske erfaringer og holdninger er nødvendige deler av både praktisk og teoretisk undervisning. Barnehagelærerstudentene dannes inn i en profesjon. De skal kunne ta avgjørelser basert på etiske overveielser, forholde seg kritisk og legge grunnlaget for andres dannelsesprosesser. Refleksjon er kanskje ikke til mye hjelp hvis ikke det gjennomgående knyttes til utøvelse av skjønn og pedagogisk dømmekraft (Biesta, 2015; Hostetler, 2016). Dette henger igjen sammen med å øve studenter til å dele faglige refleksjoner og å artikulere sin kunnskap (Eik, 2014; Steinnes, 2014).

Utdannere skal arbeide for å oppnå forventningene i utdanningens styringsdokumenter, der refleksjon blant annet fremstilles som vurderingsredskap, som løsning på komplekse profesjonelle

utfordringer og som del av studenters personlige dannelsprosesser. Både Izumi-Taylor et al. (2010) og La Paro et al. (2012) viser til behov for å forklare og nyansere hva som forventes av studenter når de blir bedt om å reflektere. Å forklare og nyansere hva refleksjon innebærer må skilles fra tekniske oppskrifter og trinn for trinn fremgangsmåter. Det krever at utdanneren er oppmerksom på nyansene, for som diskutert over, trinnene i refleksjonsprosesser kan ikke erstatte erfaringer og den forståelsen for etikk studenter utvikler gjennom å måtte reflektere (Hostetler, 2016, s. 188). Som flere av tekstene viser, så krever dette at utdannere setter av tid, gjør grundige forventningsavklaringer, og har tett oppfølging av de prosessene som settes i gang. Betydningen av relasjonen mellom student og utdanner kan heller ikke undervurderes i dette arbeidet (Cherrington & Loveridge, 2014).

Det er påfallende at ingen av tekstene fra norsk barnehagelærerutdanning presenterer empiriske undersøkelser der dyptgripende arbeid med refleksjon er hovedhensikten. Det kan dermed rettes kritiske spørsmål til utdanningsinstitusjonene om kompetanseheving og opplæring av utdannere prioriteres. Dette poenget understrekes av Beauchamp (2015, s. 135) som viser til at erfarne utdannere ikke nødvendigvis klarer å artikulere og demonstrere egne refleksjonskunnskaper når de underviser studenter. Og, Lanas et al. (2015, s. 11) som viser til at utdannere ikke nødvendigvis gjenkjenner studenters teorirefleksjoner når de møter dette. Barnehagelærerutdannere har tilgang til et mylder av teoretiske begrunnelser for refleksjon, og forklaringer om hva refleksjon innebærer. Dette mangfoldet i forståelser gjør oppdraget som utdanner kompleks, men kanskje også mer interessant? Beauchamp (2015) foreslår endring i syn på refleksjon fra å være et redskap i undervisning, til å være et komplekst begrep der dybde og betydning må arbeides med. Dette er også i tråd med etterlysning av den kraftfulle refleksjonen Søndena (2002, 2004) retter mot lærerutdanningene. Ulike nyanseringer i begrepsbruken gjenspeiler ulike etiske og politiske og epistemologiske spørsmål. Slik burde et begrep som refleksjon inspirere fagmiljøene til aktive debatter.

Eksemplene er tydelige når det gjelder nødvendigheten av oppfølging av studenter. Både for å stille kritiske spørsmål, synliggjøre ulike perspektiver og legge til rette slik at studenter kan få erfaringer med å analysere egen rolle kritisk for å overskride egen forståelse. Oppfølging må skje i praksis og i undervisning. Dette skjerper kravet til utdannere om kompetanse i hvordan en skal legge til rette for, og å utfordre til, kritisk refleksjon. Det skjerper også krav til kompetanse om hvordan være veileder, tilrettelegger og portvokter for å kvalifisere framtidens barnehagelærere til utøvere av pedagogisk dømmekraft. Det er problematisk hvor lettvent og selvforklarende begrepet ser ut til å være i dagens barnehagelærerutdanning. Det viktigste, nemlig selve kjernen i utdanningen, sklir ut av siktet, -helping people doing well-.

## Litteratur

- Akkerman, S. F., & Bakker, A. (2011). Boundary Crossing and Boundary Objects. *Review of Educational research*, 81(2), 132-169. Hentet fra <http://rer.sagepub.com/content/81/2/132>  
<http://dx.doi.org/10.3102/0034654311404435>
- Alvesson, M., & Sköldbog, K. (2008). *Tolkning och reflektion: Vetenskapsfilosofi och kvalitativ metod*. Lund: Studentlitteratur AB.
- Bayat, M. (2010). Use of Dialogue Journals and Video-Recording in Early Childhood Teacher Education. *Journal of Early Childhood Teacher Education*, 31(2), 159-172.  
<http://dx.doi.org/10.1080/10901021003781247>

- Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflective Practice*, 16(1), 123-141.  
<http://dx.doi.org/10.1080/14623943.2014.982525>
- Biesta, G. J. J. (2014). *Utdanningens vidunderlige risiko*. Bergen: Fagbokforlaget.
- Biesta, G. J. J. (2015). How Does a Competent Teacher Become a Good Teacher?: On Judgement, wisdom and Virtuosity in Teaching and Teacher Education. I R. Heilbronn & L. Foreman-Peck (Red.), *Philosophical Perspectives on Teacher Education*. Blackwell: John Wiley & Sons, Ltd.
- Bloomberg, L. D., & Volpe, M. (2012). *Completing Your Qualitative Dissertation. A Road Map From Beginning to End*. California, London, New Delhi, Singapore: SAGE.
- Bowne, M., Cutler, K., DeBates, D., Gilkerson, D., & Stremmel, A. (2010). Pedagogical Documentation and Collaborative Dialogue as Tools of Inquiry for Pre-Service Teachers in Early Childhood Education: An Exploratory Narrative. *Journal of the Scholarship of Teaching and Learning*, 10(2), 48-59.
- Cherrington, S., & Loveridge, J. (2014). Using video to promote early childhood teachers' thinking and reflection. *Teaching and Teacher Education*, 41, 42-51.  
<http://dx.doi.org/10.1016/j.tate.2014.03.004>
- Dewey, J. (1997/1933). *How we think*. New York: Dover Publications, inc.
- Edwards, S. (2012). Teaching through assessment: reconsidering the transfer problem through a convergence of technology and assessment in early childhood teacher education. *Teachers and Teaching*, 18(5), 585-599. <http://dx.doi.org/10.1080/13540602.2012.709733>
- Eik, L. T. (2014). *Ny i profesjonen: en observasjons- og intervjustudie av førskolelæreres videre kvalifisering det første året i yrket* (B. nr. 192). Oslo: Unipub forlag.
- Fulton, J. L., & Myers, B. K. (2013). Your Children, My Children. Why Not Our Children?: Dilemmas in Early Childhood Teacher Education. *Childhood Education*, 90(1), 3-10.  
<http://dx.doi.org/10.1080/00094056.2014.872441>
- Garvis, S., & Lemon, N. (2015). Enhancing the Australian Early Childhood Teacher Education Curriculum about Very Young Children. *Early Child Development and Care*, 185(4), 549-563. <http://dx.doi.org/10.1080/03004430.2014.939652>
- Halmrast, G. S., Taarud, R., & Østerås, B. (2013). Bruk av praksisfortellinger for å skape sammenheng mellom praksis og teori i førskolelærerutdanningen. *Norsk pedagogisk tidsskrift*, 97(01), 17-27.
- Hjort, K. (2013). Fra etisk bevidsthed til etisk refleksion? Analyse af en læreproces. I J. J. Rothuizen & L. Togsverd (Red.), *Hvordan uddannes pædagoger? Perspektiver fra et forskningsprojekt*. Aarhus: Videncenteret for socialpædagogik og socialt arbejde, VIACU.
- Hjort, M.-L., & Pramling, N. (2014). Den blivande förskollärarens formering. En studie av verksamhetsförlagda handledningssamtal, argumentationstraditioner och metaforik. *Tidsskrift for Nordisk Barnehageforskning*, 7(10), 1-17. <http://dx.doi.org/10.7577/nbf.610>
- Hostetler, K. D. (2016). Beyond Reflection: Perception, virtue, and teacher knowledge. *Educational Philosophy and Theory*, 48(2), 179-190. <http://dx.doi.org/10.1080/00131857.2014.989950>
- Hove, S. (2010). Bidrar praksisens utfordringer til yrkesetisk utvikling? *Norsk pedagogisk tidsskrift*, 94(05), 396-411.
- Izumi-Taylor, S., Lee, Y.-Y., Moberly, D., & Wang, L. (2010). Reflective Skills of Pre-Service Teachers: A Cross-Cultural Study of American and Japanese College Students. *Research in Comparative and International Education*, 5(2), 131-143.  
<http://dx.doi.org/10.2304/rcie.2010.5.2.131>

- Johansen, M. B., & Frederiksen, L. L. (2013). Teori og praksis i de danske professionsuddannelser. *Tidsskrift for Nordisk Barnehageforskning*, 6(5), 1-12. <http://dx.doi.org/10.7577/nbf.578>
- Katsarou, E., & Tsafos, V. (2013). Student-Teachers as Researchers: Towards a Professional Development Orientation in Teacher Education. Possibilities and Limitations in the Greek University. *Educational Action Research*, 21(4), 532-548. <http://dx.doi.org/10.1080/09650792.2013.851611>
- Kemmis, S., & Smith, T. J. (2008). Personal praxis: learning through experience. I S. Kemmis, T. J. Smith, J. Ax & P. Ponte (Red.), *Enabling praxis*. Rotterdam: Sense.
- Khales, B., & Meier, D. (2013). Toward a New Way of Learning — Promoting Inquiry and Reflection in Palestinian Early Childhood Teacher Education. *The New Educator*, 9(4), 287-303. <http://dx.doi.org/10.1080/1547688X.2013.841504>
- Klemp, T. (2013). Refleksjon - hva er det, og hvilken betydning har den i utdanning til profesjonell lærerpraksis? *Uniped [elektronisk ressurs]: tidsskrift for universitets- og*(1), 42-58.
- Korthagen, F. A. J., Kim, Y. M., & Greene, W. L. (2013). *Teaching and learning from within: a core reflection approach to quality and inspiration in education*. New York: Routledge.
- Kroll, L. R. (2013). Early Childhood Teacher Preparation: Essential Aspects for the Achievement of Social Justice. *Journal of Early Childhood Teacher Education*, 34(1), 63-72. <http://dx.doi.org/10.1080/10901027.2013.758538>
- Kunnskapsdepartementet. (2011). *Rammeplan for barnehagens innhold og oppgaver*. [Oslo]: Kunnskapsdepartementet.
- Kunnskapsdepartementet. (2012). *Nasjonale retningslinjer for barnehagelærerutdanningen*. regjeringen.no. Hentet fra [http://www.regjeringen.no/upload/KD/Rundskriv/2012/Nasjonale\\_retningslinjer\\_barnehagelae\\_rerutdanning.pdf](http://www.regjeringen.no/upload/KD/Rundskriv/2012/Nasjonale_retningslinjer_barnehagelae_rerutdanning.pdf)
- Kvernbekk, T. (2011). Filosofisk om teori og praksis. *Bedre Skole*, 2, 20-25.
- La Paro, K. M., Maynard, C., Thomason, A., & Scott-Little, C. (2012). Developing Teachers' Classroom Interactions: A Description of a Video Review Process for Early Childhood Education Students. *Journal of Early Childhood Teacher Education*, 33(3), 224-238. <http://dx.doi.org/10.1080/10901027.2012.705809>
- Lanas, M., Rautio, P., Koskela, A., Kinnunen, S., Viljamaa, E., & Juutinen, J. (2015). Engaging with theoretical diffraction in teacher education. *Discourse: Studies in the Cultural Politics of Education*, 1-12. <http://dx.doi.org/10.1080/01596306.2015.1126917>
- Lauvås, P., & Handal, G. (1990). *Veiledning og praktisk yrkesteori*. Otta: J. W. Cappelens Forlag A.S.
- Lauvås, P., & Handal, G. (2014). *Veiledning og praktisk yrkesteori* (3. utg.). Latvia: Cappelen Damm A.S.
- Nickel, J., Sutherby, L., & Garrow-Oliver, S. (2010). Fostering Reflection through Challenging Practica. *Journal of Early Childhood Teacher Education*, 31(1), 49-62. <http://dx.doi.org/10.1080/10901020903539689>
- Otterstad, A. M. (2012). Hva er forskningsbasert barnehagelærerutdanning?: en kritisk diskursiv analyse av forskningsmetodologi og barnehagepedagogikkens posisjon. I A. M. Otterstad & N. Rossholt (Red.), *Barnehagelærer-utdanningens kompleksitet. Bevegelser i faglige perspektiver*. (s. 138-163). Oslo: Universitetsforlaget, cop. 2012.
- Ridley, D. (2012). *The Literature Review: A Step-by-Step Guide for Students* (2. utg.). Los Angeles, London, New Delhi, Singapore, Washington DC: SAGE.
- Schön, D. A. (1983). *The reflective practitioner: how professionals think in action*. Aldershot: Arena.
- Schön, D. A. (2001). *Den reflekterte praktiker. Hvordan professionelle tænker, når de arbejder*. Gylling: Klim.

- Skagen, K. (2000). Det historiske tilbakeblikk. I K. Skagen (Red.), *Kunnskap og handling i pedagogisk veiledning*. Bergen: Fagbokforlaget.
- Solstad, A. G. (2010). Praksisnær teori og teorinær praksis - den nødvendige relasjonen. *Norsk pedagogisk tidsskrift*, 94(03), 203-218.
- Solstad, A. G. (2013). Profesjonsorientert refleksjon i praksisopplæringen - en utfordring for lærerutdanningen. *Norsk pedagogisk tidsskrift*, 97(02), 97-108.
- Steinnes, G. S. (2014). *Profesjonalitet under press? Ein studie av førskulelærarar si meistring av rolla i lys av kvalifiseringa til yrket og arbeidsdelinga med assistentane*. Høgskolen i Oslo og Akershus, Oslo.
- Sævi, T. (2014). Eksistensiell refleksjon og moralsk nøling - Pedagogikk som relasjon, fortolkning og språk. *Norsk pedagogisk tidsskrift*, 98(04), 248-259.
- Søndenå, K. (2002). *Tradisjon og transcendens: ein fenomenologisk studie av refleksjon i norsk førskulelærerutdanning* (B. 175). Göteborg: Acta Universitatis Gothoburgensis.
- Søndenå, K. (2004). *Kraftfull refleksjon i lærerutdanninga*. Oslo: Abstrakt forl.
- Ødegård, E. (2011). *Nyutdannede pedagogiske ledes meistring og appropriering av barnehagens kulturelle redskaper* (B. nr. 145). Oslo: Unipub forl.

Translated article 1

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**Abstract:** The purpose of this article is to discuss the use of reflection in both educational and research literature regarding Early Childhood Teacher Education<sup>1</sup> (ECTE). When reading the literature, I find that reflection is linked to theory and practice, to change and new knowledge and to ethical and critical reflection. The understanding of reflection as a concept varies, however personal change and new knowledge is a common denominator. My research reveals reflection as a multifaceted and complex concept. A consequence of this complexity is that in order to give reflection prominence in teacher education, it will require thorough preparations for reflection and comprehensive monitoring of students.

**Keywords:** Reflection, Early Childhood Teacher Education, Research, Pedagogical judgment

### Introduction

When I was a student teacher studying to become a kindergarten teacher, I remember that we were asked to reflect. We sat in small groups, where we were first told to reflect individually, then share our reflections with the group. To me, this caused turmoil. I was uncertain because I did not understand what was expected of me and how to proceed to reflect.

Reflection continues to have a central place in education. The concept is promoted in textbooks, it is used in *The framework plan for kindergartens* (Kunnskapsdepartementet, 2011) and in *The national guidelines for kindergarten teacher education* (Kunnskapsdepartementet, 2012). Central concepts, such as reflection, may be challenging to

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<sup>1</sup> In Norwegian, the title of the education is Barnehagelærerutdanning or kindergarten teacher education. Through this translated text, I will use Early Childhood Teacher Education (ECTE), since that is the title used in other articles in this thesis.

relate to both as educator and as student teacher, and it is questionable whether engaging with the concept is more harmful than beneficial for education (Beauchamp, 2015, p. 135). In textbooks and research literature there are different understandings of what reflection is, and there are disagreements on what functions reflections should fill. For example, Izumi-Taylor, Lee, Moberly, and Wang (2010, p. 132) point to differing views on how reflection is perceived in the United States and Japan. They describe how Japanese ECTE students interpret reflection as examination of previous personal behaviour and self-control, while reflection for American ECTE student teachers implies their thinking about challenges, possible future solutions and that reflection will lead to something, like new knowledge. Another example is Hostetler (2016, p. 179), who problematizes reflection used to characterise teachers' knowledge. Reflection as a concept is further nuanced in official documents mandating ECTE, textbooks and research literature. National guidelines for ECTE (Kunnskapsdepartementet, 2012) connect reflection to practical training, student teachers' academic and personal growth, student teachers' conceptual understanding, research-based education, and as an indicator of characteristics of quality. In the National guidelines, different forms of the concept are invoked 23 times.

Reflection can be linked to different theoretical traditions, where Dewey (1933), Korthagen, Kim, and Greene (2013) and Schön (1983) can be seen as representatives of practice- and learning-oriented perspectives. Biesta (2014), Kemmis and Smith (2008) and Søndena (2002, 2004) add more philosophically inspired views. Critical voices offer new understandings of reflection. These again represent different perspectives where two examples are social constructivist approaches (e.g.: Bowne, Cutler, DeBates, Gilkerson, & Stremmel, 2010), and postmodern approaches (e.g.: Kroll, 2013; Lanas et al., 2015; Otterstad, 2012). Expectations and requirements for what reflection should be in education seem to vary, and this leads to the following research question for this article: *How is reflection understood and constructed in different academic literature and research literature about kindergarten teacher education?* To answer the question I first examine how reflection is depicted in newer Norwegian and international texts<sup>2</sup>, primarily from kindergarten teacher education (ECTE)<sup>3</sup>. In what follows, I will discuss the research design and development of analytical tools before discussing how

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<sup>2</sup> When the term «text» is used, it refers to textbooks and research literature.

<sup>3</sup> From August 2013, ECTE changed from pre-school teacher education (førskolelærerutdanning) to kindergarten teacher education (barnehagelærerutdanning). The texts used here represent both educations. In the Norwegian version, I consistently use kindergarten teacher education as a term in the discussions. Here I vary between kindergarten teacher and ECTE.

the content of different concepts, or representations of reflection, are linked to theory and practice, to change and new recognition, and to ethical and critical perspectives. Finally, different consequences for educators in ECTE regarding different understandings of the concept are discussed.

### Earlier research and theoretical perspectives

Student teachers in ECTE encounter reflection as a concept in both textbooks, teaching and in connection with their practical training in kindergartens. During the practical training, the student teachers are guided by a professional kindergarten teacher (as their practice teacher). For kindergarten teachers tutoring student teachers, there is now a requirement for further education in supervision<sup>4</sup> of at least 15 credits (Kunnskapsdepartementet, 2012, p. 8). In the education of supervisors, also in the ECTE sector, Lauvås and Handal's textbooks have influenced the understanding of the concept of reflection. Lauvås and Handal (2014) show that the main purpose of guidance/supervision is to reflect on one's own practical experiences. Back in 1990 they wrote, "It is through a 'reflective guidance' that uttered knowledge becomes meaningful in confrontation with the problems of professional practice" (1990, p. 6, my translation)<sup>5</sup>. They link reflection to tacit knowledge, cognitive traditions and the tension between theory and practice. The purpose is for the supervisor to ask questions and open for reflection, rather than giving answers. It is unclear how this concept - of asking questions to stimulate reflection - arose. Lauvås and Handal (1990, 2014) launched reflection-in-action and reflection-on-action as analytical concepts to visualize divisions in professional practice. Reflection-in-action is inspired by Schön (2001) and is described as individual, spontaneous and less articulated, while reflection-on-action is reflection related to actions that will take place or have already taken place (Lauvås & Handal, 2014, p. 86). Skagen (2000, p. 29) criticizes the understanding of reflection in this tradition of supervision, claiming that the tradition gives student teachers the freedom to choose whether or not theory will be discussed. Kvernbekk (2011, p. 24) problematizes the significance of work theory in the practical field. Theory helps us "describe phenomena [...] and explain relationships", but perhaps most importantly, "we use theory to see with [...] as a way to understand what is happening" (Kvernbekk, 2011, p. 24). She argues that theory has different functions, both as descriptive and closely related to practice, and as a distant critical tool that is not legitimized in practice,

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<sup>4</sup> The Norwegian term *veiledning* is not exactly the same as supervision, it is more a mix of supervision, guidance, coaching, mentoring, and it is often used to strengthen student teachers' personal reflections on their educational tasks.

<sup>5</sup> Many of the quotations in this article are in Norwegian; they are all translated by me.



but which aims to “maintain the value of theory” (Kvernbekk, 2011, p. 25). Both approaches are important as tools for student teachers to analyse their own experiences and to develop theoretical understandings.

Lauvås and Handal (2014, p. 91) point out that reflection is used randomly in learning situations, and often without deeper considerations for what reflection requires. Both Izumi-Taylor et al. (2010) and La Paro, Maynard, Thomason, and Scott-Little (2012) suggest that student teachers should be given more training to ensure they understand what reflection requires. In a doctoral thesis, Søndena (2002) examined what reflection implies for pedagogy as a subject in ECTE. Her study is based on observations of supervising situations, interviews with student teachers, kindergarten teachers working as supervisors, teacher educators teaching pedagogy, as well as studies of related white papers. Søndena (2004, p. 23) draws a distinct line between what she defines as *deep-thinking*, which mainly focuses on actions, and *powerful reflection*. *Powerful reflection* involves looking back at how the situation was perceived, seeing the situation from different perspectives and understanding the values of being reflective. The main findings of Søndena (2002, p. 170) are that reflection in education is mainly *deep-thinking*, rather than *powerful reflection*, and that student teachers through the education learn to perpetuate traditions in kindergartens rather than expand and exceed their own knowledge. This perpetuation of tradition comes at the expense of reflection as a way of developing new knowledge and change in practice. Søndena limits her definition of reflection to *the powerful*, where the meaning and purpose of reflection is to evoke new recognition. Seeing reflection as a means toward new recognition is also thematised in international studies. In their review-study Akkerman and Bakker (2011, p. 156) find 23 articles where researchers show how reflection works as a learning mechanism for border crossing, i.e. when students experience new knowledge by expanding their perspectives. Reflection is seen as demanding mental processes in teaching.

Beauchamp (2015, p. 137) proposes to change the view of reflection from a tool in teaching to a complex concept whose meaning and potentials should be elaborated to be understood more fully. This implies that the purpose and potential of reflection must be explored in view of the practice the students need to perform their profession. In order for reflection to be activated, the teaching situation must provide student teachers with experiences that may be worth reflecting on. Student teachers must be able to access the specific professional knowledge of the education, but first and foremost they must learn from their personal experiences (Kemmis & Smith, 2008, p. 33). How student teachers acquire the ability to reflect depends on what the

education offers and what the students are given to reflect on. Kemmis and Smith (2008, p. 32) indicate that students develop wisdom through experience, gaining opportunities to reflect on these experiences, and having the opportunity to be responsible for their own actions. Biesta (2015, p. 20) encourages student teachers to exercise educational judgement from day one of their educational courses. Exercising pedagogical judgement and wisdom is linked to practical situations where you must make choices based on theoretical, practical and ethical knowledge and experience, or exercise pedagogical judgement. Hostetler (2016, p. 188) refers to this as: «helping people doing well».

According to Sævi (2014), in relationships between children and adults there are situations that require high competence in ethical reflection. She emphasizes such situations as “the form of practice that best responds both to the existential complexity and contradictory difference that creates meaning and context for the parties” (Sævi, 2014, p. 257). According to Sævi (2014, p. 257), questions about who the student teacher is as an adult in the meeting with each individual child is more important than «questions about knowledge, learning and results». Critical investigation of one’s own role and practice is emphasized as important in order to reconsider assumptions, compare experiences and identify gaps between what students do in practice and what they are told to be aware of and live up to (La Paro et al., 2012, p. 226). Theoretical perspectives presented here all have impact on how reflection in teaching is understood. They are summarised into the following three thematic categories: 1: Reflection in Practice and in Theory, 2: Reflection for Change and New Recognition, and 3: Educational Wisdom through Ethical and Critical Reflection. These three categories are used to discuss different perspectives of reflection in teaching.

#### Descriptions of process and development of analysis tools

The purpose of this article is to examine different understandings of reflection as a term, and to examine how it is presented in recent textbooks and research literature. According to Alvesson and Sköldberg (2008, p. 284), research is about focusing on «asymmetrical power relations, against assumptions and beliefs taken for granted». Discussing and highlighting assumptions and what is taken for granted about reflection is a continuous force, driving this work. I have chosen to do this by conducting a review of various texts. A review study aims to summarise what is known in the field (Ridley, 2012, p. 35), but the point of conducting this review is also to highlight problematic conditions in how the concept is presented (Alvesson & Sköldberg, 2008, p. 283). Both initially in this article and through the theoretical statements, reflection is used as a complex and multifaceted term. To navigate the diversity of

texts and to locate current research literature, the recommended strategies of Bloomberg and Volpe (2012) were followed. The selected texts for the survey are located through searches in various search engines. I chose reflex\*/reflec\* and early childhood teacher education or kindergarten teacher education (barnehagelærerutdanning or førskolelærerutdanning in Norwegian) as keywords for the search. Concepts such as reflection, reflective and reflexive are used frequently in different texts, and the search provided a rich material. The time frame for the search was set from 2010 to 2016, and some relevant review-articles from the field could be included. There were limited findings from Norwegian ECTE. In order to get a broader picture of what characterises education in Norway, I chose to analyse and apply some research work regarding graduates and their practice in kindergartens, teacher education, higher education in general and some from practical training. In all, 111 texts were analysed. The analysis process resulted in a sample of 25 texts specifically investigated in this article, originating in Norwegian, Nordic or international research.

I conducted a qualitative text analysis of the selected textbooks and research articles. The analysis process took place in three steps inspired by Bloomberg and Volpe (2012): 1) Each single text is read. 2) The text is analysed based on purpose, research questions, methodology, theory and findings. 3) Information relevant to elucidate the research question was highlighted and categorised. The same procedure was followed for all texts. In this process it became possible to designate some common features of how reflection is produced. The common features are based on practical examples of how reflection work is done, on different understandings of reflection, theoretical perspectives and experiences. By analysing the texts, I found that reflection is used frequently in the context of relationships between practice and theory. Reflection is also used in relation to change and new recognition in student teachers' perceptions of their future profession, and finally, in relation to ethical and critical reflection. These three thematic categories became important for my selection of current theoretical perspectives and for the selection of findings for further discussions in the article. Because Norwegian kindergarten teacher studies are the core of this study, more attention is devoted to Norwegian and Nordic research in this review than international research in general. References to examples from international research have been used to highlight the diversity, and to provide different perspectives on how reflection can contribute to ECTE.

### Findings and discussions

In this article, various findings are based on my analysis of how textbooks and research literature presents and uses reflection. Different findings are discussed continuously and are

again linked directly to the three chosen themes, or categories. This elected strategy is meant to visualise different understandings. At the same time, discussing understandings and representations also gives an opportunity to illuminate complexities and contrasts in the uses of term. I have chosen to organise this as follows: 1. I exemplified and discussed selected elements from texts under each of the three thematic categories. Along the way I also draw attention to the challenges reflection might cause for the education of kindergarten teachers. 2. In the concluding discussions, these challenges are re-examined across the three themes. This is done to problematize how researchers present and use reflection and to illustrate different consequences for educators and teaching.

## Discussion

### *Reflection in practice and theory*

There is relatively abundant research on reflection on theory and reflection in practice. In my review material I found no recent empirical studies on reflection in Norwegian kindergarten teacher education. However, research on newly educated kindergarten teachers' competence-building in their first years as professionals in kindergartens sheds some light on the relations between theory and practice. Among other elements, Ødegård (2011, p. 231) points out that newly educated preschool teachers are met with attitudes from colleagues that practical experience is more valuable knowledge than theoretical knowledge. She also finds that newly educated preschool teachers quickly adapt to the communication form prevalent within the local context. Steinnes (2014, p. 90) indicates that theoretical knowledge provides an important basis for reflection on practice so that graduates think and act differently than they did before they graduated from ECTE. The challenge is to articulate knowledge that is insufficiently visible so that others can gain insight into how the graduates justify their choices (Steinnes, 2014, p. 90). If graduates are better equipped to articulate their knowledge, this may also give greater acceptance for theoretical knowledge in the field of practice. Eik (2014, p. 363) also calls for a clearer articulation of knowledge. Based on her empirical studies of graduates' further qualification in the profession, she concludes that they rarely use academic arguments to explain their pedagogical judgments. The research of Eik (2014); Steinnes (2014) and Ødegård (2011) shows the relatively strong emphasis on practical experience in the kindergarten field, underlining the fact that theoretical academic argumentation may appear to be relatively weak. Encouraging student teachers to discuss and share their academic reflections thus appears to be a concrete suggestion for the educators in ECTE and for institutions offering ECTE.

In Nordic and international research, there appears to be great interest in how reflection is understood in the field of theory-practice. In textbooks and research articles, the authors discuss different approaches to what reflection should be in education. One understanding is to consider reflection as a tool for understanding theory (Edwards, 2012; Johansen & Frederiksen, 2013; Lanås et al., 2015). Another understanding is theory as a tool to reflect on practice (Garvis & Lemon, 2015; Solstad, 2010; Steinnes, 2014). In some of the texts, theory is described as descriptive and close to practice, while in other texts theory is presented as a more abstract critical tool, and some refer to theory as both abstract and close to practice (Kvernbekk, 2011, p. 25). Some examples of this are: students must learn to think theoretically (Johansen & Frederiksen, 2013, p. 10), theory is situated in one's own, personal practice (Edwards, 2012, p. 595), and theory as a starting point for analysing actions and practicing a meta-view (M.-L. Hjort & Pramling, 2014, p. 12; Solstad, 2010, p. 215). Solstad (2013, p. 98) indicates that student teachers have trouble seeing how theoretical knowledge is important. This is confirmed by Danish research, where Johansen and Frederiksen (2013, p. 10) demand that student teachers must learn to think theoretically, arguing that it is not enough to just act in the practical field. Solstad (2010, p. 215) also shows that kindergarten teachers supervising students in their practical training can help strengthen the students' academic awareness by linking theory to critical reflection of practical experiences. Reflection on theories and academic concepts can then give students' theoretical understanding as a basis for the development of meta-views on their actions in practice.

Developing a meta-view can be challenging. For example Katsarou and Tsafos (2013) learned from teacher education in Greece that while systematically working with reflections on theory and practice, theory becomes what student teachers use to assess experiences and to find practical solutions. They found that insecure students were convinced of strong arguments from fellow students, which again restricted student teachers' reflections (Katsarou & Tsafos, 2013, p. 546). Edwards (2012) examined how student teachers in ECTE in Australia can be challenged to experience theory as situated, or possible to see and apply in their practice. Edwards (2012, p. 596) shows that working systematically to strengthen students' articulation of experiences from university classrooms helps students develop reflection based on theory and technology, which again challenged their theory-practice barriers. A critical point is what these nuances will mean for teaching, because the processes described by Edwards (2012) are extensive and require educators to work closely with students over time.

Some of the texts are also challenging the idea that theory can help develop a meta-view on professional experiences. Solstad (2013, p. 98) indicates that some student teachers have difficulties seeing that theory is important for their future professional practice, and Steinnes (2014, p. 90) indicates that graduates make use of theory in reflections, but that the knowledge reflected is rarely visible to others. It is the student teachers who will learn to apply theory as a reflective tool, by applying both the practice-based theory and the abstract theories that can give rise to meta-views and new recognition. Lanås et al. (2015, p. 11) indicate that teacher educators' frustration over student teachers' lack of interest in theory may be caused by educators' failure to recognise their student teachers' diffracted theoretical reflections as theory. They point out that student teachers' emphasis on practice is not about the fact that they regard theory as less important. However, students try to adapt theory to their individual professional subjectivating-process, and it does not necessarily help educators to recognise their students' understandings of theory. The study Lanås et al. (2015) conducted, differs from several of the other studies, by focusing the attention on teacher educators' skills.

Another point to dwell on is how reflection is being theorised and presented in different textbooks and in research literature. One example is Bayat (2010) who explains reflection by referring to Dewey, van Manen and Schön, while Katsarou and Tsafos (2013) describe reflection by linking the term to other concepts such as action research and practice. Ødegård (2011) refers to Søndena (2002) and to how established truths are cultivated in practice, rather than critical reflection and innovative thoughts, while Solstad (2013) associates her concept of reflection with Dewey, further to the guidance tradition and, among others, Lauvås & Handal. Looking at textbooks used in the education of kindergarten teachers in Norway, the different traditions and understandings are widely represented. How the term is explained in the text material is also related to whether reflection is an overall or subordinated term in the survey. The diversity in the use of sources and epistemological approaches illustrates how the term can be explained, elaborated and interpreted in student teachers' processes of becoming professional practitioners.

Schön's (2001, p. 52) concept, reflection-in-action, is interesting to emphasise in connection with the concept of practice. Parts of the Norwegian texts indicate that student teachers seem to be left to reflect themselves in the moment of action, rather than reflecting on their own actions under supervision. Solstad (2010, p. 215) illustrates this when she calls for the practice supervisors' use of theoretical perspectives and facilitation of critical reflection when working

with student teachers. Halmrast, Taarud, and Østerås (2013, p. 23) find weaknesses in practice-meetings and follow-up of students, as these meetings become arenas for support and unity, instead of an opportunity to challenge established practice. When the student teacher is left to develop a reflective and critical attitude towards practice, the criticism Skagen (2000) addresses towards the reflection-based guidance is actualised. The criticism is actualised both by the absence of theory and lack of room for new recognition. Supervision is intended to awaken reflection (Lauvås & Handal, 2014). The question is whether reflection in the guidance of students is unilaterally linked to making considerations based on one's own and others' practical experiences, as M.-L. Hjort and Pramling (2014, p. 12) find in Swedish ECTE. Work with reflection on theory and practice is described as comprehensive processes. As pointed out in parts of the textbooks and research literature, such work requires devoted time, thorough expectations, follow-up and close dialogue. And, like Lanås et al. (2015, p. 11) point out; in order to recognise reflection in student teachers' work with theory, educators have to be aware of their own shortcomings.

#### *Reflection for change and new recognition*

The starting point for the discussion in the following is the dividing line Søndena (2004, p. 23) draws between what she defines as deep thinking and powerful reflection. This further complicates the understanding and presentation of what reflection in higher education should be. The texts in this review show how reflection is attempted by student teachers, in teaching, through applying different strategies and methods, shedding their perspectives, and acquiring new insights. Several of the researchers behind the texts describe their research work as successful at changing student's ideas and their achievement of new recognition. Garvis and Lemon (2015), from Australian ECTE, use videos of children under three years in various activities in kindergartens in the teaching of student teachers in university classrooms. According to Garvis and Lemon (2015), the films gave the students insights into the children's learning processes, as well as the ability to critically examine their own attitudes and kindergarten teachers' positions in meetings with the youngest children. Common reflections, involving both teacher educators and student teachers, inspired students to reflect on both theory and practical experiences. Whether this is the basis for more than deep thinking is uncertain, but some of the texts highlight extensive strategies in teaching, and that may be necessary to make headway with profound processes where changes in attitudes are the purpose.

Trying out different methods which may rekindle new insights in students seems to be a current trend in research projects. This can include the sharing of written reflection notes, or filming student teachers in activity with children to transport student teachers from the known to the unknown (eks: Bayat, 2010; Cherrington & Loveridge, 2014; Fulton & Myers, 2013; La Paro et al., 2012). According to Bayat (2010, p. 169) it takes time to strengthen student teachers' analytical reflection and integration of knowledge. Bayat (2010) encouraged students to film themselves in various practical contexts. Afterwards, the student looked at the video together with fellow students and teacher educators. Both Bayat (2010); Cherrington and Loveridge (2014); Fulton and Myers (2013), and La Paro et al. (2012) conclude that various tools such as written reflection notes, video and/or stimulated recall interviews are powerful instruments for gaining new perspectives and challenging practice. At the same time, it is pointed out that the success of these remedies depends on relationships, and on the process being led by persons the student teachers trust (Cherrington & Loveridge, 2014, p. 50).

Beauchamp (2015, p. 127) shows in her review of reflection in teaching that «[o]ther authors, in growing numbers, highlight the concern that the push for accountability in teaching has resulted in forced reflection». She poses this forced reflection as a parallel to deep thinking, more than reflection. Reflection in higher education relates to both teaching and to technical skills such as assessment of students. It is an interesting question whether deep thinking rather than powerful reflection takes place when reflection is considered as a basis for assessment. Klemp (2013, p. 56) also discusses the position of reflection in teacher education critically and asks whether «otherness is given sufficient momentum in reflection processes, without simultaneously facilitating collective analysis of experiences (my translation)». Such collective analyses however do not happen by themselves. Halmrast et al. (2013) examined how narratives based on practical experiences can contribute to reflection in meeting points between teacher students, kindergarten teachers and teacher educators in Norway. They find that “it is up for discussion whether these meetings adequately allow for differences of opinions in a multi-voice dialogue” (2013, p. 23). In these meetings, harmony often appears to be the goal, even in situations where different opinions would have been expected. This may indicate that tradition is maintained at the expense of new knowledge (Søndenå, 2002, p. 170). Nevertheless, there are examples where tradition is challenged and where students contribute to new thinking by reaching beyond the known. Khaled and Meier (2013) describe a project from ECTE in Palestine, where lack of resources meant that the student teachers



themselves had to take responsibility and develop the necessary materials for use in the education of children (Khales & Meier, 2013, s. 295). Interviews with the students showed that participation in discussions and the opportunity to develop and test their own learning resources led to challenging the established practice and to innovation and new recognition. Giving students the opportunity to acquire new recognition through their work with theory and practical experience seems to be the very essence of work on reflection in higher education. Various strategies and methods for strengthening reflection through working processes in teaching and practical training in the education can, based on what is documented in the text, challenge the student teachers professional understanding and lead to change and to exceed personal knowledge. This work seems to require safe relations, time and knowledge about what such profound learning processes require.

### *Educational wisdom through ethical and critical reflection*

The texts I have used show a common understanding of reflection as important for making ethical and critical assessments of options in actions, and again strengthening professional judgement. Biesta (2015) explains that pedagogical judgement and wisdom is about being in practical situations where you have to make choices based on theoretical, practical and ethical knowledge and experience. Kemmis and Smith (2008, p. 32) point out that student teachers' experiences of acting in practice as well as reflecting over and taking responsibility for the actions under close supervision, are essential for developing professional wisdom. The success in the research of both Khales and Meier (2013), La Paro et al. (2012) and Nickel, Sutherby, and Garrow-Oliver (2010) rested on the responsibility the student teachers were given and the experiences they achieved. Nickel et al. (2010, p. 51) describes how they handpicked student teachers and placed them in early childhood institutions where the staff lacked formal education. The student teachers were well prepared and got close follow-up along the way, but they still experienced the period as very demanding. Nickel et al. (2010) claims that in order to enhance students' critical reflection skills, expert follow-up from ECTE-institutions is necessary, especially during demanding practical training.

Hove (2010) shows that being a student teacher doing your practical training is complex, with the asymmetrical power relationship that often arises between the teacher supervising the student and the student teacher. In such relationships, students have the opportunity to develop ethical competence. It is the teacher supervising who primarily sets the premises and it is difficult for student teachers to know whether to confront the person "with what they find unethical or subordinate to their role of student" (Hove, 2010, p. 402). Hove (2010) indicates

that students see, hear and reflect on a number of ethical dilemmas, but they do not always dare to address this with the teacher or educational institution. This actualises both the relationship question and the educator's role and responsibilities. At the same time, Hove (2010) highlights how complex work with ethical reflection skills can be.

It is interesting to note how research on ethical and critical reflection seems to be unilaterally linked to practical training and how important practical experiences seem to be for student teachers on their way to become actors of professional judgement. Among other things, Hjort and Pramling (2014) investigate how Swedish mentors in supervision with student teachers position themselves within certain argumentation traditions. Through these traditions, the teacher educator signals the most important and desirable ways to understand the children, kindergartens and the kindergarten teachers' roles, usually based on stories from their own practice. Student teachers are often left to refer to literature and theory, without the help of their mentor in practical training. Solstad (2013) finds in her study of Norwegian teachers' experiences with profession-oriented and critical reflection, that these perspectives to a lesser extent influence practical training. Solstad points out that practice-oriented counselling often decreases student teachers' utilization of professional-oriented perspectives in practice. Halmrast et al. (2013) indicate that there were representatives from ECTE-institutions, as teacher educators, at the meeting-points they investigated, and thus the practice field alone cannot be blamed for not challenging student teachers attitudes or drawing in meta-perspectives. K. Hjort (2013, p. 235) places responsibility on educational institutions and claims that educators reinforce student teachers' ethical reflection by enabling the students to make critical experiences that challenge their established images of themselves and the world. K. Hjort (2013) emphasises that some students stand firm in what she denotes as «moral normativity [...] where particular educational attitudes and actions are made as the absolute right» (Hjort, 2013, s. 205). Should the education provide student teachers with the opportunity to experience educational judgement and to show wisdom from day one of their education (Biesta, 2015, p. 20), it must be applied to the entire education. Student teachers' critical experiences must be used and challenged and established views on practice put on the agenda to challenge moral normativity.

### Final discussions

Throughout the article, reflection has been discussed in light of theory and practice, change and new recognition and in the light of educational wisdom through ethical and critical reflection. Based on available research literature, I have chosen to present reflection in the

teaching of kindergarten teacher students as complex and nuanced. When documents guiding the education, textbooks and research literature vary in how the authors interpret, describe and understand the concept, this might strengthen ideas of reflection as simple, recipe-based sub-processes in teaching. Otterstad (2012, p. 147) indicates that reflection as presented in white papers for ECTE becomes a “solution to professional ethical and professional considerations”. A discursive understanding of reflection as the best solution to dealing with complex problems is problematized by Hostetler (2016, p. 188). He categorizes such a view of reflection as a delimited ideology. When reflection is seen as a technical skill, it becomes more important to articulate processes in reflection rather than the core of the reflective work, which is «helping people do well» (Hostetler, 2016, p. 188). This leads us again to the pitfall of normative morality and ideas of absolutely correct attitudes among student teachers (Hjort, 2013, s. 205). If questions about who the student teacher is as an adult in her meeting with the individual child (Sævi, 2014, p. 257) are the core of reflection in ECTE, then students’ practical experiences and attitude are rendered necessary parts of both practical and theoretical teaching. Kindergarten teacher students are engaged in a formation process, as they prepare to enter into a profession. They should be able to make decisions based on ethical considerations, relate critically, and lay the foundation for other student's building processes. Reflection may not be of much help unless it is linked to exercising professional pedagogical judgement (Biesta, 2015; Hostetler, 2016). This shows the importance of student teachers sharing their professional reflections and articulating their knowledge (Eik, 2014; Steinnes, 2014).

Teacher educators will work to achieve the expectations in the guiding documents of ECTE, where reflection is connected to assessments, seen as a solution to complex professional challenges and as part of the student teacher's personal and professional development processes. Both Izumi-Taylor et al. (2010) and La Paro et al. (2012) refer to the need to explain and nuance what is expected of students when they are asked to reflect. Explaining and nuancing what reflection involves must be distinguished from technical recipes and step-by-step approaches. This requires that the teacher educator is aware of the nuances, because as discussed above, the steps in reflection processes cannot replace experiences and the understanding of ethics students develop through reflecting (Hostetler, 2016, p. 188). As many of the texts show, this requires that educators are willing to prioritize time, clarify expectations, and closely monitor the processes that are initiated. The significance of

relationships between student teachers and their educators cannot be underestimated in such work (Cherrington & Loveridge, 2014).

It is striking that none of the research texts from Norwegian ECTE present empirical surveys where profound work with reflection is the main purpose. Critical questions can therefore be addressed to educational institutions regarding how they prioritize competence and further education of their teacher educators. This point is emphasised by Beauchamp (2015, p. 135), which indicates that experienced educators do not necessarily manage to articulate and demonstrate their own reflective skills when teaching student teachers. Also Lanas et al. (2015, p. 11) indicate that educators do not necessarily recognise student teachers' theoretical reflections when they are expressed in their classrooms. Teacher educators in ECTE have access to myriads of theoretical justifications of reflection, and explanations of what reflection entails. The diversity in understanding makes teacher educators' work with reflection complex, but perhaps also more interesting? Beauchamp (2015) proposes a change in view of reflection as a tool in teaching, to a complex term in which both its depth and importance must be worked with. This is also in line with Søndena's (2002, 2004) call for powerful reflection directed towards teacher education and ECTE. Different nuances in the use of concepts reflect different ethical, political and epistemological questions. Thus, a term as reflection should inspire the academic communities into active debates.

The examples are clear regarding the necessity of follow-up of students. Both to ask critical questions, to visualise different perspectives and to facilitate, so that student teachers can gain experience in critically analysing their own role in order to exceed their own understanding. Follow-up must be done in practice and in teaching. This raises the need for educators' competence in how to prepare for and challenge students to critically reflect. It also raises demands for supervisor competence as facilitator and gate-keeper to qualify future kindergarten teachers as practitioners of educational and professional judgement. It is problematic how easy and self-explanatory the term appears to be in contemporary ECTE. The most important thing, namely the very core of the education, so easily slides out of sight, *-helping people doing well.*

#### Literature

Akkerman, S. F., & Bakker, A. (2011). Boundary Crossing and Boundary Objects. *Review of Educational research*, 81(2), 132-169. Retrieved from <http://rer.sagepub.com/content/81/2/132>

- Alvesson, M., & Sköldberg, K. (2008). *Tolkning och reflektion: Vetenskapsfilosofi och kvalitativ metod*. Lund: Studentlitteratur AB.
- Bayat, M. (2010). Use of Dialogue Journals and Video-Recording in Early Childhood Teacher Education. *Journal of Early Childhood Teacher Education*, 31(2), 159-172. doi:10.1080/10901021003781247
- Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflective Practice*, 16(1), 123-141. doi:10.1080/14623943.2014.982525
- Biesta, G. J. J. (2014). *Utdanningens vidunderlige risiko*. Bergen: Fagbokforlaget.
- Biesta, G. J. J. (2015). How Does a Competent Teacher Become a Good Teacher?: On Judgement, wisdom and Virtuosity in Teaching and Teacher Education. In R. Heilbronn & L. Foreman-Peck (Eds.), *Philosophical Perspectives on Teacher Education*. Blackwell: John Wiley & Sons, Ltd.
- Bloomberg, L. D., & Volpe, M. (2012). *Completing Your Qualitative Dissertation. A Road Map From Beginning to End*. California, London, New Delhi, Singapore: SAGE.
- Bowne, M., Cutler, K., DeBates, D., Gilkerson, D., & Stremmel, A. (2010). Pedagogical Documentation and Collaborative Dialogue as Tools of Inquiry for Pre-Service Teachers in Early Childhood Education: An Exploratory Narrative. *Journal of the Scholarship of Teaching and Learning*, 10(2), 48-59.
- Cherrington, S., & Loveridge, J. (2014). Using video to promote early childhood teachers' thinking and reflection. *Teaching and Teacher Education*, 41, 42-51. doi:10.1016/j.tate.2014.03.004
- Dewey, J. (1933). *How we think*. New York: Dover Publications, inc.
- Edwards, S. (2012). Teaching through assessment: reconsidering the transfer problem through a convergence of technology and assessment in early childhood teacher education. *Teachers and Teaching*, 18(5), 585-599. doi:10.1080/13540602.2012.709733
- Eik, L. T. (2014). *Ny i profesjonen: en observasjons- og intervjustudie av førskolelæreres videre kvalifisering det første året i yrket* (Vol. nr. 192). Oslo: Unipub forlag.
- Fulton, J. L., & Myers, B. K. (2013). Your Children, My Children. Why Not Our Children?: Dilemmas in Early Childhood Teacher Education. *Childhood Education*, 90(1), 3-10. doi:10.1080/00094056.2014.872441
- Garvis, S., & Lemon, N. (2015). Enhancing the Australian Early Childhood Teacher Education Curriculum about Very Young Children. *Early Child Development and Care*, 185(4), 549-563. doi:10.1080/03004430.2014.939652
- Halmrast, G. S., Taarud, R., & Østerås, B. (2013). Bruk av praksisfortellinger for å skape sammenheng mellom praksis og teori i førskolelærerutdanningen. *Norsk pedagogisk tidsskrift*, 97(01), 17-27.
- Hjort, K. (2013). Fra etisk bevidsthed til etisk refleksion? Analyse af en læreproces. In J. J. Rothuizen & L. Togsverd (Eds.), *Hvordan uddannes pædagoger? Perspektiver fra et forskningsprojekt*. Aarhus: Videncenteret for socialpædagogik og socialt arbejde, VIACU.
- Hjort, M.-L., & Pramling, N. (2014). Den blivande förskollärarens formering. En studie av verksamhetsförlagda handledningssamtal, argumentationstraditioner och metaforik. *Tidsskrift for Nordisk Barnehageforskning*, 7(10), 1-17.
- Hostetler, K. D. (2016). Beyond Reflection: Perception, virtue, and teacher knowledge. *Educational Philosophy and Theory*, 48(2), 179-190. doi:10.1080/00131857.2014.989950
- Hove, S. (2010). Bidrar praksisens utfordringer til yrkesetisk utvikling? *Norsk pedagogisk tidsskrift*, 94(05), 396-411.
- Izumi-Taylor, S., Lee, Y.-Y., Moberly, D., & Wang, L. (2010). Reflective Skills of Pre-Service Teachers: A Cross-Cultural Study of American and Japanese College Students. *Research in Comparative and International Education*, 5(2), 131-143.
- Johansen, M. B., & Frederiksen, L. L. (2013). Teori og praksis i de danske professionsuddannelser. *Tidsskrift for Nordisk Barnehageforskning*, 6(5), 1-12.
- Katsarou, E., & Tsafos, V. (2013). Student-Teachers as Researchers: Towards a Professional Development Orientation in Teacher Education. Possibilities and Limitations in the Greek University. *Educational Action Research*, 21(4), 532-548. doi:10.1080/09650792.2013.851611

- Kemmis, S., & Smith, T. J. (2008). Personal praxis: learning through experience. In S. Kemmis, T. J. Smith, J. Ax, & P. Ponte (Eds.), *Enabling praxis*. Rotterdam: Sense.
- Khales, B., & Meier, D. (2013). Toward a New Way of Learning — Promoting Inquiry and Reflection in Palestinian Early Childhood Teacher Education. *The New Educator*, 9(4), 287-303.  
doi:10.1080/1547688X.2013.841504
- Klemp, T. (2013). Refleksjon - hva er det, og hvilken betydning har den i utdanning til profesjonell lærerpraksis? *Uniped [elektronisk ressurs] : tidsskrift for universitets- og(1)*, 42-58.
- Korthagen, F., Kim, Y. M., & Greene, W. L. (2013). *Teaching and learning from within: a core reflection approach to quality and inspiration in education*. New York: Routledge.
- Kroll, L. R. (2013). Early Childhood Teacher Preparation: Essential Aspects for the Achievement of Social Justice. *Journal of Early Childhood Teacher Education*, 34(1), 63-72.  
doi:10.1080/10901027.2013.758538
- Kunnskapsdepartementet. (2011). *Rammeplan for barnehagens innhold og oppgaver*. [Oslo]: Kunnskapsdepartementet.
- Kunnskapsdepartementet. (2012). *Nasjonale retningslinjer for barnehagelærerutdanningen*. regjeringen.no Retrieved from [http://www.regjeringen.no/upload/KD/Rundskriv/2012/Nasjonale\\_retningslinjer\\_barnehagelærerutdanning.pdf](http://www.regjeringen.no/upload/KD/Rundskriv/2012/Nasjonale_retningslinjer_barnehagelærerutdanning.pdf).
- Kvernbekk, T. (2011). Filosofisk om teori og praksis. *Bedre Skole*, 2, 20-25.
- La Paro, K. M., Maynard, C., Thomason, A., & Scott-Little, C. (2012). Developing Teachers' Classroom Interactions: A Description of a Video Review Process for Early Childhood Education Students. *Journal of Early Childhood Teacher Education*, 33(3), 224-238.  
doi:10.1080/10901027.2012.705809
- Lanas, M., Rautio, P., Koskela, A., Kinnunen, S., Viljamaa, E., & Juutinen, J. (2015). Engaging with theoretical diffraction in teacher education. *Discourse: Studies in the Cultural Politics of Education*, 1-12. doi:10.1080/01596306.2015.1126917
- Lauvås, P., & Handal, G. (1990). *Veiledning og praktisk yrkesteori*. Otta: J. W. Cappelens Forlag A.S.
- Lauvås, P., & Handal, G. (2014). *Veiledning og praktisk yrkesteori* (3 ed.). Latvia: Cappelen Damm A.S.
- Nickel, J., Sutherby, L., & Garrow-Oliver, S. (2010). Fostering Reflection through Challenging Practica. *Journal of Early Childhood Teacher Education*, 31(1), 49-62.  
doi:10.1080/10901020903539689
- Otterstad, A. M. (2012). Hva er forskningsbasert barnehagelærerutdanning?: en kritisk diskursiv analyse av forskningsmetodologi og barnehagepedagogikkens posisjon. In A. M. Otterstad & N. Rossholt (Eds.), *Barnehagelærer-utdanningens kompleksitet. Bevegelser i faglige perspektiver*. (pp. 138-163). Oslo: Universitetsforlaget, cop. 2012.
- Ridley, D. (2012). *The Literature Review: A Step-by-Step Guide for Students* (2 ed.). Los Angeles, London, New Delhi, Singapore, Washington DC: SAGE.
- Schön, D. A. (1983). *The reflective practitioner : how professionals think in action*. Aldershot: Arena.
- Schön, D. A. (2001). *Den reflekterte praktiker. Hvordan professionelle tænker, når de arbejder*. Gylling: Klim.
- Skagen, K. (2000). Det historiske tilbakeblikk. In K. Skagen (Ed.), *Kunnskap og handling i pedagogisk veiledning*. Bergen: Fagbokforlaget.
- Solstad, A. G. (2010). Praksisnær teori og teorinær praksis - den nødvendige relasjonen. *Norsk pedagogisk tidsskrift*, 94(03), 203-218.
- Solstad, A. G. (2013). Profesjonsorientert refleksjon i praksisopplæringen - en utfordring for lærerutdanningen. *Norsk pedagogisk tidsskrift*, 97(02), 97-108.
- Steinnes, G. S. (2014). *Profesjonalitet under press? Ein studie av førskulelærarar si meistring av rolla i lys av kvalifiseringa til yrket og arbeidsdelinga med assistentane*. Høgskolen i Oslo og Akershus, Oslo.
- Sævi, T. (2014). Eksistensiell refleksjon og moralsk nøling - Pedagogikk som relasjon, fortolkning og språk. *Norsk pedagogisk tidsskrift*, 98(04), 248-259.

- Søndenå, K. (2002). *Tradisjon og transcendens: ein fenomenologisk studie av refleksjon i norsk førskulelærerutdanning* (Vol. 175). Göteborg: Acta Universitatis Gothoburgensis.
- Søndenå, K. (2004). *Kraftfull refleksjon i lærarutdanninga*. Oslo: Abstrakt forl.
- Ødegård, E. (2011). *Nyutdannede pedagogiske ledes mestring og appropriering av barnehagens kulturelle redskaper* (Vol. nr. 145). Oslo: Unipub forl.

## Article 2

Moxnes, A. R. (2017). "Det er alltid ulike perspektiver" - En studie av hvordan undervisere i pedagogikk arbeider med refleksjon i høyskoleklasserommet ["There are always different perspectives" – A study of how teacher educators teaching pedagogy work with reflection in University classrooms]. In: Frers L, Hognestad K and Bøe M (eds) *Metode mellom forskning og læring: Refleksjon i praksis* [Method of research and learning: Reflection in practice]. Oslo: Cappelen Damm akademiske.

English translation is attached after original



## KAPITTEL 6

# «Det er alltid ulike perspektiver.»

## En studie av hvordan undervisere i pedagogikk arbeider med refleksjon i høgskoleklasserommet

Anna R. Moxnes

### Abstract

*In this chapter, teacher educators' teaching to enhance reflection in Early Childhood Teacher Education (Barnehagelærerutdanningen) is highlighted. The educators' stories and experiences are collected through an interview study. Elements from both thematic and structural analysing strategies are made use of. Firstly, to construct narratives based on interviews, and secondly to construct a story of reflection in classroom teaching based on a fictional voice, «Line». Line tells about experiences with different methods. She shares experiences about her own pedagogical work with student teachers and challenges that have influence on her teaching. The discussion addresses facilitation of reflection and that reflection easily ends up mirroring the already known. In this chapter, the main suggestions are that working methods for strengthening student teacher's reflectivity require a focus on different areas. Suitable teaching rooms and personal interest in developing teaching methods are needed. It is necessary to challenge the student teacher's perception of professional practice. Last but not least, teacher educators also need courage to be a virtuoso with confidence to display and discuss personal reflections and limitations.*

*Keywords: Reflection, Teacher educator, Early Childhood Teacher Education, Classroom teaching and Educational judgement*

## Introduksjon

I løpet av tre år skal barnehagelærerstudentene gjennom praktisk, teoretisk og forskningsbasert undervisning kvalifiseres for pedagogisk arbeid med barn i alderen 0–6 år i barnehagen (Kunnskapsdepartementet, 2012a, 2012b). Den nyutdannede skal kunne fungere som barnehagelærer og som pedagogisk leder, og for å nå målsettingen om kvalifisering har refleksjonsbegrepet fått en sentral plassering. I *Forskrift om rammeplan for barnehagelærerutdanningen* knyttes begrepet til «profesjonsetisk» og «kritisk». Det lenkes til begreper som profesjonsforståelse, pedagogiske arbeidsprosesser, forskning og erfaringsbasert kunnskap, og knyttes til prosesser rundt arbeid med barn i barnehagen, til veiledning og til å vurdere og justere egen praksis (Kunnskapsdepartementet, 2012a). I tillegg anvendes begrepet hyppig i fag og forskningslitteratur som støtter opp om barnehagelærerutdanningen (Moxnes, 2016)

Ifølge Søndena (2002, 2004) står refleksjon i høyere utdanning i et spenningsfelt der intensjonen er ny erkjennelse gjennom kraftfull refleksjon, refleksjon som leder til nytenkning, og som avhenger av et fellesskap. Motpolen er speiling av det allerede kjente, eller former for dyptenkning som ikke fører til endring. I en metastudie av forskningstekster om refleksjon i lærerutdanningen framgår det at erfarne undervisere ikke nødvendigvis klarer å artikulere egen refleksjonskunnskap i undervisning (Beauchamp, 2015, s. 135). Fra norsk hold kritiserer Lauvås og Handal (2014, s. 81) undervisere for å betrakte refleksjon som en enkel oppgave, og stiller spørsmål ved hvor ofte vi selv virkelig forsøker å reflektere. Nyere dansk forskning viser at høgskoleklasserommet er lite anvendt til å bygge opp om profesjonsorienterte prosesser. Eksempelvis finner Johansen og Frederiksen (2013, s. 10) at det i liten grad vies plass, i undervisning, til aktiviteter og kritiske erfaringer som viser teori og praksis som nyttige for hverandre. Og Hjort (2013) finner at pedagogstudenters etiske refleksjoner ikke nødvendigvis styrkes gjennom utdanningen. Samlet sett er disse undersøkelsene ganske nedslående for utdanningen og høgskoleklasserommet som arena for å styrke refleksjon og pedagogiske begrunnelser. Når arbeid med refleksjon i tillegg krever at undervisere setter av tid til refleksjonsarbeid, og at refleksjon fordrer trygge relasjoner der studentene må følges tett (Moxnes, 2016, s. 10), kan det settes spørsmålsteget ved om refleksjon som del av læring kommer av seg selv.

Siden pedagogikkfaget er tildelt en posisjon der det skal «bidra til studentene sin dannelsesprosess, personlege vekst og utvikling, analytiske ferdigheter, integrering av teori og praksis, innsikt i vitenskapelig tenkemåte og til etisk refleksjon» (Kunnskapsdepartementet, 2012b, s. 10), er pedagogikkfaget av spesiell interesse for å belyse undervisningspraksiser. De nevnte forskningsfunnene vekket interesse for hva undervisere i pedagogikk selv forteller om det de gjør for å styrke studenters profesjonsorienterte refleksjoner. Hva de forteller om egen undervisning, hvilke metoder de anvender, hva dette krever av dem, og hva som jobber imot dem i høyskoleklasserommet. I det følgende gjøres det rede for teoretiske aspekter som kan gi et bilde av refleksjon i barnehagelærerutdanningen.

## Refleksjon som teoretisk omdreining

Det teoretiske omdreiningspunktet i artikkelen er *refleksjon*. Refleksjon beskrives, forklares, nyanseres og tillegges ulike funksjoner og intensjoner i fagtekster, forskningstekster og styringsdokumenter som omhandler utdanningen av barnehagelærere (Moxnes, 2016). Her vil en forståelse som inspireres av Schön (1983, 1987), nyanseres av Kinsella (2012) og delvis utfordres av Søndena (2002, 2004), virke som teoretisk grunnlag for videre diskusjoner. Schön (1983, s. 55) skiller mellom refleksjon *i* og *på* handling, der *på* viser til den refleksjonen som gjøres i etterkant av at noe har skjedd, mens *i*-handling viser til selve handlingsøyeblikket (Schön, 1983). Det handler om å reflektere over det man gjør i det øyeblikk man gjøre noe, og samtidig gjøre dette «noe» helt utmerket. Schön (1987) knytter refleksjon-i-handling til utdanning, og undervisning i klasserommet som pågående praksis. Studenters utbytte av refleksjonen henger sammen med den oppfølging og veiledning de får, og dette avhenger ifølge Schön (1987, s. 169) av hvordan underviseren evner å tilpasse sine beskrivelser til den enkelte students behov og kapasitet til å reflektere-i-handling i den pågående dialogen.

Forståelsen av refleksjon-i-handling blir nyansert av Kinsella (2012) til også å omhandle å foreta etiske overveielser, og å se refleksjon og tolkning som både sosiale og individuelle prosesser. Oppmerksomheten i sosiale prosesser ledes slik mot diskurser som påvirker meningsforståelser og det å være kritisk reflektert om hvorfor ting er som de er (Kinsella, 2012, s. 49). For arbeid med refleksjon i høyskoleklasserommet retter disse perspektivene refleksjon mot

handlingsøyeblikket, etiske overveielser over møter mellom undervisere, studenter og underviser–student, og hva som påvirker disse møtene.

Refleksjon står også i sentrum i Søndena (2002, 2004) sin forskning. Hun skiller mellom dyptenkning (repetisjon og speiling) og kraftfull refleksjon (overskridelse og nytenkning). Hun beskriver kraftfull refleksjon som det å ta grep om kvaliteten på pedagogikken, å ta stilling til noe, men samtidig å holde fast på det som gir mening i livet. Konsekvensen av dette er ifølge Søndena (2004, s. 131) «ei stadig veksende tenking». Hun påpeker at «[i] vår iver etter å utvikle evne til refleksjon, har vi såleis gløymt å diskutere *kva* vi skal reflektere over og å *ta stilling* til eit innhald» (Søndena, 2004, s. 15/16). Hun er kritisk til hva refleksjon er i utdanning, og viser til at det gjerne tar form av speiling og dyptenkning, og at studenter lærer å tilpasse seg en tradisjon, uten kritisk blikk på det de gjør (Søndena, 2002). For refleksjon i høgskoleklasserommet åpner disse nyanseringene for å etterspørre innholdet i refleksjonene og å utfordre ytterligere hva nytenkning innebærer.

Refleksjon i utdanning kan knyttes mot framtidig skjønnsutøvelse. Skjønnsutøvelse omhandler resonneringer, basert på overført kunnskap, normer og verdier, reflekterte handlingsoverveielser og argumentasjon rundt valg (Molander, 2013). Kinsella (2012, s. 35) spesifiserer dette ved å knytte refleksjon til *fronesis*, som det som informerer og assisterer oss i å navigere varierte praktiske kontekster. Eller «evne til å vurdere hvordan man bør handle for å fremme det som er moralsk godt for mennesker i konkrete situasjoner» (Grimen, 2008, s. 78). Arbeid med refleksjon i utdanning må da omhandle å sette studenter i stand til å navigere komplekse handlinger, og gjøre reflekterte handlingsoverveielser. Dette inspirerte til å undersøke om, og eventuelt hvordan, refleksjon aktiveres gjennom undervisning i høgskoleklasserommet, og forskningsspørsmålet som følger opp dette er: Hva forteller undervisere i pedagogikk at de gjør og erfarer i arbeidet med å styrke barnehagelærerstudenters refleksjoner?

## Abduktive og narrative forskningstilnærminger

For å granske hva som ble fortalt om refleksjon, ble en abduktiv tilnærming til metoder, teori og empiri valgt (Alvesson & Kärreman, 2011; Brinkmann, 2014). Abduksjon blir gjerne knyttet til pragmatisme, men i dette kapitlet handler det om å gjøre pragmatiske valg og variere strategier ut fra hva som virker

hensiktsmessig, for igjen å belyse forskningsspørsmålet (Alvesson & Kärreman, 2011; Biesta, 2015). Et slikt metodisk valg handler om reflekterende bevegelser, der ulike hendelser kan endre ideer og forståelser i møter med empiri og ny teori. Abduksjon blir det som gjøres når det ikke er en oppskrift, når teoretiske perspektiver eller empiriske funn ikke passer helt inn og teoretiske utvidelser kan gi ny innsikt. Abduksjon foreslås som former for argumentasjon som er konsentrert om forholdet mellom situasjon og forskning, og er verken drevet av teori eller empiri, men av *breakdowns* (Alvesson & Kärreman, 2011; Brinkmann, 2014). Breakdowns kan være overraskelser og innspill som ikke stemmer med forventninger, og forskeren må prøve andre strategier og justere sine planer (Alvesson & Kärreman, 2011, s. 19). Dette dreier seg om brudd i forventninger til handling, eller forløp av en handling, slik Frers (2017) viser til i kapittel 1, og som Lofthus (2017) eksemplifiserer gjennom sine refleksjoner i kapittel 2 i denne boken. Breakdowns oppstod både i arbeid med ulike metodiske utfordringer, i arbeid med analysene av materialet og i arbeid med teoretiske perspektiver.

Flere overraskelser og brudd fikk betydning for utformingen av dette kapitlet. Et eksempel er arbeidet med det empiriske materialet. Materialet består av ti intervjuer av ansatte i pedagogikkundervisning ved barnehagelærerutdanningen ved fem ulike universiteter/høgskoler i Norge. En diktafon ble anvendt under intervjuene, og lydopptakene ble transkribert. Da de første intervjuene var transkribert, ble de levert tilbake til de intervjuede som et ledd i valideringen av materialet. De intervjuede gav uttrykk for at det var problematisk å lese sin uttrykksmåter. Å se egne muntlige formuleringer som tekst var et sterkt virkemiddel. Dette ble et brudd i forskningsprosessen, og nye metodestudier ble gjennomført. Vendingen ble å undersøke muligheter i narrativ forskning. De fleste narrative studier tar, ifølge Riessman (2008, s. 23), utgangspunkt i, og bygges ut fra, intervjumateriale. Hensikten er gjerne å generere detaljerte beskrivelser, der en fortelling leder til den neste (Riessman, 2008). Dette stemte godt overens med materialet i denne studien, siden transkripsjonene inneholder flere små og lengre fortellinger og også sekvenser der en fortelling leder til den neste. Å studere fortellingene i intervjumaterialet kan betraktes som et vindu inn mot meningskonstruksjoner (Souto-Manning, 2014, s. 162). I materialet i denne studien blir mening forsterket gjennom hva de intervjuede forteller av ulike subjektive opplevelser og ideer. Dette beskrivende materialet er det som anvendes i de videre analysene.

Den narrative strategien som ble valgt, kan beskrives som konstruksjon av en fortelling ut av flere intervju, gjerne i kombinasjon med feltnotater, observasjoner eller annet relevant materiale (Engelsen & Smith, 2014). Fortellingen som blir introdusert senere, er sammensatt av tematikker analysert fram fra intervju med flere aktører, og er en konstruert fortelling (Engelsen & Smith, 2014; Jernes & Engelsen, 2012). Denne vendingen i forskningsprosessen gav rom til å reflektere over flere ulike aspekter ved undervisning og undervisningspraksis og bidro dermed til å forsterke den abduktive analyseprosessen. Studien er meldt til personvernombudet for forskning (NSD), og spesielle kjennetegn er fjernet for å anonymisere bidragsyterne og institusjonene de arbeider ved. Egennavn som benyttes, er pseudonymer. I det som følger, brukes narrativ som betegnelse på en av de valgte analysestrategiene, å utarbeide et narrativ fra hvert av de ti intervjuene. Data basert på hendelser, handling og aktivitet i de ti narrativene ble videre analysert fram til den konstruerte fortellerstemmen, «Line». Analyseprosessen blir beskrevet under.

## Å analysere fram en fortelling om refleksjon

Som nevnt over foregår prosessen med å konstruere en fortelling som belyser refleksjon i barnehagelærerutdanningen gjennom flere ledd. For å få fram ulike meninger, intensjoner og funksjoner om refleksjon i intervjutekstene valgte man å konstruere et narrativ for vært intervju. Å tydeliggjøre den enkeltes meninger og intensjoner gjøres, ifølge Riessman (2008, s. 53), for å unngå å generalisere innholdet i intervjuene, og for å vektlegge hva som ble fortalt. Å skrive fram et narrativ for hver bidragsyter bidro til å sette den enkeltes personlige engasjement, episodiske erfaringer og fortelling fra arbeid med refleksjon i undervisning i sentrum for oppmerksomheten. Hvert ord måtte velges med omhu for å sikre at det var representativt for intervjuet. Et eksempel er fra intervjuet med Jane. Gjennom intervjuet poengterer Jane viktigheten av selvrefleksjon og slik ble det skrevet fram:

Jeg mener at selvrefleksjon er utrolig viktig. Det dreier seg om makt, og maktperspektiver. Da tenker jeg på relasjoner mellom barn og voksne og hvor viktig det er å få studenter til å reflektere for både å oppdage seg selv og egen handling, slik at de unngår å gjøre for mange feil i møte med barn.

Ulike sitater ble valgt ut for å få fram det spesifikke i hva hver enkelt var opptatt av. Hvert narrativ ble et konsentrat av innhold og budskap fra det enkelte intervju. I denne prosessen ble det avdekket fem tematikker som gikk igjen i alle intervjuene, og som ble synlige i alle narrativene. Disse temaene ble grunnlaget for å konstruere Lines fortelling. Konstruksjonen av Line utdypes nærmere etter den tematiske analysen.

## Tematisk analyse av ti narrativ

For å få fram tematikker basert på hva de ti ulike bidragsyterne forteller om hvordan de tilrettelegger for refleksjon, ble et grep å studere «hva» som ble sagt, framfor til hvem, hvordan det er sagt eller hva intensjonen bak utsagnet kan ha vært (Riessman, 2008). I Dinas narrativ deles følgende erfaring:

Det viktigste for meg er å hjelpe mine studenter til å reflektere for igjen å få et grunnlag for skjønnsarbeid når de kommer ut i praksis. Barnehagearbeid er å vise profesjonelt skjønn og det igjen mener jeg handler om å kunne reflektere, drøfte og diskutere og vurdere en situasjon. Jeg må utfordre studentene, og gjøre undervisningen spennende for å få de til å reflektere. Dette krever mye og gjør meg svært engasjert!

Dina forteller om hvordan hun må bidra og ta aktivt del for å utfordre studentene og styrke refleksjon. Hva Dina forteller om sitt syn på refleksjon, bidrar til å nyansere forståelsen av hva refleksjon kan som oppfattes i klasseromsundervisning. Dina ser refleksjon i sammenheng med skjønn, men hun ser også på egen rolle for å få studentene til å reflektere. Når pedagogikkunderviserne beskrev refleksjon i høgskoleklasserommet, ble dette gjerne knyttet til hva de selv forteller at de gjør i undervisningen. Eksempelvis forteller Anja at: «for meg er refleksjon først og fremst å få studenter til å tenke over ting. Det må de kunne når de blir barnehagelærere». Et annet eksempel er fra Janes narrativ. Hun forteller om metoder som kan utfordre til kritisk refleksjon og uttaler at: «Jeg må lære de å stille kritiske spørsmål til seg selv og kolleger. Det er nødvendig når du skal jobbe i et team og lede teamet i en barnehage». Ulike utsagn om hva som kreves for å få studenter til å reflektere, tegner et variert bilde av metodebruk og underviserens rolle i undervisningen.

Ulike teorier om refleksjon (eks: Kinsella, 2012; Schön, 1983, 1987; Søndena, 2002, 2004), spilte også inn i hva det ble sett etter, og hva det ble mulig å se i analysearbeidet. I noen av narrativene blir det referert direkte til Søndena

(2002) og begrepet kraftfull refleksjon, andre nevnte begreper som refleksjon i eller på handling. Undervisningsmetoder som beskriver arbeid for å styrke refleksjon, er et eksempel der pedagogikkunderviserens teoretiske forståelse ble synlig og knyttes sammen med hva de forteller om undervisning i klasserommet. I Hannes narrativ fortelles det:

Jeg må bruke klasserommet aktivt som arena for å tenke både pedagogikk og didaktikk, og bruke de mulighetene rommet faktisk byr på. Jeg har ansvar for å gjøre klasserommet til en levende undervisningsarena der det er spennende for studentene å delta. Jeg må hele tiden prøve ut nye metoder for å få til refleksjon over det de har opplevd i praksisperiodene.

Å gjøre klasserommet til et sted der praktiske erfaringer og refleksjon på handling vektlegges, fortelles fram av Hanne. Et annet eksempel er fra Bentes narrativ der følgende erfaring deles:

Av og til deler jeg studentene i grupper på to og to og så sender jeg dem ut for å gå. Så sier jeg hva de skal diskutere mens de går. Ut av bygningen, ut av campus. Ut og bruk området i en halv time. Det avstedkommer ofte mye godt [...] så får vi i gang diskusjon med nye refleksjoner og synspunkter når de kommer tilbake.

Bente viser slik til metoder hun erfarer kan sette i gang nye ideer og tanker hos studentene, og fremkalle refleksjoner på og i handling. Både Hanne og Bente viser begeistring for at de kan prøve ut nye metoder. Dette suppleres av Eva, som forteller:

Jeg liker at vi prøver ut ulike undervisningsmetoder. Kanskje det er det som gjør det morsomt å jobbe i dette teamet, at jeg får jobbe så variert med faget mitt? Det er som å være pedagog i barnehagen igjen, for jeg må forberede meg på det uforberedte, og så får jeg mye å reflektere over selv.

Metoder for å styrke refleksjon i undervisningen er en fellesnevner for narrativene, og det kunne velges ut som et tema også for Lines fortelling. Ved å se på hva som ble fortalt om metoder, ble pedagogikk som fag tydeliggjort som et fellestema mellom narrativene. Refleksjon og undervisningsmetoder for å styrke refleksjon ble etterspurt i intervjuguiden og ble dermed fremtredende i intervjuene. Et overraskelsesmoment var hvordan pedagogikk som fag og opplevelser av å være pedagogikkunderviser i møte med studenter ble snakket fram i materialet. Dette var ikke tema i intervjuguiden, men kommer fram



gjennom små beretninger som når Eva forteller om gleden hun opplever over teamet hun jobber i. Kjærlighet til og stolthet over pedagogikkfaget ble uttrykt i narrativene, og eksempelvis forteller Ida:

Vi må vise til at pedagogikk er et tenkefag og være synlige på hvorfor pedagogikk er viktig som nettopp et tenkefag. Å få jobbe med et tenkefag gjør meg stolt av å undervise i pedagogikk.

Mens Carla uttrykker andre kvaliteter med faget:

Jeg synes pedagogikk handler nettopp om det at det ikke er en fasit for enhver situasjon, og at det alltid er ulike perspektiver.

Infiltrert i pedagogikk som fag og metoder for å fremme refleksjon ble interessen for spørsmålsstillinger enda et fellestrekk. Spørsmål ble beskrevet i alle narrativene. Eksempelvis er Carla og Ida begge opptatt av å anvende spørsmål for å tenke sammen med sine studenter, mens Anja og Hanne beskriver at de stiller åpne spørsmål til sine klasser for å utfordre studentene til å reflektere. Gunn forteller:

Jeg stiller små spørsmål underveis i min undervisning for å få studentene til å knytte sammen tematikken der vi er i undervisningen, med sine egne erfaringer fra barnehagene og reflektere over disse. Jeg tror det er viktig at jeg spør dem, for slik kan vi sammen gjøre undervisningen aktuell.

Å stille kritiske spørsmål ble også hyppig nevnt som refleksjonsframkallende virkemiddel, og Bente forteller:

Det å virkelig begynne å røre i gryta og stille de virkelige kritiske spørsmålene. Det er krevende for meg som underviser. Jeg tror man må øve og øve igjen og igjen. Slike prosesser tar tid, og krever mye refleksjon også fra min side.

Relasjoner til klasser og enkeltstudenter ble et annet sentralt tema som underviserne knyttet til refleksjon og til metoder i undervisningen. Et eksempel er fra Frikk sitt narrativ:

Jeg er veldig fornøyd med den arbeidsformen vi har nå. Studentene sier ofte at det er krevende med så mange tunge begreper i pedagogikk. Når studentene får sitte sammen og diskutere i smågrupper, og vi som underviser er sammen med dem og stiller kritiske spørsmål og drar diskusjonen, så får de andre muligheter til å reflektere

og knytte begrepene til praksis. På denne måten får også de stilt spørsmål og snakket om det de synes er vanskelig med begrepene og teori. De får virkelig diskutert innholdet i begrepene. Etter å ha sett på evalueringene og snakka med studentene så viser det seg at det er slikt arbeid, der vi deltar, mange mener de får mest ut av. De sier det er fordi vi som lærere tør å gå tettere på og når dette skjer i en liten gruppe tør flere å delta.

Frikk var, gjennom hele intervjuet opptatt av sin relasjon til klassen. Anja var også opptatt av dette, men i hennes narrativ er det mer vekt på egne savn og ønsker for undervisningen:

Jeg savner å kunne følge samme klasse. Fordi nummer 1: jeg kjenner klassen, og nummer 2: jeg har en relasjon til dem som i sterkere grad forplikter studentene til å komme på undervisningen.

I flere narrativ er relasjoner til kolleger og studenter knyttet til opplevelser av hindringer for refleksjon. I alle intervjuene beskrives ulike hindringer som pedagogikk lærerne mener motvirker refleksjonsarbeid. Slike hindringer varierer fra frustrasjon over ny utdanning, mangel på tid, IKT og annet utstyr som hindring til utfordringer relatert til hendelser i møter med klasser og enkeltstudenter. Et breakdown i arbeidet med analysene var hvordan negativt ladede opplevelsene kunne fortelles fram, uten å ledes tilbake til enkeltpersoner. Å konstruere fortellerstemmen Line ble en mulighet for å skrive fram frustrasjoner og nederlag.

Den tematiske analysen viser undervisningsmetoder, pedagogikkfaget, spørsmål, relasjoner og utfordringer som temaer som oppstod i materialet. Tematikkene er uttrykk for systematisering av erfaringer (Souto-Manning, 2014), og disse erfaringene er anvendt som byggematerialet i konstruksjonen av Lines fortelling og grunnlag for de påfølgende diskusjonene. Først skal Lines stemme framskrives.

## Å konstruere en «livfull» Line

For å gjøre Lines fortelling mer «livfull» ble et grep å ta utgangspunkt i et narrativ, og utvide dette med tematiske innspill fra de øvrige ni narrativene. Dette er inspirert fra Jernes og Engelsen (2012, s. 287), som beskriver tilsvarende valg basert på observasjoner. Å konstruere en fortelling er et problematisk valg fordi ved å samle et flerstemt bidrag til én røst tones individuelle nyanser ned.

Ved å ta utgangspunkt i ett narrativ kunne likevel noe av det særegne fra ett intervju bevares, i utformingen av Lines uttrykk. Å arbeide fram en fortelling i en akademisk tekst dreier seg om å få lesere til å oppleve at de selv var der (Czarniawska, 2010). Å gi Line liv dreier seg om å male fram en troverdig pedagogikkunderviser som ikke er for striglet og ordentlig. Lyduttrykk fra intervjusamtaler og rommene utenfor ble delvis fanget opp av diktafonen og gir en bakgrunn for hvordan Lines fortelling kunne utformes. Å gå tilbake og se på ulike uttrykksmåter som «vet du hva» og «liksom» gav inspirasjon til Lines uttrykk. I denne prosessen ble også andre uttrykk fra andre narrativ prøvd ut, inntil fortellingen fikk den form den framstår i her.

Å arbeide fram en fortelling i en akademisk tekst handler også, ifølge Czarniawska (2010, s. 254/255), om både å male med ord og å skape plott, eller forstyrrelser i stabile situasjoner. Ulike elementer fra fortellingene ble brukt for å illustrere plott. Her er plott betraktet som brudd, og dette uttrykkes i fortellingen gjennom de momenter av usikkerhet eller ubehag, men også tilfredshet Line beskriver. Usikkerheten støttes opp av ord og kroppsuttrykk, og ved å la ulike elementer fra intervjuene forstyrre det stabile i fortellingen. Det sentrale er hva Line gjør og erfarer i sitt arbeid med å styrke barnehagelærerstudenters refleksjoner. På lik linje med at intervjuer og den intervjuede påvirker hverandre gjennom ord og kroppslig tilstedeværelse, virker rom og andre former for materialitet inn i samtalen. Dette kunne ikke diktafonen fange opp, og når bruk av kropp, kroppsuttrykk og andre materialiteter tydeliggjøres, er dette skrevet inn ved hjelp av feltnotater, supplert med minner nedtegnet etter gjennomførte intervju. De fem temaene fra den tematiske analysen er brukt som ramme for innholdet, mens minner fra intervjusituasjoner hentet fra feltnotater gjenskaper illusjonen av å sitte på Lines kontor og høre henne fortelle.

## Fortellinger fra Lines undervisning i høgskoleklasserommet

Line lener seg bakover på stolen i det rektangulære kontoret, smiler og sier: «Jeg har kommet fram til at skal studentene konstruere kunnskap aktivt, så må jeg ta ansvar og aktivere dem. De må få ta del i diskusjons- og refleksjonsprosesser sammen med oss som undervisere.» Line forteller om et møte med en klasse og hvor ivrige studentene ble når de fikk være med og endre undervisningsformen. «Jeg tror mye skjer når

jeg varierer i bruk av ulike metoder, som når jeg ber studentene finne en praksisfortelling og så dramatisere den, eller jeg leser opp et case, eller gir dem fotografier fra barnehager de kan studere. Det viktige er at vi diskuterer underveis, for da kan studentene bidra med sin kunnskap og sine opplevelser», fortsetter Line. Hun utdyper hvordan hun utfordrer studenter til å forberede seg til å presentere et faglig tema for diskusjon, eller ha med en praksisfortelling eller noe annet som setter i gang tankene og gjør undervisningen levende. «Jeg har nok blitt litt gæren med årene», ler Line. «Vi må skape liv og gi studentene noe å tenke på. Før var jeg redd for å bryte alle disse uskrevne reglene. Nå gir jeg studentene oppgaver de må forberede uten å nøle.» Line smalner øynene og tar en slurk av kaffekoppen før hun fortsetter. «Egentlig så følte jeg at jeg møtte meg selv skikkelig i døra i min måte å tenke om egen undervisning på. Jeg trodde jeg var kreativ og så ble det bare PowerPoint på PowerPoint, og hva er det, liksom?»

Line kikker ut av vinduet og trekker pusten før hun fortsetter. «Jeg har selv blitt mer opptatt av at jeg må få studentene til å stille spørsmål, å våge å ta ordet og delta i diskusjoner. Samtidig må jeg arbeide for at noen studenter skal kunne komme seg vekk fra å være skråsikre. Å stille spørsmål er å åpne for endring, og åpne for at her er det noe jeg ikke kan. Jeg synes pedagogikk handler om at det ikke er en fasit for enhver situasjon, og at det alltid er ulike perspektiver. Jeg diskuterte undervisningsmetoder med en kollega her om dagen, og hun fortalte at hun lar studenter skrive om på praksisfortellinger for så å analysere disse ut ifra ulike perspektiv. Jeg skulle ønske vi hadde mer tid til å prate sammen om hvordan vi underviser. Det er skikkelig nyttig og det gir meg ideer for hvordan jeg kan utvikle min undervisning. Nå har jeg lyst til å gå i gang og få studenter til å skrive om på praksisfortellinger og nyansere forståelser med mine klasser.»

Line sukker, før hun fortsetter med lav stemme: «Det krever mye å stå i undervisning. I tillegg til å bli godt kjent med studentene og gjøre de trygge på meg så må jeg ha god oversikt over pensum, og være forberedt på å møte ulike krevende utfordringer som når studenter pasifiserer hverandre, eller boikotter undervisningsopplegg. Vet du, en gang hadde jeg en klasse som bare ville ha forelesninger. De klaget til ledelsen på min undervisning. Det var både krevende og tøft!» Line blir stille noen sekunder. «Jeg tenkte hele tiden at det var meg det var noe i veien med, at jeg ikke dugde. Jeg gav nesten opp jobben. Å bruke undervisningstid på å få studentene til å engasjere seg og delta aktivt krever mye mer forberedelse og innsats enn jeg trodde var mulig.»

Det blir stille til Line igjen smiler og spør: «Har jeg fortalt deg om dramatiseringsprosjektet mitt? Du skjønner, i min undervisning har rollespillet blitt et viktig omdreiningspunkt for teori og praksis. Når studentene dramatiserer, kan vi plukke fra hverandre handling, stille kritiske spørsmål og drøfte teoretiske perspektiver. Jeg lar de få føle ulike roller på kroppen. Når vi gjør slike øvelser, blir jeg nyttig for studentene som brobygger mellom meta-teori og deres opplevelser og faglige refleksjoner. Jeg husker første gangen jeg ville gjennomføre dramatisering med en klasse, ville de ikke bidra. De var tredje års studenter, og det var en uvant metode for klassen. Så nå over jeg studenter på å dramatisere fra tidlig første semester.» Hun forteller om en kollega som er ivrig tilhenger av dialogkafeer, paneldebatter eller ulike former for diskusjonsspill, og hvor spennende undervisning de to får til når de får arbeide sammen.

«Vet du hva som irriterer meg skikkelig?» fortsetter Line. «Det er økonomiske begrensninger som at jeg skal undervise kanskje 90 studenter samtidig. Det begrenser metodemuligheter det! I tillegg blir jeg frustrert når rommet vi skal ha, plutselig er gitt til et annet, høyere prioritert formål, og jeg må være takknemlig for et auditorium eller et lite kott av et klasserom. Når man skal være pedagogikklærer og jobbe med refleksjon, er det jammen bruk for å være kreativ!»

## Diskusjoner

Med utgangspunkt i Lines fortellinger vil hva undervisere i pedagogikk gjør og erfarer i sitt arbeid med å styrke barnehagelærerstudenters refleksjoner, drøftes.

Det fortelles om ulike undervisningsmetoder som anvendes for å arbeide med refleksjon i klasserommet. Line beskriver hva hun gjør, og hvordan hun legger til rette for refleksjon, både i-handling i klasserommet og på-handling, ved å anvende og utfordre studenters erfaringer (Schön, 1983). Handlingsbeskrivelsene gir ikke uttrykk for hva studenter har sagt og gjort som får Line til å oppleve at de reflekterer. Hennes vektning av spørsmål og muligheter for å diskutere og undre seg viser at hun legger til rette for refleksjon, både over erfaringer og over hendelser der og da. Refleksjon blir også synliggjort i hvordan hun utfordrer studentene og er opptatt av å være «brobygger» mellom deres opplevelser, faglige refleksjoner og meta-teori, og gjennom dette fungere som veileder. Relasjonstematikken fra analysene

understreker også at pedagogikkundervisere forsøker å tilpasse sine beskrivelser for å nå den enkelte student (Schön, 1987). En begrensning med forskningsstrategiene er at det kun blir pedagogikkundervisernes fortellinger som drøftes. Studenters beskrivelser og observasjoner av undervisningen kunne gitt et tydeligere bilde av hvordan dette fungerer i praksis.

Når Søndena (2004, s. 15) etterspør hva det skal reflekteres over, så er det kanskje ikke bare tematikken, men også hvordan det arbeides med tematikkene hun etterspør? Spørsmål er stadig nevnt, både i Lines fortelling og i intervjuene, som en strategi for refleksjon. Betydningen av å bruke ulike spørsmål i undervisningen kan dreie seg om forskjeller i hva som fører til dyptenkning, og hva som fører til kraftfull refleksjon. Line viser til bruk av spørsmål for å delta i diskusjoner, for å vektlegge undring, men også for å utfordre studenter til å komme seg vekk fra å være skråsikre på hva barnehagepraksis omhandler, og innse at det er noe en ikke kan. Som det framgikk av analysene, aktiverer ulike undervisere ulike måter å arbeide med spørsmål på. Både kritiske spørsmål, spørsmål for å tenke sammen med studenter, åpne spørsmål, eller stille små spørsmål hele tiden, ble nevnt. I analysene av intervjuene og i fortellingen om Line framgår det ikke hva studentene gis å reflektere over, og hvordan spørsmål kan bygge opp om kritisk refleksjon og utviklingsarbeid, mer enn speiling av det allerede kjente (Søndena, 2002). Hvordan noen arbeidsformer i undervisningen eventuelt kan styrke studenters refleksjoner, belyses av Aamaas og Davidsen (2017) (kapittel 8, denne boken), de observerer lærerstudenter i arbeid med mysterier som metode. De mener å se at studenter oppnår dypere forståelse gjennom utprøving av denne konkrete arbeidsformen, og deres undersøkelse støtter opp om at det som skjer i høgskoleklasserommet er av betydning for studentenes refleksjoner.

Å foreta etiske overveielser, og å se refleksjon og tolkning som både sosiale og individuelle prosesser, er ifølge Kinsella (2012, s. 49) vesentlig for refleksjon i handlingsøyeblikket. Lines undervisningsmetoder kan gi studenter erfaringer, som igjen kan styrke deres framtidige etiske overveielser i utøvelse av skjønn. Relasjoner veves inn i bildet av hva som begrenser undervisning, og Lines fortelling belyser flere eksempler der relasjoner er betydningsfulle. Hjort (2013, s. 235) kritiserer høgskolers arbeid med studenters etiske refleksjon og foreslår at slikt arbeid kan styrkes gjennom å vektlegge drøfting av studenters kritiske erfaringer. Dette mener Hjort (2013) må skje både i undervisning og i praksis, noe som igjen fordrer et bedre samarbeid mellom praksis og

utdanning. Ethiske refleksjoner dreier seg om utøvelse av fronesis, eller det som informerer profesjonsutøvere i å navigere varierte praktiske kontekster (Kinsella, 2012). Line bruker ikke betegnelsen etisk refleksjon, men hun forteller om metoder der studentene må ta del med egne kunnskaper og erfaringer. Dramaøvelsene hun skisserer, er et eksempel på klasseromsundervisning der studentene får kjenne på ulike perspektiver. Line forteller også om hvordan hun selv har blitt utfordret av studenter. Line var berørt av slike utfordringer. Etisk refleksjon handler kanskje også om at både studenter og undervisere må våge å sette ord på ulike kroppslige affekter, kritiske erfaringer, og igjen drøfte og nyansere disse i fellesskapet i klasserommet. Skjønn blir knyttet til «evne til å vurdere hvordan man bør handle for å fremme det som er moralsk godt for mennesker i konkrete situasjoner» (Grimen, 2008, s. 78). I undervisning handler dette om å styrke studentenes grunnlag for å gjøre valg. Men det handler også om hvordan Line kombinerer praktiske erfaringer og kritisk refleksjon med kunnskap om undervisning og undervisningsmetoder, og hva hun gjør som blir godt for andre.

Utfordringer er en kilde for refleksjon, fordi de innebærer beslutninger der generelle kunnskaper og handlingsregler ikke er tilstrekkelig, og hvor profesjonsutøveren må kunne anvende skjønn (Molander & Terum, 2008). Utfordringene fungerer som brudd, men de er først og fremst reelle erfaringer og bekymringer underviserne har valgt å formidle. Line viser at usikkerhet med romtildeling og å tilpasse metoder etter rom utfordrer faglig kompetanse. Hun forteller om studentgrupper med manglende engasjement, om studenter som pasifiserer hverandre, og klasser som ikke vil bidra i undervisningen. Hvordan undervisere forhandler fram undervisningsmetoder, argumenterer for, og responderer på eventuell motstand, kan også være øyeblikk der underviseren virkelig kan framstå som virtuos. Forhandlingssituasjoner har potensial for kritisk refleksjon i fellesskapet i klasserommet. Hvordan Line takler utfordrende situasjoner og våger å blottlegge og diskutere sine handlinger med studentene, kan gi anledning til å diskutere skjønn i praksis. Å stille egen undervisning åpen for kollektiv refleksjon krever tid og mot. Tid til å dekonstruere hendelsesøyeblikket i klasserommet, og mot til å blottstille seg i fellesskapet. Som pedagogikkunderviser står du i møte med studenter, du blir sett, både som ekspert på barnehagepraksis, som teori kyndig, som brobygger til spesifikk fagkompetanse og som modell for virtuos pedagogikk.

## Avsluttende kommentarer

For å kunne granske undervisere i pedagogikk sine fortellinger om hva de gjør og erfarer i arbeidet med refleksjon i høyskoleklasserommet, ble elementer fra narrative analyseprosesser anvendt. De metodiske og analytiske prosessene ble drevet av brudd og undringer, som igjen utfordret til å hente inspirasjon fra andre metodeteorier og refleksjonsteorier for å belyse empirien. Analysene resulterte i konstruksjonen, Line, som beretter om ulike erfaringer med metoder for å styrke refleksjon i pedagogikkundervisningen. Drøftingene belyser at pedagogikk, relasjoner, undervisningsmetoder, spørsmålsstillinger og klasserommet som materialitet spiller inn i arbeidet. Kjærlighet til pedagogikk som fag og beskrivelsene av undervisningsmetoder uttrykker også motvekt til overdreven effektivisering av utdanningen. Ulike metoder for refleksjon i klasserommene fordrer at pedagogikkunderviseren setter av tid, har kjennskap til studentgruppen og kan utfordre forestillinger om rett og galt i praksis. Dette krever mot til å utfordre, til å tenke nytt, vilje til å undersøke perspektiver og se etter hva som ikke speiler det allerede kjente.

Basert på Lines fortelling kan klasserommet fungere som øvingsarena for å styrke studenters refleksjoner både i handling her og nå og over handling som har funnet sted i praksis. Studien føyer seg slik inn i rekken av studier som bekrefter at klasseromsundervisning kan anvendes til både refleksjon i- og på-handling. Studien får i liten grad fram om arbeidsmetodene i pedagogikkundervisningen åpner for kraftfull refleksjon, men diskusjonene viser at nytenkning også handler om hva studenter tilbys å reflektere over, og hvordan dette arbeides med. Å virkelig våge å være virtuos som underviser i pedagogikk handler også om å synliggjøre egne refleksjoner og begrensninger. Å våge å synliggjøre egne refleksjoner og begrensninger, forhandle om metoder og stå i uenighet kan videre løftes opp og drøftes som meta-perspektiver på undervisningen, og gi andre muligheter for refleksjon. Refleksjon gir ingen fasit for enhver situasjon, men tilbyr ulike perspektiver å utforske og utfordre sammen som studenter og undervisere i klasserommene i barnehagelærerutdanningen.

## Referanser

- Aamaas, Å. & Davidsen, A. (2017). *Mysterier som læringsstrategi i lærerutdanning. En casestudie ved Høgskolen i Sørøst-Norge*. I: L. Frers, K. Hognestad & M. Bøe (red.), *Metode – læring – refleksjon*. Oslo: Cappelen Damm Akademisk.



- Alvesson, M. & Kärreman, D. (2011). *Qualitative Research and Theory Development*. London/Thousand Oaks, California/New Delhi/Singapore: SAGE Publication Ltd.
- Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflective Practice*, 16(1), 123–141. doi: 10.1080/14623943.2014.982525
- Biesta, G.J.J. (2015). No paradigms, no fashions, and no confession. Why researchers need to be pragmatic. I: A. M. Otterstad & A. B. Reinertsen (red.), *Metodefestival og øyeblikksrealisme – eksperimenterende kvalitative forskningspassasjer* (s. 133–149). Bergen: Fagbokforlaget.
- Brinkmann, S. (2014). Doing Without Data. *Qualitative Inquiry*, 20(6), 720–725. doi: 10.1177/1077800414530254
- Czarniawska, B. (2010). Narratologi og feltstudier. I: S. Brinkmann & L. Tanggaard (red.), *Kvalitative metoder : en grundbog* (s. 239–262). København: Reitzel.
- Engelsen, K.S. & Smith, K. (2014). Assessment literacy. I: C. Wyatt-Smith, V. Klenowski & P. Colbert (red.), *Designing assessment for quality learning* (s. 91–107): Springer.
- Frers, L. (2017). Metode mellom hverdagspraksis, læring og forskning. I L. Frers, K. Hognestad & M. Bøe (red.), *Metode - læring - refleksjon*. Oslo: Cappelen Damm Akademisk.
- Grimen, H. (2008). Profesjon og kunnskap. I: A. Molander & L.I. Terum (red.), *Profesjonsstudier* (s. 71–86). Oslo: Universitetsforlaget.
- Hjort, K. (2013). Fra etisk bevidsthed til etisk refleksjon? Analyse af en læreproces. I: J.J. Rothuizen & L. Togsverd (red.), *Hvordan uddannes pædagoger? Perspektiver fra et forskningsprojekt*. Aarhus: Videncenteret for socialpædagogik og socialt arbejde, VIACU.
- Jernes, M. & Engelsen, K.S. (2012). Stille kamp om makten : En studie av barns interaksjon i digital kontekst i barnehagen. *Nordic studies in education*.
- Johansen, M.B. & Frederiksen, L.L. (2013). Teori og praksis i de danske professionsuddannelser. *Tidsskrift for Nordisk Barnehageforskning*, 6(5), 1–12.
- Kinsella, E.A. (2012). Practitioner reflection and judgement as phronesis: A continuum of reflection and considerations for phronetic judgement. I: E.A. Kinsella & A. Pitman (red.), *Phronesis as Professional Knowledge. Practical Wisdom in the Profession*. Rotterdam: Sense Publishers.
- Kunnskapsdepartementet. (2012a). *Forskrift om rammeplan for barnehagelærerutdanningen*. Hentet 15.11.13, fra <http://www.lovdata.no/cgi-wift/wiftldles?doc=/app/gratis/www/docroot/for/sf/kd/kd>.
- Kunnskapsdepartementet (2012b). *Nasjonale retningslinjer for barnehagelærerutdanningen*. regjeringen.no. Hentet fra [http://www.regjeringen.no/upload/KD/Rundskriv/2012/Nasjonale\\_retningslinjer\\_barnehagelærerutdanning.pdf](http://www.regjeringen.no/upload/KD/Rundskriv/2012/Nasjonale_retningslinjer_barnehagelærerutdanning.pdf)
- Lauvås, P. & Handal, G. (2014). *Veiledning og praktisk yrkest teori* (3. utg.). Oslo: Cappelen Damm Akademisk.

- Lofthus, L. (2017). Bruk av teori for økt refleksivitet i praksis. Praksisarkitektur som rammeverk for å belyse forskerens plass i datagenereringen. I L. Frers, K. Hognestad & M. Bøe (red.), *Metode mellom forskning og læring: Refleksjon i praksis* (s. 35–55). Oslo: Cappelen Damm Akademisk.
- Molander, A. (2013). Profesjonelt skjønn i velferdsstaten: mekanismer for ansvarliggjøring. I: A. Molander & J.-C. Smeby (red.), *Profesjonsstudier 2* (s. 44–54). Oslo: Universitetsforlaget.
- Molander, A. & Terum, L.I. (2008). Profesjonsstudier: en introduksjon (s. 13–27). Oslo: Universitetsforlaget.
- Moxnes, A.R. (2016). Refleksjon i barnehagelærerutdanningen. *Tidsskrift for Nordisk barnehageforskning*, 12. doi: 10.7577/nbf.1563
- Riessman, C.K. (2008). *Narrative methods for the human sciences*. Los Angeles: Sage Publications.
- Schön, D.A. (1983). *The reflective practitioner : how professionals think in action*. Aldershot: Arena.
- Schön, D.A. (1987). *Educating the reflective practitioner*. San Francisco, Calif: Jossey-Bass.
- Souto-Manning, M. (2014). Critical narrative analysis: the interplay of critical discourse and narrative analyses. *International Journal of Qualitative Studies in Education*, 27(2), 159–180. doi: 10.1080/09518398.2012.737046
- Søndenå, K. (2002). *Tradisjon og transcendens: ein fenomenologisk studie av refleksjon i norsk førskulelærerutdanning* (B. 175). Göteborg: Acta Universitatis Gothoburgensis.
- Søndenå, K. (2004). *Kraftfull refleksjon i lærarutdanninga*. Oslo: Abstrakt forlag.

## Translated article 2: "Det er alltid ulike perspektiver" - En studie av hvordan undervisere i pedagogikk arbeider med refleksjon i høskoleklasserommet.

(‘There are always different perspectives’ – A study of how teacher educators teaching pedagogy work with reflection in University classrooms). In: Frers L, Hognestad K and Bøe M (eds) *Metode mellom forskning og læring: Refleksjon i praksis* Oslo: Cappelen Damm akademiske.

### Abstract

*In this chapter, teacher educators’ teaching to enhance reflection in Early Childhood Teacher Education (Barnehagelærerutdanningen) is highlighted. The educators’ stories and experiences are collected through an interview study. Elements from both thematic and structural analysing strategies are made use of. Firstly, to construct narratives based on interviews, and secondly to construct a story of reflection in classroom teaching based on a fictional voice, «Line». Line tells about experiences with different methods. She shares experiences about her own pedagogical work with student teachers and challenges that have influence on her teaching. The discussion addresses facilitation of reflection and that reflection easily ends up mirroring the already known. In this chapter, the main suggestions are that working methods for strengthening student teacher’s reflectivity require a focus on different areas. Suitable teaching rooms and personal interest in developing teaching methods are needed. It is necessary to challenge the student teacher’s perception of professional practice. Last but not least, teacher educators also need courage to be a virtuoso with confidence to display and discuss personal reflections and limitations.*

**Keywords:** Reflection, Teacher educator, Early Childhood Teacher Education, Classroom teaching and Educational judgement

### Introduction

Over a three-year period, Early Childhood Teacher Education (ECTE) students [in Norway] are expected to qualify for pedagogic work with children ages 0-6 years through a combination of practical, theoretical and research-based education (Kunnskapsdepartementet, 2012a, 2012b). The newly educated should be qualified to function both as a kindergarten teacher and as a pedagogic leader. To ensure this qualification, the concept of reflection has been given special prominence. In the national framework for early childhood teacher education (*Forskrift om rammeplan for barnehagelærerutdanningen*) the concept is associated with professional ethics and critical thinking. It is linked to professional understanding, pedagogical work processes, research and experience-based knowledge, and is tied to processes surrounding the work with children in kindergarten, as well as guidance and the ability to adjust and assess one's own practice (Kunnskapsdepartementet, 2012a). Reflection as a term is also used in research literature relevant to ECTE (Moxnes, 2016).

According to Søndena (2002, 2004), reflection in higher education is intended to generate new insights, through a powerful kind of reflection that leads to innovation. This is an antithesis to the already known, or to the kind of deep thinking that does not instigate change. A meta-analysis of research literature on reflection in teacher's education shows that experienced educators are not necessarily able to convey their own reflection-based knowledge in an educational context (Beauchamp, 2015, p. 135). In a Norwegian context, Lauvås and Handal (2014, p. 81) have criticized educators for oversimplifying the task of reflection. They question how often any of us really attempt to reflect. Recent Danish research shows that higher education rarely supports profession-oriented processes. Johansen and Frederiksen (2013, p. 10) show that in an educational context one rarely finds room for activities or critical experience that demonstrate the mutual usefulness of theory and practice. Hjort (2013) finds that the ethical reflections of pedagogy students are not necessarily reinforced through their education.

Seen as a whole, these findings are rather depressing with regards to higher education as an arena where reflection and pedagogic reasoning can be reinforced. Since any work with reflection also demands that educators set aside sufficient time for these tasks, not to mention that this kind of work requires safe relations where students can be followed up closely (Moxnes, 2016, p. 10), we have to ask if reflection as a part of learning can be expected to occur on its own.

Since pedagogy has been given a position where it is supposed to “contribute to student’s development processes, personal growth, analytic abilities, the integration of theory and practice, insight into scientific modes of thinking and ethical reflection”, (Kunnskapsdepartementet, 2012b, p. 10) it is uniquely positioned to illuminate educational practices. The above-mentioned research findings awoke an interest in what pedagogy educators themselves say about what they do to strengthen their students' profession-oriented reflections. What do they say about their own teaching, the methods they employ, what it requires from them and what works against them in the university classroom? In the following text, I will explicate the theoretical aspects that can help outline the role of reflection in ECTE.

## **Reflection as theoretical turning**

The theoretical fulcrum in this article is *reflection*. Reflection is described, explained, nuanced and given various functions and intentions in educational and research literature as well as white papers dealing with ECTE (Moxnes, 2016). An understanding inspired by Schön (1983, 1987), nuanced by Kinsella (2012) and partly challenged by Søndena (2002, 2004) function as a theoretical foundation for further discussion. Schön (1983, p. 55) makes a distinction between reflection *in* and *on* action, where *on* indicates reflection after the fact, and *in*-action refers to the moment of action itself (Schön, 1983). It's about reflecting on something while you are actually doing it, and doing it with excellence. Schön (1987) ties reflection-in-action

to education and classroom teaching as on-going practice. The degree to which students get something out of their reflection depends on the degree to which they are followed up and given supervision. This in turn depends on the educator's ability to adapt their descriptions to the students' individual needs and capacity to reflect-in-action, according to (Schön, 1987, p. 169).

The understanding of reflection-in-action is nuanced by Kinsella (2012) who brings in ethical considerations and sees reflection and interpretation as both social and individual processes. The attention in social processes is thus lead towards discourses that influence understandings of meanings and the critical reflection on why things are as they are (Kinsella, 2012, p. 49). As regards work with reflection in the ECTE classroom, these perspectives direct reflection towards the moment of action, towards ethical considerations and the interaction between educators, students and educator-students.

Reflection is also the focus of Søndena's (2002, 2004) research. She makes distinctions between deep thinking (repetition and mirroring) and powerful reflection (transgression and innovation). Powerful reflection is, according to her, about dealing with the quality of pedagogy, taking a stance, but also holding on to what gives life meaning. This leads to Søndena (2004, p. 131) calls "an ever increasing thinking". She points out that "(in) our eagerness to develop the ability to reflect, we have forgotten to discuss *what* we are supposed to reflect on and to *take a position* regarding contents" (Søndena, 2004, pp. 15-16). She takes a critical stance to what reflection means in an educational context, showing that it frequently takes the form of mirroring and deep thinking, teaching students to adapt to a tradition rather than have a critical eye on what it is they do (Søndena, 2002). These more nuanced approaches to reflection in the ECTE classroom give us a chance to question the actual contents of reflections and to challenge what innovation really entails.

Reflection in education can be tied to the future practicing of professional judgement. Professional judgement deal with reasoning based on transmitted knowledge, norms, values, reflective considerations and the discussion of choices (Molander, 2013). Kinsella (2012, p. 35) makes this clear by tying reflection to *fronesis*, that which informs and assists us in navigating various practical contexts. Otherwise defined as "the ability to assess how to act to promote that which is morally good for people in a given situation" (Grimen, 2008, p. 78). Reflection work in an educational context must focus on enabling students to navigate complex actions, and make reflective assessments of their actions. This necessitates an investigation into whether, and if so how, reflection is activated through teaching in the ECTE classroom. The research question that logically follows is: What do pedagogy teachers themselves say that they do and experience in their work with strengthening ECTE students' reflections?

## Abductive and narrative research approaches

To investigate what was said about reflection, an abductive approach to methods, theory and empirical data was used (Alvesson & Kärreman, 2011; Brinkmann, 2014). Abductive methods are often associated with pragmatism. In this chapter it is employed to make pragmatic choices and to adjust strategies according to what best illuminates the research question (Alvesson & Kärreman, 2011; Biesta, 2015). This methodical choice has been made to enable reflecting movements, where different incidents can change ideas and understandings as they encounter empiricism and new theories. Abduction is what you use when there is no ready-made method, when theoretical perspectives and empirical findings do not quite fit in and theoretical expansion can give new insights. Abduction is understood here as a form of argumentation focused on the relationship between situation and research, neither driven by theory nor empiricism but by *breakdowns* (Alvesson & Kärreman, 2011; Brinkmann, 2014).

Breakdowns may be surprising incidents or input that does not conform to expectations. The researcher must then try new strategies and adjust her plans (Alvesson & Kärreman, 2011, p. 19). Expectations of actions or how they may unfold may be thwarted, as Frers (2017) shows in chapter one, and as Lofthus (2017) exemplifies through her reflections in chapter two of this book. Breakdowns occurred in the present work both with regards to methodological challenges, analyses of the material and in working with theoretical perspectives.

Several breakdowns and surprises impacted the making of this chapter. One such instance was the work with empirical data. The material is made up of 10 interviews with employees in the ECTE departments of five different universities/university colleges in Norway. A dictaphone was used for the interviews, that were then transcribed. When the first interviews had been transcribed they were returned to the interviewees for approval. The interviewees expressed discomfort with seeing their spoken statements in print. Seeing their own, oral modes of expression on paper was a challenging experience. This was a breakdown in the research process, and new method studies were conducted. Exploring the possibilities of narrative research became the turning point. Most narrative studies, according to Riessman (2008, p. 23) are built on interview-based data. The purpose is to build detailed descriptions where one narrative leads into the next one (Riessman, 2008). This was congruent with the data for this study. The transcriptions contain several short and long narratives, and sequences where one narrative leads into the next. The study of these narratives is a window through which the construction of meaning can be observed (Souto-Manning, 2014, p. 162). The material in this study reinforces meaning through the interviewees' tales of their subjective experiences and ideas. This descriptive material is what is being used to further the analyses.

The chosen narrative strategy could be described as a construction of a larger narrative based on the individual interviews. This process includes field notes,

observations and other relevant material (Engelsen & Smith, 2014). The narrative that will subsequently be presented is a compound of themes extracted from the various interviews, and as such is a constructed narrative (Engelsen & Smith, 2014; Jernes & Engelsen, 2012). This redirection of the research process gave room for reflection on several aspects of education and educational practice, and helped reinforce the abductive process of analysis.

The study has been submitted for review by the Norwegian Centre for Research Data, and signifiers that may identify the contributors or the institutions they work for have been removed. All names are pseudonyms. In the following, narrative is used to describe one of the chosen analytical strategies, extracting a narrative from each of the 10 interviews. Data based on incidents, action and activity in the 10 narratives was further analysed and incorporated into the constructed narrative voice, "Line". The analytical process is described below.

### **Analysing toward a story about reflection**

There are several steps to the process of constructing a narrative that elucidates reflection in an ECTE context. To bring out various meanings, intentions and functions of reflection in the interview texts, a narrative was constructed for each interview. This clarification of meaning and intention in each interview can, according to Riessman (2008, p. 53), emphasize what was being told and avoids generalization. To construct a narrative for each participant was a way to put each one's personal involvement, experiences and stories about their work with reflection into focus. Each word had to be chosen carefully to ensure that it was representative of the interview. One example is from the interview with Jane. Throughout the interview she points out the importance of self-reflection. This is how it was written into her narrative:

*I think self-reflection is incredibly important. It's about power, and power perspectives. I'm thinking about relations between children and adults and how important it is to make students reflect both to discover themselves and their actions so that they can avoid making too many mistakes in their meetings with children.*

Different quotes were chosen to bring out the specifics of what each participant was particularly concerned about. Each narrative condensed meaning and message from the interviews. During this process five central themes gradually emerged as recurring throughout the interviews. These also became visible in the narratives. These themes formed the basis of Line's narrative. The construction of Line's narrative will be elucidated after the thematic analysis.

## Thematic analysis of 10 narratives

To bring out themes based on what the 10 different participants relate and how they facilitate reflection, it was decided to focus on *what* was said, rather than to whom, how or what the intention may have been (Riessman, 2008). In Dina's narrative the following experience is related:

*The most important thing for me is to help my students reflect, and thereby build a foundation for professional practice when they enter the field. Kindergarten work is all about making professional judgement, which in turn calls for an ability to reflect on, discuss and assess a situation. I have to challenge the students and make the teaching exciting to get them to reflect. This places great demands on me, and it engages me!*

Dina tells us that she has to participate and actively partake to challenge the students and strengthen their reflections. What she tells us about her view on reflection helps us get a more nuanced understanding of what reflection is in an ECTE context. Dina sees reflection in the context of professional judgement, but she is also aware of her own role in stimulating her students' reflections. Pedagogy educators tended to describe classroom reflections as dependent on what they themselves say and do during their teaching. For example, Anja relates: *for me, reflection is first and foremost about getting students to think about things. That's an ability they need as kindergarten teachers.* Another example can be found in Jane's narrative. She talks about methods that can provoke critical reflection, and says: *I have to teach them to pose critical questions both to their colleagues and to themselves. This is necessary when you are working with a team and leading a team in a kindergarten.* Different statements about what is required to inspire reflection in students outline a multifaceted picture of the use of methods and the role of the teacher in the education.

Various theories on reflection (ex. Kinsella, 2012; Schön, 1983, 1987; Søndena, 2002, 2004) also influenced what was looked for and what could be discerned from the analytical work. Some of the narratives referred directly to Søndena (2002) and the concept of powerful reflection. Others mentioned terms like reflection in or on action. The educator's theoretical understanding is exposed and tied to what they relate in the classroom through their educational methods employed to teach reflection. In Hanne's narrative we hear that:

*I have to use the classroom very actively as an arena for thinking about pedagogy and didactics. I have to use the possibilities offered by the room. My responsibility is to turn the classroom into a living arena for education, a place where it is exciting for the students to participate. I constantly have to try out new methods to make them reflect on their experiences during their practice periods.*



Making the classroom an arena for practical experiences and reflection is conveyed in Hanne's narrative. Another example comes from Bente:

*I sometimes divide the students into groups of two and send them out on walks. I tell them what to discuss while they are walking. They're supposed to leave the building and the campus, to get away for about a half hour. It often yields good results." ... "we get to start discussions on new reflections and viewpoints when they return.*

Bente demonstrates how certain methods can generate new ideas and thoughts among the students, and inspire reflections on and in action. Hanne and Bente are both enthusiastic about trying new methods. Another narrator who agrees with this is Eva:

*I like trying out different teaching methods. Maybe that's what makes working with this team so much fun, that I get to work with my profession in a varied way? It's like being a pedagogue in kindergarten again, because I have to prepare for the unexpected, and that gives me a lot to reflect on personally.*

Methods to strengthen reflection in teaching situations is a recurring theme in all these narratives, and could thus be chosen as a theme for the constructed Line narrative. Looking at what was said about methods revealed pedagogy as a strong theme in these narratives. Reflection and teaching methods that strengthen reflection were requested in the interview guide and were consequently evident in the interviews. A surprising aspect was how pedagogy and experiences of pedagogy teachers' encounters with students were emphasised in the material. This was not mentioned in the interview guide, but emerged through small stories, as in the story about how much Eva enjoys the team she is a part of. Love and pride in their chosen profession recurs in the narratives. For example, Ida tells:

*We have to demonstrate that pedagogy is a thought-based discipline and we have to make clear why pedagogy is important exactly because of that. Working with a thought-based discipline makes me proud to be a pedagogy teacher.*

Carla expresses other qualities:

*To me pedagogy is about there not being clear-cut answers to every situation, that there are always differing perspectives.*

The posing of questions was another issue that recurred in the narratives, entwined in talk of pedagogy and methods. Every narrative touched on the subject of questions. Carla and Ida were both interested in using questions to be able to reflect along with students, and Anja and Hanne describe how they pose open-ended questions to inspire their students to reflect. Gunn relates:

*Along the way I will pose small questions to make the students connect the themes we discuss with their own experiences from kindergarten and reflect on these. I think these questions are important, because they enable us, together, to make the education relevant.*

Asking critical questions was also frequently mentioned as a means of invoking reflection. Bente tells us:

*To really stir the pot and ask the tough, critical questions. That's challenging for me as an educator. You have to practice and practice, over and over again. These processes take time, and they require a lot of reflection on my part as well.*

Relations to their class and to individual students was also a theme that the narrator related to reflection and teaching methods. Here is an example from Frikk's narrative:

*I am very satisfied with the current work structure. Students often tell me that all the heavy terminology in pedagogy is challenging for them. When the students are allowed to sit in smaller groups and discuss and we, the teachers, interact with them and ask critical questions, they are given the opportunity to reflect and to connect the terms to practical realities. That way they are also able to ask questions and discuss what they find difficult about terminology and theory. They get to really discuss the contents of the various terms. Looking at the evaluations, and talking to the students, it becomes clear that this is the kind of work they get the most out of. They appreciate that we as teachers get more up close, and that in turns gives them courage to participate more.*

Throughout his interview, Frikk was interested in his relation to the class. Anja also had this preoccupation, but her narrative shows more of an emphasis on her own longing and wishes for the teaching process:

*I miss being able to follow the same class. Because, number 1: I know the class, and number 2: I have a relation to the students that give them a stronger sense of commitment to the classes.*

Many narratives mention relations to colleagues and students as sources of experienced obstacles to reflection. All the interviews describe various obstacles that hinder reflection work, in the view of the pedagogy teachers. These include frustrations connected to frequent reforms to the education program, lack of time, information technology and other equipment that hinder opportunities for reflection. One breakdown in the research was how negative experiences were described generally, but were not related to interviewees specific personal experiences. Constructing Line, the narrator, was an opportunity to present personal frustrations and defeats.

The thematic analysis shows pedagogy, educational methods, questions, relations and challenges as themes that rose out of the material. The themes indicate a systematization of experiences (Souto-Manning, 2014), and these experiences are used as building blocks for the construction of Line's narrative and as a foundation for the subsequent discussions. But first, Line's narrative needs to be extrapolated.

## **Constructing a "lifelike" Line**

To make Line's story more "lifelike" it was helpful to use one narrative as a starting point, and to expand this with thematic input from the other nine narratives. This is inspired by Jernes and Engelsen (2012, p. 287) method where they describe similar choices based on observations. To construct a narrative is a problematic choice because individual nuances are attenuated when you gather several voices together. But by using one narrative as a starting point, it was possible to preserve the nuances of that particular interview for the benefit of Line's narrative. To construct a narrative in an academic text is a matter of making the reader feel like they were present as it was happening (Czarniawska, 2010). Bringing life to Line was a matter of painting a portrait of a pedagogy teacher who was not too prim and proper. Aural impressions from the interview settings and from adjacent rooms were caught by the dictaphone and provided a background for the shaping of Line's narrative. Returning to informal interjections like "you know" and "sort of" inspired the tone of Line's narration. During this process certain modes of expression from the other interviews were also incorporated until the narrative was given its final form.

Constructing a narrative, according to Czarniawska (2010, pp. 254-255), require you to paint with words and to create a plot, or disturbances in otherwise stable situations. Various elements of the narratives were used to create a plot. In the present context plot is seen as a break that is expressed in the narrative through the incidents of insecurity and unease, but also contentedness, that Line describes. The insecurity is described through words and bodily expression, and by allowing different elements of the narratives to disturb the stability of the narrative. It is what Line does and experiences in her work with strengthening her students' reflections that is central. Just as the interviewer and the interviewee mutually influenced each other with words and bodily presence, the surrounding space and other material elements also influenced the conversation. This was not caught by the dictaphone, but when use of the body, bodily expression and other materialities appear, they are written into the narrative through field notes and supplemented with memories written down after the interview. The five themes from the thematic analysis are used as a framework for the contents, while memories of the interview settings gathered from field notes create the illusion of sitting in Line's office, listening to her tale.

## Stories from Line's teaching

Line leans back in her chair in the rectangular room, smiles, and says:

"I have arrived at the conclusion that if the students are supposed to actively construct knowledge, I have to take responsibility and activate them. They have to be able to partake in discussion and reflective processes along with us, the educators."

Line tells about a meeting with a class and how eager students became when they were allowed to influence the style of education.

"I think a lot happens when I mix different methods, like asking the students to find a practice story and then dramatize it, or I read a case study, or give them photographs from kindergartens to study. What's important is that we discuss things as we go along, that way the students can contribute with their knowledge and experiences".

She elucidates how she challenges her students to prepare a presentation of a subject for discussion, or bring a practice story or something else that stimulates thinking and brings the lessons to life.

"I've gone a little crazy as the years have passed", Line laughs. "We have to stir up some life and give the students something to think about. I used to be scared to break all these unwritten rules. Now I give the students assignments they have to prepare without hesitation." Line squints and takes a sip of her coffee before she goes on: "I actually came face to face with my own shortcomings when it came to my way of thinking about my own teaching methods. I thought I was being creative, but in fact it was just Power Point after Power Point. And, like, what's that?"

Line gazes out the window and inhales before she continues: "I've become a lot more conscious of getting the students to ask questions, to dare to speak up and participate in discussions. At the same time I have to ensure that certain students avoid being too certain of themselves. To question is to open up to curiosity, to the fact that there may be something here I don't know. To me pedagogy is about there not being any clear-cut answers to every situation, and that there are always different perspectives. I was discussing teaching methods with a colleague the other day, and she told me that she lets her students rewrite practice narratives and then analyse them from different perspectives. I wish we had more time to talk to each other about how we teach. It's very useful and it gives me ideas about how to advance my own methods. Now I want to get my students to rewrite practice narratives and to nuance understandings along with my classes."

Line sighs, and then goes on in hushed tones: "It's very demanding to teach. In addition to getting to know the students and make them trust me, I have to know the curriculum and be prepared to meet challenging situations as when students try to suppress each other, or they boycott certain teaching situations. You know, I once had a class that just wanted lectures. They complained to

the administration about my teaching. That was hard!" Line is silent for a few seconds. "The whole time I was thinking I was at fault, that I was just not good enough. I almost gave the job up. Getting the students to engage and to participate takes a lot more preparation and a lot more work than I thought was possible".

She gets quiet again, then smiles, and asks: "Did I tell you about my dramatization project? You see, in my teaching, roleplaying has become central to both theory and practice. When students dramatize, we can disassemble the narrative, ask critical questions and discuss theoretical perspectives. I let them really inhabit their various roles. When we do things like that I become useful to the students by building bridges between meta-theory and their experiences and reflections. I remember the first time I tried to introduce dramatization to a class. They didn't want to participate. Third year students, and they weren't used to that method. So now I practice dramatization from the very first semester". She tells us about a colleague who is an ardent proponent of dialogue-café, panel debates and various forms of discussion games. She talks about how exciting their classes become when they get to work together.

"You know what really irritates me?", she continues. "The economical limitations that make me have to teach maybe 90 students at the same time. That's a real limitation on methodical possibilities! Additionally it frustrates me if the room we were going to use is suddenly handed over to someone with higher priority. I have to be thankful for either an auditorium or a small closet of a classroom. When you are a pedagogy teacher and you're teaching reflection you sure have to be creative!".

## Discussions

With a basis in Line's narrative, we will discuss what pedagogy teachers do and experience in their work to strengthen ECTE students' reflections.

We hear about different methods used to facilitate work with reflection in the classroom. Line describes what she does and how she prepares for reflection, both in-action in the classroom and on-action, by using and challenging the students' experiences (Schön, 1983). The descriptions from the narrative do not relate what it is students have said and done to make Line see that they reflect. Her emphasis on questions and possibilities to discuss and wonder shows that she facilitates reflection, both on experiences and on incidents as they occur. Reflection is also highlighted by her challenges towards students and her interest in building bridges between their experiences, reflections and meta-theory. Through this she functions as a tutor. The recurring theme of relations in the analyses show that pedagogy teachers strive to

adapt their descriptions to better communicate with each student (Schön, 1987). A limitation of these research strategies is that we only get to discuss the pedagogy teachers' narratives. Descriptions and observations of the education from the students' perspectives could have given a more complete picture of how this actually works.

When Søndena (2004, p. 15) asks what should be reflected on, it is perhaps not just the themes, but also how these themes are worked with. Questions are frequently mentioned, both in Line's narrative and in the interviews, as a strategy for reflection. Discerning which questions lead to deep thinking or powerful reflection is one way of assessing the use of questions in teaching situations. Line mentions the use of questions as a way of participating in discussions, to inspire curiosity but also to challenge students to not be so certain that they know what kindergarten pedagogy is all about. It was clear from the analyses that different teachers inspire different ways of working with questions. Both critical questions, questions that let teachers and students reflect together or open questions were mentioned. In the analyses of the interviews and in Line's narrative it is not clear what the students are encouraged to reflect upon, or how the posing of questions can help build critical reflection, beyond a mirroring of what is already known (Søndena, 2002). How certain work methods can strengthen the students' reflections is highlighted by Aamaas and Davidsen (2017) (Chapter 8, this book). They observe student teachers in their work with mysteries as a method. They claim that students gain a deeper understanding through this particular work method, and their research supports the claim that what happens in the university classroom is significant to the students' reflections.

To make ethical considerations and to see reflection and interpretation as both social and individual processes is, according to Kinsella (2012, p. 49) vital to reflection in the moment of action. Line's teaching methods can provide her students with experiences that in turn strengthen their future ethical considerations when practicing their professional judgement. Relations are interwoven with limitations on education. Line's story highlights several examples where relations are meaningful. Hjort (2013, p. 235) criticizes the way universities work with students' ethical reflections and proposes that it can be strengthened by emphasizing discussion of the students' critical experiences. According to Hjort (2013) this should happen both in educational contexts and in professional practice, which in turn calls for better coordination between education and practice. Ethical reflection depends on the exercise of *fronesis*, that with informs the professional practitioner in their navigation of various practical contexts (Kinsella, 2012). Line does not use the term ethical reflection, but she tells of methods where the students have to partake with their own experiences and knowledge. The drama exercises that she describes are one example of classroom education where students are exposed to different perspectives. Line also tells us that she herself has been challenged by students. She was affected by those challenges. Possibly, ethical reflection might also be about putting words to various bodily affects and critical experiences, and discussing and nuancing these in the classroom community. Discretion is tied to "the ability to assess how to act to do what is morally

good for humans in a given situation" (Grimen, 2008, p. 78). In a teaching situation this means strengthening the students' ability to make these choices. But it also refers to the way Line combines practical experiences and critical reflection with knowledge of educational methods, and what good she does for others.

Challenges are a source of reflection because they involve decisions where general knowledge and rules of action are not sufficient. The professional practitioner has to be able to exercise discretion (Molander & Terum, 2008). The challenges function as a break, but they are first and foremost real experiences and concerns that the educators have chosen to share. Line shows that insecurity about her access to education spaces, and having to adapt her teaching to new rooms challenges her professional competence. She also tells of student groups with a lack of engagement, of students who silence each other and classes that don't want to contribute to the teaching process. How educators negotiate teaching methods, argue for them, and respond to opposition also give them an opportunity to practice virtuosity. Negotiations hold the potential for critical reflection in the classroom community. How Line handles challenging situations and dares to expose and discuss her actions with the students can give rise to a discussion about discretion in practice. As a pedagogy teacher you face students, and you are seen both as an expert in kindergarten practice, as a theory expert, as a builder of bridges to specific professional competences and as a model of virtuoso pedagogy.

## **Concluding comments**

To examine the narratives of pedagogy teachers, relating to what they do and experience in their work with reflection in the ECTE classroom, elements from narrative analytical processes were used. The methodical and analytical processes were driven by breakdowns and by wonderment, which in turn led to inspiration from other theories of method and reflection theories to elucidate the empirical findings. The analyses gave rise to the constructed narrator, Line, who tells of her various experiences with methods that can strengthen reflection in ECTE. The discussions highlight pedagogy, relations, teaching methods, questions and the classroom as elements that influence this work. The love of pedagogy and the descriptions of teaching methods also express an antidote to excessive streamlining of the education. Various methods of reflection require the educator to set aside time, to know her students and to challenge ideas of right and wrong in their practice. This takes courage - to challenge, to innovate and to want to explore perspectives and look for things that do not simply mirror what is already known.

Based on Line's narrative, the classroom can serve as a practice ground for the strengthening of the students' reflection, both in here-and-now action and in past practice. The study joins the ranks of studies that affirm that classroom education can be used for reflection both in-action and on-action. The study is only moderately

successful in showing whether the work methods of the ECTE open up for powerful reflection, but the discussions show that innovation also has to do with what students are offered to reflect on. To dare to be virtuoso as an educator of pedagogy means exposing your own reflections and limitations. This, along with negotiating methods and daring to endure disagreements should be further discussed as meta-perspectives on the education. It gives new possibilities for reflection. Reflection offers no clear-cut answers to any situation, but it offers various perspectives to explore and to challenge along with the students in the ECTE classrooms.

## Literature

- Aamaas, Å., & Davidsen, A. (2017). Mysterier som læringsstrategi i lærerutdanningen – en casestudie ved Høgskolen i Sørøst-Norge. In L. Frers, K. Hognestad, & M. Bøe (Eds.), *Metode mellom forskning og læring – refleksjon i praksis*. Oslo: Cappelen Damm akademiske.
- Alvesson, M., & Kärreman, D. (2011). *Qualitative Research and Theory Development*. London/Thousand Oaks, California/New Delhi/Singapore: SAGE Publication Ltd.
- Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflective Practice*, 16(1), 123-141. doi:10.1080/14623943.2014.982525
- Biesta, G. J. J. (2015). No paradigms, no fashions, and no confession. Why researchers need to be pragmatic. In A. M. Otterstad & A. B. Reinertsen (Eds.), *Metodefestival og øyeblikksrealisme - eksperimenterende kvalitative forskningspassasjer* (pp. 133-149). Bergen: Fagbokforlaget.
- Brinkmann, S. (2014). Doing Without Data. *Qualitative Inquiry*, 20(6), 720-725. doi:10.1177/1077800414530254
- Czarniawska, B. (2010). Narratologi og feltstudier. In S. Brinkmann & L. Tanggaard (Eds.), *Kvalitative metoder : en grundbog* (pp. 239-262). København: Reitzel.
- Engelsen, K. S., & Smith, K. (2014). Assessment literacy In C. Wyatt-Smith, V. Klenowski, & P. Colbert (Eds.), (Vol. 1, pp. 91-107). Dordrecht, The Netherlands: Springer International.
- Frers, L. (2017). Metode mellom hverdagspraksis, læring og forskning. In L. Frers, K. Hognestad, & M. Bøe (Eds.), *Metode mellom forskning og læring – refleksjon i praksis*. Oslo: Cappelen Damm akademiske.
- Grimen, H. (2008). Profesjon og kunnskap. In A. Molander & L. I. Terum (Eds.), *Profesjonsstudier* (pp. s. 71-86). Oslo: Universitetsforl.
- Hjort, K. (2013). Fra etisk bevidsthed til etisk refleksion? Analyse af en læreproces. In J. J. Rothuizen & L. Togsverd (Eds.), *Hvordan uddannes pædagoger? Perspektiver fra et forskningsprojekt*. Aarhus: Videncenteret for socialpædagogik og socialt arbejde, VIACU.
- Jernes, M., & Engelsen, K. S. (2012). Stille kamp om makten ; En studie av barns interaksjon i digital kontekst i barnehagen. *Nordic Studies in Education*.
- Johansen, M. B., & Frederiksen, L. L. (2013). Teori og praksis i de danske professionsuddannelser. *Tidsskrift for Nordisk Barnehageforskning*, 6(5), 1-12.



- Kinsella, E. A. (2012). Practitioner reflection and judgement as phronesis: A continuum of reflection and considerations for phronetic judgement. In E. A. Kinsella & A. Pitman (Eds.), *Phronesis as Professional Knowledge. Practical Wisdom in the Profession*. Rotterdam: Sense Publishers.
- Kunnskapsdepartementet. (2012a). Forskrift om rammeplan for barnehagelærerutdanningen. Retrieved from <http://www.lovdata.no/cgi-wift/wifildles?doc=/app/gratis/www/docroot/for/sf/kd/kd>.
- Kunnskapsdepartementet. (2012b). *Nasjonale retningslinjer for barnehagelærerutdanningen*. regjeringen.no Retrieved from [http://www.regjeringen.no/upload/KD/Rundskriv/2012/Nasjonale\\_retningslinjer\\_barnehagelaererutdanning.pdf](http://www.regjeringen.no/upload/KD/Rundskriv/2012/Nasjonale_retningslinjer_barnehagelaererutdanning.pdf).
- Lauvås, P., & Handal, G. (2014). *Veiledning og praktisk yrkesteori* (3 ed.). Latvia: Cappelen Damm A.S.
- Lofthus, L. (2017). Bruk av teori for økt refleksivitet i praksis – praksisarkitektur som rammeverk for å belyse forskerens plass i datagenereringen. In L. Frers, K. Hognestad, & M. Bøe (Eds.), *Metode mellom forskning og læring – refleksjon i praksis*. Oslo: Cappelen Damm akademiske.
- Molander, A. (2013). Profesjonelt skjønn i velferdsstaten: mekanismer for ansvarliggjøring. In A. Molander & J.-C. Smeby (Eds.), *Profesjonsstudier 2* (pp. S. 44-54). Oslo: Universitetsforl.
- Molander, A., & Terum, L. I. (2008). *Profesjonsstudier*. Oslo: Universitetsforl.
- Moxnes, A. R. (2016). Refleksjon i barnehagelærerutdanningen. *Tidsskrift for Nordisk Barnehageforskning*, 12. doi:10.7577/nbf.1563
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Los Angeles: Sage Publications.
- Schön, D. A. (1983). *The reflective practitioner : how professionals think in action*. Aldershot: Arena.
- Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco, Calif: Jossey-Bass.
- Souto-Manning, M. (2014). Critical narrative analysis: the interplay of critical discourse and narrative analyses. *International Journal of Qualitative Studies in Education*, 27(2), 159-180. doi:10.1080/09518398.2012.737046
- Søndenå, K. (2002). *Tradisjon og transcendens: ein fenomenologisk studie av refleksjon i norsk førskulelærerutdanning* (Vol. 175). Göteborg: Acta Universitatis Gothoburgensis.
- Søndenå, K. (2004). *Kraftfull refleksjon i lærarutdanninga*. Oslo: Abstrakt forl.

## 9.2 Information

The following information is in Norwegian. It consist of different information to the participants, and receipts from Norsk Samfunnsvitenskapelig Datatjeneste (NSD).

1: Forespørsel om deltakelse i forskningsprosjekt (del 1)

2: Intervjuguide til intervju med pedagogikklærere

3: Observasjonsguide for observasjon av klasseromsundervisning

4: Kvittering fra NSD

5: Forespørsel om deltakelse i forskningsprosjekt (del 2)

6: Guide for filmopptak og re-call intervjuer (del 2)

7: Kvittering fra NSD (del 2)

## Forespørsel om deltakelse i forskningsprosjekt

Prosjekt tittel: *Fostering a praxis stance in Early Childhood Teacher Education*

Bakgrunn og formål: I august 2013 tiltrådte jeg stilling som ph.d. stipendiat ved Høgskolen i Buskerud og Vestfold. Prosjektet «Forstering a praxis stance in early childhood teacher education» er tiknyttet ph.d programmet *Pedagogiske ressurser og læreprosesser*. Hensikten med prosjektet er å undersøke hvordan det tilrettelegges for studenters refleksjon og synliggjøring av kritisk tenkning i møte mellom teori og praksis om barnehage i utdanningsløpet. Så langt i prosessen har hovedfokus vært rettet mot studier av prosjektets teoretiske ramme knyttet mot innholdet i refleksjonsbegrepet. Jeg arbeider med å se refleksjon som grunnlag for å utvikle profesjonskompetanse med spesielt fokus på begreper som kritisk og etisk refleksjon. Problemstillingen for ph.d. prosjektet er:

Hvilke kulturelle redskaper kan styrke refleksjon hos studenter i barnehagelærerutdanningen? Hvordan fungerer redskaper for refleksjon som ressurser for studenter?

I problemstillingen framgår det at refleksjon som «kulturelle redskaper» har en sentral plass. Jeg har en vid tilnærming til redskapsbegrepet og ser her teorier, ulike modeller for å beskrive kunnskapsproduksjon, erfaringer fra praksis og «det som blir sagt» i møter mellom mennesker som mulige redskaper for refleksjon. Utfra dette har det foreløpig utkrystallisert seg noen forskningsspørsmål<sup>1</sup> jeg vil arbeide videre med:

- Hva finnes av forskning på refleksjon i lærerutdanningen generelt og barnehagelærerutdanningen spesielt?
- Hvilke redskaper for refleksjonen utvikles og settes i spill i utdanningsinstitusjoner for barnehagelærere i Norge?
- Hvordan fungerer ulike redskaper for refleksjon for studenter? Og er praksis gjenkjennelig i studenters refleksjoner og eventuelt handlinger?

I denne delen av prosessen er det spesielt forskningsspørsmål to; hvilke redskaper for refleksjon som utvikles og settes i spill i utdanningsinstitusjoner, og for å avgrense dette ytterligere er det pedagogikkundervisningen jeg primært ønsker å undersøke.

**Intervju av pedagogikklærere og observasjon av de samme lærerne i undervisning er de valgte forskningsstrategiene.**

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<sup>1</sup> Disse spørsmålene gjennomgår stadig endring, og er dermed i prosess.

## Utvalg for undersøkelsen

Utvalget for denne undersøkelsen er gjort ved henvendelse til pedagogisk institutt ved ulike høyskoler. Det har vært en intensjon å inkludere by, bygd, større og mindre institusjoner, og at ulike landsdeler er representert. Deltakelse er frivillig. Jeg ønsker to representanter fra hver av totalt fem utdanningsinstitusjon.

Jeg ønsker å komme i kontakt med to pedagogikklærere som underviser ved barnehagelærerutdanning ved din institusjon.

**Intervju:** Spørsmålene i intervjuet vil omhandle 'refleksjon hos studenter i og rundt undervisning'. Hvordan det tilrettelegger for refleksjon i undervisning, hva pedagogikklæreren opplever som gode redskaper for refleksjon, hvordan det gjennom studiet legges til rette for etisk og kritisk refleksjon. Hvordan studenter tar til seg, og bruker de ulike redskapene. Det benyttes diktafon til opptak av samtalen. Intervjusamtalen vil bli transkribert og alle spor av personidentifiserbare opplysninger (som arbeidssted, personnavn etc) vil bli utelatt i transkripsjonen. Intervjuet vil ikke inneholde personnavn eller annen person/og institusjon-identifiserbar informasjon.

**Observasjon:** Å være «beskjeden gjest» i undervisning. Jeg ønsker å sitte bak i klasserommet og observere hvilke redskaper pedagogikklærere aktiverer i undervisning. I undervisningen vil kun ta med penn og papir og gjøre notater underveis. I etterkant av observasjonene ønsker jeg å snakke med pedagogikklæreren(e) individuelt for å høre hvordan de opplevde denne konkrete undervisningssituasjonen. Notater jeg gjør i undervisningen og i samtalen etter undervisningen vil ikke inneholde noen personnavn eller annen institusjon/ og person-identifiserbar informasjon.

Jeg planlegger å gjennomføre denne empiriinnsamlingen ved fem høyskoler for å få et bredt utvalg. Det samles ikke inn personidentifiserende opplysninger i undersøkelsen.

## Hva skjer med informasjonen om deg

Alle opplysninger du oppgir vil bli behandlet konfidensielt. Personopplysninger er ikke av relevans for denne studien. Person og institusjonsnavn og eventuell annen personidentifiserende opplysninger som går til å bli nevnt i intervju vil ikke bli transkribert. Lyddopptak fra intervjuet slettes når studien avsluttes. I observasjonene i undervisningsobservasjonene vil ikke personnavn, eller annen personidentifiserbare opplysninger registreres. Jeg vil lagre intervju og feltnotater fra undervisningsobservasjonene

nummerert, etter rekkefølge de ble gjennomført i. Du vil ikke kunne bli gjenkjent i publikasjoner der materiale fra studiet brukes inn.

Prosjektet skal etter planen avsluttes i august 2017.

Lydopptak vil bli slettet når prosjektet er avsluttet.

**Etikk er et vesentlig aspekt i hele prosessen og bidragsyttere og høgskoler vil anonymiseres og spesielle hensyn og ønsker hos de involverte ivaretas. Nødvendige hensyn og krav til forskningsetikk overholdes.**

**Det er frivillig å delta i studien og du kan når som helst trekke deg, uten å oppgi noen grunn.**

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS.

**Kontaktperson: Anna Moxnes, 90854804, e-post: [anna.moxnes@hbv.no](mailto:anna.moxnes@hbv.no)**

## **Samtykke til deltakelse i studien**

Jeg har mottatt informasjon om studien, og er villig til å delta

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(Signert av prosjektdeltaker)

# Intervjuguide

Anna R. Moxnes

«Fostering a praxis stance in early childhood teacher education».

“Hvilke redskaper for refleksjonen aktiveres i barnehagelærerutdannings-institusjoner i Norge?»

## **Bakgrunnsinformasjon:**

Hvor lenge har du undervist i pedagogikk?

Har du annen form for arbeidserfaring?

## **Spørsmål om undervisning:**

Fortell hvordan du

- Planlegger undervisning
- Gjennomfører undervisning
- Evaluerer undervisning

Hvordan følger du opp studentprogresjon?

## **Spørsmål om tilrettelegging for refleksjon:**

Fortell hvordan du tilrettelegger for refleksjon

- I undervisning
- Etter undervisning
- Før, underveis og etter praksis

## **Spørsmål om oppfølging av refleksjon:**

Fortell hvordan du følger opp refleksjon

- I undervisning
- Etter undervisning
- Før, underveis og etter praksis

Hva ønsker du ideelt sett å få til i din undervisning for å styrke studentenes refleksjonsprosesser?

Hvordan ville du ideelt sett undervist for å få til dette?

- Hva må til for å få til dette?

## **Spørsmål om redskaper for refleksjon:**

- Hvilke redskaper for refleksjon benytter du deg av i din undervisning?
- Hvilke redskaper for refleksjoner er du tydelig på å presentere for dine studenter?
- Hvordan opplever du at disse redskapene fungerer?
- Hvordan gjenkjenner du refleksjon hos studenter?

- Hvordan sikrer du deg at studentene vet hva refleksjon er og hva som er forventet av dem?
- Hvordan ivaretar du kvalifikasjonsrammeverkets målsetninger og rammeplan for barnehagelærerutdanningen inn i arbeidet ditt?
- Hvordan ivaretar du studenters bidrag, spørsmålsstillinger mm inn i undervisningen din?

Annet:

- Hvordan bruker du selv refleksjon som redskap i din undervisning?
- Fortell hvordan du opplevde overgangen til BLU og hvordan det påvirker din undervisning
- Annet du har lyst til å tilføye

# Observasjonsguide

Anna R. Moxnes

«Fostering a praxis stance in early childhood teacher education».

Hva som spesielt undersøkes i observasjonene:

- Hvilke redskaper for refleksjonen aktiveres i barnehagelærerutdannings-institusjoner i Norge?
- Hvordan fungerer ulike redskaper for refleksjon for studenter?

## Informasjon til studenter:

- Før undervisning: pedagogikk lærer orientere studentene skriftlig, via fronter og muntlig i siste undervisningstime før min deltakelse. Hvis klassen ikke godkjenner observasjonen blir den ikke gjennomført.
- Jeg informerer studentene kort, og ber om muntlig tillatelse i klasserommet før observasjonsstart. Ønsker klassen at jeg ikke gjennomfører observasjonene blir den ikke gjennomført.
- Det tydeliggjøres at frivillighet er sentralt.
- Det tydeliggjøres at det som skriftlig gjøres i feltnotater kun er beskrivelser av prosesser og handlinger og ingen direkte sitater, eller personidentifiserende opplysninger.

## Utstyr:

- Penn, papir og notisbok

## Gjennomføring av observasjonen:

- Ønsket plassering er bak i klasserommet.
- Notater vil bli gjort fortløpende, både på papir og i notisbok
- Pauser gjennomføres når klassen tar pauser

## Hva noteres i feltnotatene:

- Prosesser i undervisningen
- Mulige redskaper for refleksjon
- Notater om synlige refleksjonsprosesser
- Spørsmål fra pedagogikk lærer til klassen (ikke ordrett)
- Praksisfortellinger (ikke ordrett)
- Prosesser rundt diskusjoner (ikke ordrett)
- Samtaler og spørsmål mellom pedagogikk lærer og studenter (ikke ordrett)
- I notatboken noteres mine personlige refleksjoner rundt det som skjer. Dette gjøres for at ikke mine personlige refleksjoner skal forstyrre for mye de inntrykk jeg tar inn som observatør



## **Innsyn i notater**

Faglærer og studenter kan når som helst be om å få se hva som blir notert



Anna Rigmor Moxnes

Institutt for barnehagepedagogikk og profesjonskunnskap Høgskolen i Buskerud og Vestfold

Boks 4

3199 BORRE

Vår dato: 11.12.2014

Vår ref: 40655 / 3 / AGL

Deres dato:

Deres ref:

## TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 10.11.2014. All nødvendig informasjon om prosjektet forelå i sin helhet 08.12.2014. Meldingen gjelder prosjektet:

40655

Behandlingsansvarlig

Daglig ansvarlig

*Fostering a praxis stance in early childhood teacher education*

*Høgskolen i Buskerud og Vestfold, ved institusjonens øverste leder*

*Anna Rigmor Moxnes*

Etter gjennomgang av opplysninger gitt i meldeskjemaet og øvrig dokumentasjon, finner vi at prosjektet ikke medfører meldeplikt eller konsesjonsplikt etter personopplysningslovens §§ 31 og 33.

Dersom prosjektopplegget endres i forhold til de opplysninger som ligger til grunn for vår vurdering, skal prosjektet meldes på nytt. Endringsmeldinger gis via et eget skjema,

<http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>.

Vedlagt følger vår begrunnelse for hvorfor prosjektet ikke er meldepliktig.

Vennlig hilsen

Katrine Utaaker Segadal

Audun Løvlie

Kontaktperson: Audun Løvlie tlf: 55 58 23 07

Vedlegg: Prosjektvurdering



## Prosjektvurdering - Kommentar

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Prosjektnr: 40655

Vi kan ikke se at det behandles personopplysninger med elektroniske hjelpemidler, eller at det opprettes manuelt personregister som inneholder sensitive personopplysninger. Prosjektet vil dermed ikke omfattes av meldeplikten etter personopplysningsloven.

Det ligger til grunn for vår vurdering at alle opplysninger som behandles elektronisk i forbindelse med prosjektet er anonyme.

Med anonyme opplysninger forstås opplysninger som ikke på noe vis kan identifisere enkeltpersoner i et datamateriale, verken:

- direkte via personentydige kjennetegn (som navn, personnummer, epostadresse el.)
- indirekte via kombinasjon av bakgrunnsvariabler (som bosted/institusjon, kjønn, alder osv.)
- via kode og koblingsnøkkel som viser til personopplysninger (f.eks. en navneliste)
- eller via gjenkjennelige ansikter e.l. på bilde eller videoopptak.

Personvernombudet legger videre til grunn at navn/samtykkeerklæringer ikke knyttes til sensitive opplysninger.

# Forespørsel om deltakelse i forskningsprosjektet

## *”Fostering a praxis stance in Early Childhood Teacher Education”*

### **Bakgrunn og formål**

Denne studien er fase tre i doktorgradsstudiet «Fostering a praxis stance in early childhood teacher education». Prosjektet er tiknyttet ph.d programmet *Pedagogiske ressurser og læreprosesser*, ved Høgskolen i Buskerud og Vestfold. Hensikten med prosjektet er å undersøke hvordan det tilrettelegges for barnehagelærerstudenters refleksjon og synliggjøring av kritisk tenkning over teori og praksis i utdanningsløpet. Så langt i prosessen har hovedfokus vært rettet mot studier av prosjektets teoretiske ramme knyttet mot innholdet i refleksjonsbegrepet og hva undervisere i pedagogikk gjør for å tilrettelegge for refleksjon. I denne tredje fasen av prosjektet er det studenters syn på hva refleksjon er og hvordan studenter utvikler refleksjonskompetanse jeg ønsker å undersøke.

Problemstillingen for ph.d. prosjektet er:

Hvilke kulturelle redskaper kan styrke refleksjon hos studenter i barnehagelærerutdanningen?  
Hvordan fungerer redskaper for refleksjon som ressurser for studenter?

For denne fasen har jeg følgende forskningsspørsmål:

Hvordan uttrykker studenter at de gjør nytte av sine refleksjoner og øves til å utvise skjønn?

Forskningsspørsmålet er utdypet i fire underspørsmål:

- Hvordan fungerer refleksjon som kulturelt redskap for studenter?
- Hvilke redskaper bruker studenter for å sette i gang, og komme i dybden av refleksjoner?
- Hvordan anvendes teoretisk kunnskap, praktiske erfaringer, forskningsbasert kunnskap, etiske problemstillinger og kritiske momenter inn i studenters refleksjonsprosesser.
- Hva mener studenter om refleksjon og hvordan opplever de å gjøre nytte av egne refleksjoner.

Utvalget av institusjon for denne undersøkelsen er gjort basert på ulik geografisk tilhørighet og med bakgrunn i hvor det ble hentet informasjon til fase to av prosjektet. Jeg ønsker å komme i kontakt med to studentgrupper/kollokviegrupper, henholdsvis fra forskjellige trinn (eks en fra trinn en og en fra trinn to, eventuelt trinn tre) ved din Høgskole/Universitet. Jeg ønsker fire til fem deltakere i hver gruppe.

### **Hva innebærer deltakelse i studien?**

Denne studien krever aktiv deltakelse fra de studentene som ønsker å delta. Jeg planlegger å møte hver studentgrupper/kollokviegrupper 3 x 2 ganger gjennom kommende studieår. Første møtepunkt i september/oktober, andre i januar/februar og tredje i april/mai. I møtepunktene er det ønskelig at studentgruppene arbeider med studierelaterte oppgaver. Jeg planlegger å filme gruppe/kollokviegruppemøtet i ca. en time, med et enkelt filmkamera. I tillegg vil jeg bruke diktafon

for å sikre lyd kvaliteten. Jeg vil selv befinne meg i rommet under opptak og gjøre notater. Jeg ønsker videre å komme tilbake til studentgruppen ca. en uke etter opptak for å se på utdrag av filmopptaket med studentene og diskutere det vi ser på opptaket (metoden kalles stimulated recall). Denne sekvensen vil da basere seg på innholdet i filmopptaket og ikke styres av en intervjuguide. Jeg vil stille spørsmål med utgangspunkt i hva som skjer i filmopptaket. I recall møtene ønsker jeg også å gjøre filmopptak og lydopptak, med samme utstyr som i første møtet.

Etter første møtepunkt og tredje møtepunkt ønsker jeg å intervju en student i gruppa. I intervjuet er det kun meg og den ene studenten som er tilstede. Opptak av intervjuet vil bli gjort med diktafon.

Det vil ikke bli samlet inn annen informasjon om dere, Høgskolen etc, utover hva dere som studentene velger å dele i møtepunktene.

Opptak kan bli brukt i forskningssammenheng.

### **Hva skjer med informasjonen om deg?**

Alle personopplysninger vil bli behandlet konfidensielt. Opptak vil bli lagret på egen ekstern harddisk, forsvarlig innlåst til prosjektet avsluttes. Filmopptak og lydopptak vil bli transkribert og i denne prosessen vil personopplysninger som egennavn, stedsnavn osv. anonymiseres. Som ledd av prosessen vil det være aktuelt å kunne bruke små (ett – fem) minutters utsnitt fra filmopptak til diskusjon med andre forskere. Hvis dette blir aktuelt vil personidentifiserende tekk forsøkes å anonymiseres ytterligere.

I materiell som skal publiseres vil det ikke være mulig å identifisere personer og institusjoner.

Prosjektet skal etter planen avsluttes i desember 2017. Filmopptak og lydopptak vil bli slettet når prosjektet avsluttes. Underveis i prosessen oppbevares data på ekstern harddisk forsvarlig innlåst. Anonymisering vil skje fortløpende, etter hvert som materialet transkriberes. Det er ikke behov for å lagre noen former for personidentifiserende materiale.

### **Frivillig deltakelse**

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli anonymisert.

Dersom du ønsker å delta eller har spørsmål til studien ta kontakt med Anna Moxnes, mobilnr: 90854804, epost: [anna.moxnes@hbv.no](mailto:anna.moxnes@hbv.no).

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS.

## **Samtykke til deltakelse i studien**

Jeg har mottatt informasjon om studien, og er villig til å delta

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(Signert av prosjektdeltaker, dato)

## Guide til filmopptak og stimulated recall

Anna R. Moxnes

«Fostering a praxis stance in early childhood teacher education».

Denne prosessen er todelt. Først gjøres det et videoopptak av gruppearbeidet, så ser gruppen på utdrag av opptaket og kommenterer det de ser. Begge sekvenser filmes og tas opp som lydfil.

Hva som spesielt undersøkes:

- Hvilke redskaper bruker studenter for å sette i gang, og komme i dybden av refleksjoner?
- Hvordan anvendes teoretisk kunnskap, praktiske erfaringer, forskningsbasert kunnskap, etiske problemstillinger og kritiske momenter inn i studenters refleksjonsprosesser.
- Hva mener studenter om refleksjon og hvordan opplever de å gjøre nytte av egne refleksjoner.

### Informasjon til studenter:

- Pedagogikk lærer orientere studentene muntlig i siste undervisningstime før jeg kommer.
- Jeg informerer studentene kort, og spør om det er en kollokviegruppe, eller fire til fem studenter i klassen som kan tenke seg å ta del i dette.
- Det tydeliggjøres at frivillighet er sentralt.
- Det tydeliggjøres at det som skriftliggjøres i feltnotater kun er beskrivelser av prosesser og handlinger og ingen direkte sitater, eller personidentifiserende opplysninger.
- Jeg gjør avtaler om 3X2 møtepunkter direkte med gruppen. Avtaler dato og klokkeslett og utveksler telefonnummer og epostadresser, slik at vi kan få tak i hverandre hvis det skulle skje endringer i planene.
- Jeg informerer gruppen om hva dette innebærer for dem i forhold til forberedelser og deltakelse der og da. Jeg ber gruppen om å forberede tema før jeg kommer.

### Utstyr:

- Penn, papir, notatbok, filmkamera, kamerastativ, diktafon og pc (til recall-sekvensen)

### Gjennomføring av observasjonen:

- Jeg får hjelp av pedagogikk lærer ved institusjonen til å booke et grupperom
- Jeg møter noe før og setter opp kamera, klarstiller diktafon og arrangerer rommet
- Notater vil bli gjort fortløpende, på papir og i notatbok
- Pauser gjennomføres ved behov

### **Gjennomføring av recall:**

- Jeg får hjelp av pedagogisklærer ved institusjonen til å booke et grupperom
- Jeg møter noe før for å klargjøre rommet ved å sette opp kamera, klarstille diktafon, koble pc til større skjerm for å vise opptak
- Studentene blir vist utklipp av opptak fra observasjonene. Jeg stopper opptakene og spør studentene om hva de tenker om det de ser og hva de tenkte da de holdt på med gruppearbeidet.
- Jeg filmer og tar lydopptak av samtalene med gruppen
- Notater vil bli gjort fortløpende, på papir og i notatbok
- Pauser gjennomføres ved behov

### **Hva noteres i feltnotatene (gjelder både for observasjon og recall):**

- Prosesser i gruppearbeidet
- Mulige redskaper for refleksjon
- Notater om synlige refleksjonsprosesser
- Prosesser rundt diskusjoner (ikke ordrett)
- I notatboken noteres mine personlige refleksjoner rundt det som skjer. Dette gjøres for at ikke mine personlige refleksjoner skal forstyrre for mye de inntrykk jeg tar inn som observatør

### **Innsyn i notater**

Studenter kan når som helst be om å få se hva som blir notert

Anna Rigmor Moxnes

Institutt for barnehagepedagogikk og profesjonskunnskap Høgskolen i Buskerud og Vestfold

Boks 4

3199 BORRE

Vår dato: 20.08.2015

Vår ref: 44088 / 3 / KH

Deres dato:

Deres ref:

## TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 23.07.2015. Meldingen gjelder prosjektet:

**44088** *Fostering a praxis stance in early childhood teacher education.*  
*En tidligere fase av prosjektet har vært meldt inn før og fikk prosjektnr: 40655*  
**Behandlingsansvarlig** *Høgskolen i Buskerud og Vestfold, ved institusjonens øverste leder*  
**Daglig ansvarlig** *Anna Rigmor Moxnes*

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstillende i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, <http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://pvo.nsd.no/prosjekt>.

Personvernombudet vil ved prosjektets avslutning, 31.12.2017, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Katrine Utaaker Segadal

Kjersti Haugstvedt

Kontaktperson: Kjersti Haugstvedt tlf: 55 58 29 53

*Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.*

*Avdelingskontorer / District Offices:*

OSLO: NSD, Universitetet i Oslo, Postboks 1055 Blindern, 0316 Oslo. Tel: +47-22 85 52 11. nsd@uio.no

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TROMSØ: NSD, SVF, Universitetet i Tromsø, 9037 Tromsø. Tel: +47-77 64 43 36. nsdmaa@sv.uit.no



Vedlegg: Prosjektvurdering



## Prosjektvurdering - Kommentar

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Prosjektnr: 44088

Personvernombudet finner prosjektopplegget tilfredsstillende.

Prosjektslutt er 31.12.17. Data vil da anonymiseres/slettes.

Doctoral dissertation no. 30

2019

**Sensing, Thinking and Doing Reflection  
in Early Childhood Education**

Dissertation for the degree of PhD

Anna Rigmor Moxnes

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