# Doing arts-based master's thesis supervision/writing in teacher education: A new materialist approach to supervision

Sofia Jusslin\* & Gunilla Eklund Åbo Akademi University, Finland

## Abstract

Arts-based research has been proposed to be a new paradigm in teacher education, but research on supervising arts-based educational research in master's theses in education remains scarce. Recently, researchers have begun re-thinking supervision with relational, more-than-human ontologies, acknowledging that it encompasses doings and relational becomings produced by a multiplicity of human and non-human bodies. However, little attention has been given to the becoming for both student and supervisor, and this research has been limited to doctoral supervision. Originating through a student-supervisor relationship, the study explored the entangled supervision/ thesis writing processes to produce an understanding of arts-based educational master's thesis supervision in teacher education. The analytical questions were: (1) What doings make a difference when supervising and writing an arts-based educational master's thesis, and (2) what are their opportunities and challenges for teacher education? A diffractive analysis produced doings of thinkingtogether with/in theory and arts-based educational research practice, be(com)ing-teacher and be(com)ing-supervisor, and be(com)ing-with-the-thesis. The doings focused on the master's thesis project but extended its boundaries. The doings drew on the past concerning previous experiences and knowledges, were fueled by present mutual interests, and affected future teaching practices. The study holds implications by providing valuable insights into arts-based educational research supervision in teacher education.

**Keywords:** teacher education; master's thesis; arts-based educational research; new materialism; supervision

Received: October, 2021; Accepted: June, 2022; Published: August, 2022

<sup>\*</sup>Correspondence: Sofia Jusslin, e-mail: sofia.jusslin@abo.fi

<sup>© 2022</sup> Sofia Jusslin & Gunilla Eklund. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (https://creativecommons.org/licenses/BY/4.0/), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

Citation: S. Jusslin & G. Eklund. «Doing arts-based master's thesis supervision/writing in teacher education: A new materialist approach to supervision» Journal for Research in Arts and Sports Education, Special issue: Postperspektiv på pedagogik och konst, Vol. 6(3), 2022, pp. 121–137. http://dx.doi.org/10.23865/jased.v6.3538

## Introduction

This study addressed the supervision and writing of an arts-based master's thesis in class teacher education. It originated through a student–supervisor relationship between supervisor Sofia (author 1) and student teacher Anna (pseudonym) at Åbo Akademi University (ÅAU) in Finland. Anna conducted arts-based research using a relational ontology when investigating digital dance-integrated teaching in a Grade 3 classroom. This study started in a speculative middle (Springgay & Truman, 2018); a middle not known in advance but awakened by intriguing questions that arose in the entangled supervision/thesis writing processes. The processes raised questions about the supervision of student teachers doing arts-based educational research positioned within a relational ontology and how teacher education can support students in such complex methodological and theoretical endeavors. These questions intrigued us and set this study in motion.

Arts-based research has been proposed to be a new paradigm in teacher education; it can foster becoming a teacher and learning to teach (Ewing & Hughes, 2008). Arts-based educational research addresses educational questions by actively using art forms in both research processes and products (Barone, 2006; Sinner et al., 2006). An underlying rationale for this study is that conducting arts-based educational master's theses can, with its practice-near and explorative features, be valuable for student teachers' future teaching practices. The use of arts-based educational research in doctoral dissertations has increased (Sinner et al., 2006), but research about supervising such research remains scarce (e.g., Barone & Eisner, 2012; Forinash, 2016). To our knowledge, there is little to nonexistent research-based knowledge of supervising arts-based educational master's theses in teacher education. Knowledge about this phenomenon is needed to provide supervision and support in students' thesis processes that use arts-based educational research.

Education often relies on humanistic values (Bayley, 2018), and supervision has primarily been studied from a human-centered approach (cf. Fullagar et al., 2017). Although supervision and thesis writing can be understood as distinguished phenomena, the current study's underlying assumption is that both processes influence each other by be(com)ing entangled in different ways. New materialism (Barad, 2007) moves beyond a human-centered ontology towards a more-than-human, relational ontology and provides a conceptual framework for studying the entanglements produced in the supervision/thesis writing processes. It changes educational thinking, practice, and research by accounting for how humans are related to non-humans in educational settings and reframing learning and teaching as always in-becoming (Bayley, 2018; Lenz Taguchi, 2012b). Relational ontologies have recently been used to re-think supervision from beyond a human-centered perspective (Fullagar et al., 2017; Grant, 2018). However, little attention has been given to the becoming for both student and supervisor, and this research has been limited to doctoral supervision. Building on previous research, the current study understands the student-supervisor relationship as being more-than-human rather than human-centered. It encompasses

doings and relational becomings produced by a multiplicity of humans (e.g., student and supervisor) and non-humans (e.g., theories, texts, investigated practice; Fullagar et al., 2017; Grant, 2018). In arts-based research, artists affect and work upon different materials, while the materials also affect and work upon them (e.g., Jusslin & Østern, 2021; Rosiek, 2018). Therefore, supervising arts-based educational research needs to consider a multiplicity of humans and non-humans to guide arts-based research processes. A new materialist approach can thus provide valuable insight into supervising arts-based educational research.

The current study explored the entangled supervision/thesis writing processes to produce an understanding of arts-based educational master's thesis supervision in teacher education. Notably, a relational ontology resided both as the theoretical framework for the current study and as part of the investigated master's thesis project. This study problematized doing master's thesis research in education differently, the supervision of arts-based educational research positioned within a relational ontology, and the knowledge generated through the supervision/thesis processes. The study was speculative as it problematized supervision rather than sought a solution to a problem (Springgay & Truman, 2018). The analytical questions were: (1) What doings make a difference when supervising and writing an arts-based educational master's thesis, and (2) what are their opportunities and challenges for teacher education?

#### The role of the master's thesis in research-based teacher education

Research-based teacher education in Finland has been university-based for decades (Sitomaniemi-San, 2021) and aims to qualify professional and reflective teachers who can base their teaching on research principles and use these to address practical challenges in the profession (Hansén et al., 2015; Niemi & Nevgi, 2014). Teacher education includes specific research activities, and the master's thesis is a central part of the program. Studies have highlighted various challenges in research-based teacher education, showing that the role of research is somewhat unclear and that teachers find it difficult to apply the knowledge gained in education to the practice of their day-to-day work (Afdal & Spernes, 2018; Puustinen et al., 2018). Hence, balancing research-based activities, including the master's thesis, in a way that promotes teachers' professional development, is challenging (Antonsen et al., 2020; Eklund et al., 2019; Ellis et al., 2019) and can be linked to the well-known dilemma of integrating theory and practice (Randi & Corno, 2007). Successful research-based activities must facilitate active and independent student participation and be connected to educational practices (Baan et al., 2019; Flores, 2018; Nikolov et al., 2020).

Despite a long tradition of research-based teacher education, there is still a debate in Finland concerning the function of research and especially of the scientific thesis within teacher education (Eklund et al., 2019). Previous studies have shown a twosided view of research, and a more critical approach has been raised (Puustinen et al., 2018). Generally, student teachers appreciate research-based education but find a

weak relation between scientific theses and the teaching profession (Eklund et al., 2019). This result aligns with previous studies, in which student teachers found it difficult to relate research-based activities to knowledges and skills they need for teaching practice (Afdal & Spernes, 2018; Baan et al., 2020). Recent evaluations of research-based learning activities in an international perspective showed that student teachers considered research projects to be quite unnecessary and irrelevant for their future teaching profession (Nikolov et al., 2020). Despite the critique, ratings were more positive when student teachers were active and had the freedom to investigate their teaching and topics in which they had a personal interest.

Everton et al. (2000) have concluded that research evidence, in general, is valued when the results deal with activities in the classroom and particular aspects of learning and teaching. To enhance student teachers' motivation for research-based activities, their scientific theses could be connected to educational practices (Baan et al., 2019; Ulvik & Riese, 2016). Research in practice further supports teachers' development of an integrated view of theory and practice and enhances their ability to develop teacher practice systematically and reflectively (Lillejord & Børte, 2017). However, studies have shown that to succeed, practice-related scientific theses require tight collaboration between research-based studies and practice (Dimmock, 2016; Flores, 2018; Jakhelln & Pörn, 2018). In developing students' master's theses in this direction, it is thus valuable to try different approaches in teacher education.

#### Supervising arts-based educational research

Research on master's thesis supervision is limited compared to doctoral supervision, but seemingly increasing (e.g., Harwood & Petrić, 2020; de Kleijn et al., 2016; Marnewick, 2020). A commonality in previous research is recognizing the value of investigating the supervisor and student perspectives, as does the current study. However, supervising arts-based educational research requires consideration of aspects more specifically connected to the methodology. Forinash (2016) identified four main issues of supervising arts-based research. First, the supervisee and supervisor need to decenter traditional ways of knowing to disconnect from previous ways of researching and understanding and instead embrace artistic knowing and the legitimacy of arts-based research. Second, the intelligence of artistic inquiry relates to the awareness of the studied topic. Third, supervisors need to balance when to trust the process and when to challenge it, which also refers to trusting and challenging the supervisee. Finally, a challenging aspect of supervising arts-based research concerns understanding and evaluating the results. From the students' perspectives, Guyas and Keys (2009) emphasized that mentorships in arts-based educational research included co-learning and the provision of theoretical protection as well as practical and conceptual guidance.

A crucial consideration concerns what knowledge of the arts student teachers and supervisors must have. Some argue that only formally trained artists can do artsbased research (e.g., Piirto, 2002), while others argue for the opposite (e.g., Barone & Eisner, 2012; Leavy, 2018). Leavy (2020) argued that one can learn the used art form if one has no formal artistic training. She maintained that there is no rigid set of skills that arts-based researchers must exhibit: "even when a project necessitates particular skill sets, we can still begin from where we are, learn as we go, and improve over time" (2018, p. 11). However, Ewing and Hughes (2008) argued that working with arts-based educational research in teacher education requires that teacher educators develop an understanding of the nature of the arts.

Student-supervisor relationships in arts-based educational research can be described to encompass different in-betweens that problematize the boundaries between the student and the supervisor (Ewing & Hughes, 2008; Fox & Geichman, 2001). What and how teachers teach—or supervisors supervise—cannot be distinguished from the developed relationship (Ewing & Hughes, 2008). Fox and Geichman (2001) posed the question of "do our graduate students really extend beyond us? What is the distance between our students' work and our own?" (p. 39). This perspective resembles new materialism, since both arts-based educational research and new materialism reject a separation between the knower and the known (Barad, 2007; Ewing & Hughes, 2008).

## Supervision as doings and becomings

New materialism aligns with an ontological turn, suggesting that being (ontology) and knowing (epistemology) cannot be separated as they are mutually constituted and entangled. Barad (2007) termed this *onto-epistemology*, arguing that knowing does not happen at a distance but with direct engagement with the world. This rejects a representationalist view that the reality exists independent of the researcher. Being and knowing are profoundly relational and entangled, and the worlds with their humans, non-humans, and entanglements are always in-becoming. New materialism also rejects other dualisms, such as theory/practice, discourse/matter, and researcher/ researched. These are instead *intra-active becomings* of the world. Barad (2007) separated the concept of intra-action from interaction, which requires the existence of independent entities. Intra-actions happen in the midst, in the in-betweens, thereby not separating subjects and objects (e.g., the student and the thesis). The focus is turned towards relations and what the relations produce. This notion also challenges the assumption of humans as active and materials as passive. Both humans and non-humans matter in knowledge-creation.

These theoretical notions are relatively new in educational sciences, albeit gaining ground in different educational levels and being used to understand learning, teaching, and supervision differently (e.g., Bayley, 2018; Lenz Taguchi, 2012b). Fullagar et al. (2017) referred to *doing* supervision and perceived supervision as relational processes of knowledge-creating. They re-thought "supervision practices as productive of a 'relational becoming' where both students and supervisors learn and unlearn, engage in knowing and importantly unknowing as an on-going process" (p. 8). Similarly, Grant (2018) discussed the notion of *becoming-supervisor*, where the supervisor is entangled

with other humans, affects, objects, practices, spaces, and forces. For Fullagar et al. (2017), supervision is a multiplicity and improvisation where academic dilemmas and possibilities are negotiated and performed anew. This study adds to this strand of research within the context of master's theses in teacher education. It addresses several research gaps by contributing knowledge from a new materialist perspective on the supervision of arts-based educational master's theses in teacher education.

#### Methodological engagements

#### Study context

To provide an understanding of the study context, we present the student teacher and the supervisor, how the supervision process was structured, and a brief account of how the master's thesis came to be.

Anna<sup>1</sup> was a student teacher in the class teacher education program at ÅAU. She had a significant interest in dance as she had been a dancer and dance teacher for many years. However, she had no formal training in dance. Anna had insight into how Sofia had worked with arts-based research and dance in literacy education since she observed a dance lesson in Sofia's doctoral research project (Jusslin, 2020). She had announced her interest in working with dance in the master's thesis to Sofia two years before the thesis process started. As Anna's supervisor, Sofia had previous experience in new materialism, arts-based research, and dance integration. She had extensive experience teaching academic writing but did not have long experience supervising theses. Further, Gunilla (author 2) was responsible for master's theses in the teacher education program and thus had extensive experience working with and supervising research-based master's theses.

Master's theses constitute a small-scale research project (30 ECTS) as part of the research-based activities at ÅAU. In the master's thesis, Anna collaborated with a dance teacher, and the thesis was part of a dance residency project.<sup>2</sup> The project had chosen arts-based educational research as the methodological approach when Anna entered the project. Notably, Anna was not familiar with arts-based educational research or relational ontologies before the thesis writing process, indicating that these perspectives were entirely new for her. Anna and the dance teacher planned and implemented lessons with digital dance-integrated teaching in Swedish and literature via Zoom in parallel with supervision discussions between Anna and Sofia. The supervision meetings were held mainly in Zoom, sometimes also face to face, and the supervision and feedback were provided orally and through email conversations or comments to Anna's manuscript drafts.

<sup>&</sup>lt;sup>1</sup> Anna gave informed consent to participated in the study and accepted the manuscript before publication.

<sup>&</sup>lt;sup>2</sup> The thesis was part of a collaborative project between Åbo Akademi University, The Regional Dance Center in Ostrobothnia, and The Ostrobothnian Children's Culture Network BARK.

## Research materials

The student–supervisor relationship was not intended to be researched initially. The study began in a speculative middle (Springgay & Truman, 2018), which meant that there was no predetermined research question when starting the supervision/thesis writing processes. The study explored in-depth a limited context by assembling a broad range of materials to provide different angles on the studied phenomenon. We "engage[d] in the ongoing process of assembling data through the intra-action (mutual constitution) of researchers, participants, material objects, and cultural discourses within particular places and times" (Ellingson & Sotirin, 2020, p. 7). The research methods were a practice of being *inside* the researched phenomenon (Springgay & Truman, 2018). Because the student–supervisor relationship was understood as more-than-human, the study considered humans and non-humans as equally important in the knowledge production (Nordstrom, 2018).

The materials were produced through the supervision/thesis writing processes. Written materials from the ten-month-long supervision/thesis writing processes included the manuscript drafts in-becoming, the email conversations providing feedback and guidance, the supervisor's comments in the manuscript drafts, and the master's thesis. During the supervision process, Sofia kept a logbook about her perspective as the supervisor. After the thesis had been examined, Sofia and Anna discussed the supervision/thesis writing processes and the arts-based educational research project in retrospect to address Anna's work with the theories and the methodology, the multi-professional collaboration, and the thesis project's relevance to Anna's teaching profession. The conversation was used to think with (Jackson & Mazzei, 2012) the processes Anna and Sofia had undergone together. Materials also included living material as embodied data (Ellingson & Sotirin, 2020), with Sofia's embodied participation and presence in the thesis process as the supervisor. The materials, together with the study context, was understood as a research-assemblage (Fox & Alldred, 2015) that included the student and the supervisor, the used research strategies, the produced materials, evaluative dialogues with Gunilla, and the broader materialdiscursive context of writing and supervising a master's thesis in teacher education. Using different materials helped us *think with* our analysis, as these materials were entangled with and produced through the supervision/writing processes. We chose these materials—and they chose us—as they were already there in the student-supervisor relationship (cf. Ellingson & Sotirin, 2020).

## Diffractive analysis

*Thinking with theory* refers to putting theories to work in empirical materials instead of concentrating on interpreting materials through reductive coding, categorization, or thematization (Jackson & Mazzei, 2012). It does not expect something to be *found* in the analysis. Instead, "it is something that is to come; something that happens, paradoxically, in a moment that has already happened; something emergent, unpredictable, and always rethinkable and redoable" (Jackson & Mazzei, 2018, p. 717). Theory and materials

constitute each other, constantly producing something new in the process of thinking and (un)making. A diffractive analysis is a specific way to think with theory (Mazzei, 2014). *Diffraction*, which is an optical and physical phenomenon, can be explained as waves that bend, spread, and change in new ways when encountering obstacles (Barad, 2007). A diffractive analysis involves reading theories and materials through each other to study how differences make a difference (Barad, 2007; Lenz Taguchi, 2012a). Our diffractive analysis explored doings in the supervision/thesis writing processes, what differences were produced, and what became the differences' effects. We discuss the doings' opportunities and challenges for teacher education in the discussion.

The analysis produced *agential cuts* that enabled investigation of doings and their differences that made a difference. The cuts separated differences in the supervision/ writing processes while simultaneously entangling the analysis onto-epistemologically with/in the studied doings. In other words, enacting agential cuts in the diffractive analysis encompassed embodied engagements with the research materials: "a becoming-with the data as researcher" (Lenz Taguchi, 2012a, p. 265). We put the theoretical concepts of doing, becoming, intra-action, and entanglement to work in the research materials to make and (un)make sense of the supervision/thesis writing processes. We moved back and forth between the different materials and theories, reading them through each other. Sofia enacted the analysis in dialogue with Gunilla; we made the cuts and were agential parts of the research materials in different ways, with Sofia as an active participant in the student–supervisor relationship and Gunilla as co-author. Three cuts were produced because they stood out in the diffractive thinking-with-theory-and-materials.

#### Analysis

The analysis produced three doings that made a difference in the supervision/thesis writing processes. These doings entangled the-student-and-the-supervisor and made them move in different directions in the supervision/thesis writing processes.

#### Thinking-together with/in theory and arts-based educational research practice

One doing encompassed a collaborative thinking-together about and beyond the arts-based educational research project. The supervision happened with/in the thesis process, the student had her goal set on a thesis product, and both revolved around an arts-based educational research practice.

Sofia clearly remembered the introduction of relational ontologies (more specifically, intra-active pedagogy) when Anna talked about how different "things" (e.g., the dancing, the Covid-19 pandemic, the dance teacher, screen recordings in Zoom, or the children) made her (re)consider and re-think parts of the planning in the arts-based educational research project. Anna and Sofia discussed how, possibly, different human and non-human bodies produced something that made a difference, making Anna twist and turn and move back and forth—sometimes even doubt—in the arts-based, practical work. This thinking-and-doing made a difference and challenged Anna to embark on an intra-active theoretical approach. For Anna, the theories felt difficult and overwhelming. It also challenged Sofia to (re)connect with her entry into intra-active thinking to support Anna in the initial meeting with previously unknown theories and concepts.

I noticed the struggle with the theory. How a humanistic language from the teacher education was deeply embedded in Anna (e.g., humans do something *to* the materials). We discussed the language use, and I offered discussions about the theories and a fast response during the writing process when she wrote about how she understood and used the intra-active pedagogy in her thesis. I told her how I had struggled with the theories. (Sofia's logbook)

The struggle produced differences in the supervision/thesis writing processes. It enabled and required Anna and Sofia to (re)read and (re)discuss theories in relation to the arts-based educational research practice and its human (e.g., the children and their class teacher) and non-human bodies (e.g., the dance studio and Zoom). Sofia placed particular emphasis on providing feedback on the theoretical section in the thesis and reminded Anna to relate the theory to her arts-based educational research practice. Anna felt that it was not enough to stay at home, merely reading the theories. In a way, that created a dis/entanglement between the theory and arts-based educational research practice for Anna.

And like maybe, I need to get to both read about it myself and hear somebody else talk about it, like I need to take part in how someone else has done it to understand. Because it did take a good while before I understood what it was really about. (Anna in retrospect conversation)

I had maybe thought, but maybe I did not have like, like more in-depth aspects, I came to think of such only after coming home [from teaching with the dance teacher] and sitting down and writing. (Anna in retrospect conversation)

This pointed to how the doing in arts-based educational research practice enabled thinking with theory, but that Anna's in-depth thinking happened in the writing process after engaging with the practice, sometimes also in connection to supervision meetings. The thinking-together that made a difference revolved around entanglements of thesis process/product/practice, with neither one separated from the other. However, the collaborative thinking-together with/in theory and arts-based educational research practice was also set in motion through Sofia's previous experiences with thinking with relational ontologies in similar arts-based contexts. This doing made a difference with Anna's thesis process/project/practice intra-acting with Sofia's previous knowledge and experience of similar research.

## Be(com)ing-teacher and be(com)ing-supervisor

Another doing encompassed personal/professional be(com)ing for Anna and Sofia. Doing a master's thesis project in an arts-based educational research practice made

a difference in Anna's be(com)ing-teacher. Anna experienced that the thesis had affected her and that she, in her first job as a teacher, inevitably thought about how her pedagogical approaches to teaching and learning were affected by what she had learned in the thesis. For example, Anna taught dance early in her new class when she started her first teaching job and considered how non-human bodies became agential in her teaching. The thesis seemed to have influenced how she reasoned and acted as a teacher in her first teaching job. Anna did not expect the thesis to influence her as a teacher, but as a newly qualified teacher, she could not dis/entangle herself from the process/product/practice. In retrospect, Anna and Sofia discussed:

| Anna:  | I think that there is, this climate that a master's thesis is something<br>you do and then never think about again. And maybe I have felt like<br>that somewhat too, but this has affected me so much that it is not<br>something that I will hide away or never think about again, like some<br>others perhaps do. Indeed, I will always remember what I have written<br>and how I went about it. |
|--------|--|
| Sofia: | So where is the relevance for the teaching profession then, or is there a relevance?   |
| Anna:  | Yes, I think so. Like it is very developing for yourself as a teacher and as a person.   |

Similarly, supervising Anna and her master's thesis made a difference for Sofia in her be(com)ing-supervisor of arts-based educational research. The supervision/thesis writing became a process of (un)learning. For Sofia, it felt like an improvisation (cf. Fullagar et al., 2017), drawing on how her supervisor had guided her into doing arts-based educational research and thinking with relational ontologies.

The professional be(com)ing became entangled with personal interests. Anna's professional role in the project intra-acted with her previous experiences from and interest in dancing and being a dance teacher for children. Arts-based educational research was new to Anna, but she enjoyed the explorative freedom the methodology gave her.

[Arts-based research] was also unfamiliar, but at the same time, I thought it was very interesting, instead of using any of the conventional [methodologies], and it felt like one was given more freedom. [...] I have to say that I liked working in that way. Because this thing again, the freedom it provides and when it is close to yourself, so I thought it was rewarding to do it. (Anna in retrospect conversation)

Nevertheless, prior to the teaching, Anna felt it was challenging to decide what to teach and how to teach in the arts-based educational research practice. Having previous experience of the methodology, Sofia was in a process of be(com)ing-supervisor when drawing on her previous personal/professional experiences when supervising Anna, trying not to steer her practical process too much, but to encourage Anna to make her own decisions. This opted Sofia to (re)experience and re-turn to her arts-based work. Still, it was challenging to verbally convey previous experiences of being bodily engaged and entangled with/in an arts-based practice. At times, they discussed

and (re)experienced the social and material realities of Sofia's arts-based teaching in her doctoral project (Jusslin, 2020), which Anna had observed several years before the master's thesis process started. Altogether, the doings of be(com)ing-teacher and be(com)ing-supervisor made a difference as the supervision/thesis writing extended beyond the master's thesis project—before and after the project.

# Be(com)ing-with-the-thesis

The third doing encompassed Anna's movement towards entangling herself with/ in the thesis text. During a supervision meeting after the practical part had ended, Anna asked Sofia about how *she* was allowed to be visible in the thesis. She knew that arts-based researchers were involved in and affected the process, but the question of "am I allowed to write 'I' in the thesis and where am I allowed to do it?" remained strong in her, drawing on previous knowledge of academic writing and conventional (quantitative and qualitative) research.

How she had begun to learn what qualitative research was and should be was firmly embedded in her. I problematized arts-based educational research and intraactive pedagogy and explained that there are different opinions about arts-based research belonging to qualitative research or if it can be counted as something of its own. I started from what she had read in Lenz Taguchi (2012b) and Østern et al. (2019) and especially Barad's (2007) critique of knowing happening at a distance. I emphasized how arts-based educational research does not need "to excuse itself" because the researcher is embodied, affective, and active WITH the research. The researcher needs to be visible in the text and the process. I asked her to trust the process and herself. (Sofia's logbook)

Sofia problematized how the self, the researcher's voice, was allowed—and encouraged and required—to be visible in text and grounded the explanations in the theories and methodologies that Anna used. This affirmative discussion became agential and made a difference for Anna, who also remembered this event from the supervision meetings.

Well, it was, I almost think it has been, it was really, really weird at first [...] Because you have never been allowed to be visible, you have always had to be a "writer" and not like "Anna." Very objective often. But now, afterward, I liked writing in that way, and I almost believe that it strengthened me as a writer because I do not feel that I am a very strong writer, that I got to bring myself into the process and the thesis. (Anna in retrospect conversation)

After this discussion, something let go in Anna, and the text became something else; something new was created. She allowed herself to be-in-the-text and to be-in-the-thesis.

The personal interest in the study and in dance made the methodology very suitable in that the arts-based researcher is very close to what is being investigated by being actively involved in all research phases, as emphasized by Østern (2017) and Kara (2020). The eagerness to move forward and reach answers to the analytical questions

fueled the study. The holistic approach where practice and theory are intertwined in arts-based research (Leavy, 2009) meant that the study was conducted through a larger perspective, and several different aspects and approaches were investigated to arrive at a result. (Anna's thesis)

After discussing the presence of the researcher's voice in the thesis, for Sofia, it seemed like Anna allowed herself to be more explorative, experimenting, and wondering in the text. She started writing herself into and acknowledging her role in the thesis. Anna stated that she experienced growing together with what she wrote. Accordingly, what made a difference was that Anna started be(com)ing-with-the-thesis, actively involving herself in the text.

#### Discussion

This study explored arts-based educational master's thesis supervision/thesis writing in teacher education by thinking with a new materialist approach. Similar to previous research on doctoral supervision (Fullagar et al., 2017; Grant, 2018), the study suggests that arts-based educational master's thesis supervision produces and is produced by doings that intra-act with different human (e.g., student, supervisor, dance teacher) and non-human bodies (e.g., dance, theories, classrooms, texts). The doings focus on the master's thesis project but extend its boundaries. The doings draw on the past in relation to previous experiences and knowledge, are fueled by current mutual interests, and affect future teaching practices.

The analysis indicates that thinking-together with/in theory and arts-based educational research practice has the opportunity to emphasize the entangled relationships between theory/practice, which holds implications for teacher education where integrating theory and practice has been proven to be somewhat difficult (Afdal & Spernes, 2018; Puustinen et al., 2018; cf. Randi & Corno, 2007). However, it also poses challenges as it seems demanding for the student on multiple levels. The relational ontologies' complexity and the movement beyond humanistic notions of education—which education has traditionally leaned upon (Bayley, 2018)—requires a re-thinking of learning, teaching, and research. The onto-epistemological approach disrupts the Cartesian view of the all-knowing subject and the dichotomization of mind and body, which has dominated Western views of knowledge for centuries (Lenz Taguchi, 2012b). Such an approach to pedagogy and research was new for the student teacher, and the supervisor and student teacher had to think-together to reach an understanding that could fuel the arts-based educational master's thesis. However, an onto-epistemological stance influences many levels of doing artsbased educational research, ranging from paradigm, ontology, and epistemology to method, researcher position, and analysis. We maintain that aspects of ontology and epistemology can be challenging for students at the master's level. For example, the student teacher felt that the theories were overwhelming. This points toward a need to support students by, for example, addressing such aspects in methodology and/

or philosophy courses in teacher education and encouraging students to relate to difficult and complex theoretical and methodological issues (Hansén et al., 2015; Niemi & Nevgi, 2014).

Discussing the theories in relation to the arts-based educational research practice becomes productive in the thinking-together in the student-supervisor relationship. The doing of be(com)ing-supervisor draws on previous experience and knowledges about arts-based educational research practices and dance-integrated teaching and matter in the student-supervisor relationship, because it can guide the student teacher in how others work within similar research endeavors. Accordingly, the analysis highlights the agential role of the supervisor when it comes to thinking-together with the student, discussing theoretical nuances, and providing practical and methodological protection and guidance. In comparison to doctoral supervision (Forinash, 2016; Fullagar et al., 2017; Grant, 2018; Guyas & Keys, 2009), the supervisor's guiding and supportive role might be even more essential in arts-based educational research at the master's level because students are often unexperienced in research and the master's thesis is often the first (and last) larger research endeavor. Therefore, Fox and Geichman's (2001) question of what the distance is between the student's and the supervisor's work is highly relevant and simultaneously poses opportunities and challenges. On the one hand, the supervisor's area of expertise become agentic in the supervision process, possibly also steering the student's work. On the other hand, supervising arts-based educational research requires an understanding of such research (cf. Ewing & Hughes, 2008). Accordingly, supervising arts-based educational research requires awareness of the influence one might have as a supervisor.

The doing of be(com)ing-supervisor produces and is produced by entanglements between humans, practices, spaces, and forces (cf. Grant, 2018), and the analysis gives rise to questions of what kind of knowledge and experience a supervisor needs to supervise an arts-based educational master's thesis using relational ontologies. Leavy (2018) stated that one can learn while being within the process, but what it means for the supervision process if the supervisor does not have such experience becomes critical. Not having experience in arts-based educational research can make it challenging to fulfill Forinash's (2016) four aspects deemed necessary in supervision. It can be challenging to trust the supervisee's process if the supervisor has not experienced a similar process. Thinking-together with theory with/in an arts-based educational research practice also requires knowledge of the used theory from the supervisor or the supervisor to be immersed with the theory together with the student. Therefore, we stress the need to be critically aware of how supervisors' experiences can affect students' theses, whereas it can also be vastly valuable in order to provide the theoretical and methodological guidance that students need.

As regards the student's be(com)ing-teacher and future teaching practices, the analysis points at multiple opportunities and challenges (see also Antonsen et al., 2020; Eklund et al., 2019; Ellis et al., 2019). Using arts-based educational research

and thinking with relational ontologies simultaneously enable and demand student teachers to think, teach, and conduct master's thesis research differently. The creative freedom that the methodology provides can simultaneously be liberating and challenging for student teachers investigating their own teaching practices, and it seems to have a relevance for the future teaching profession (see also Ewing & Hughes, 2008). The fact that the student teacher was personally involved and chose a topic she deemed relevant for her future teaching practice promoted be(com)ing-teacher and be(com)ing-with-the-thesis (Nikolov et al., 2020). Notably, the supervision process became agentic in these processes of becoming. The student could not dis/entangle herself from the knowledge learned in the master's thesis, but it seemingly affected her teaching practice as a newly qualified teacher (Lillejord & Børte, 2017). Based on the analysis, we argue for the arts-based educational master's thesis' relevance for the teaching profession, as it can promote the integration of theory and practice, foster be(com)ing-teacher and learning to teach, and prompt an analytical approach to the students' teaching and teacher role (Ewing & Hughes, 2008; Lillejord & Børte, 2017; Ulvik & Riese, 2016). Conducting arts-based educational master's theses can support students, as the topic can be meaningful for them and later brought into their future teaching practices (Afdal & Spernes, 2018; Baan et al., 2020; Everton et al., 2020).

Therefore, we recognize that arts-based educational research has implications for teacher education with its practice-led logic. When doing arts-based educational research, students need to dare to deviate from what they have learned about conventional research and become active agents themselves in their research processes (Baan et al., 2019; Nikolov et al., 2020). This pushes the student–supervisor relationship towards collaborative (un)learning (cf. Fullagar et al., 2017) and a re-thinking of how master's thesis research can be done. This can be understood as a relatively new way to conduct the master's thesis in education, thus hinting at a paradigm shift (cf. Ewing & Hughes, 2008), especially when it comes to practice-based research, where the students are actively involved in and part of the research (Dimmock, 2016; Flores, 2018; Jakhelln & Pörn, 2017).

This study has contributed knowledge of arts-based educational supervision/ thesis writing in teacher education through a new materialist perspective. This smallscale study does not claim to provide a prescriptive understanding of best practices in teacher education. More research is still needed to further the knowledge of how teacher education can support student teacher's doing arts-based educational research. Nevertheless, the study raises awareness of how doings produce opportunities and challenges that matter in supervision/thesis writing processes in teacher education. Arts-based educational supervision/thesis writing encompasses a mutual becoming for both student teacher and supervisor in teacher education; a becoming-with the investigated process/project/practice. The knowledge gained provides valuable insights that can be used to promote and develop the master's thesis within research-based teacher education.

## Acknowledgments

The residency project Dance in School was funded by KulturÖsterbotten/SÖFUK. The authors especially thank Charlotta Hilli for constructive readings of the manuscript.

## Author biographies

**Sofia Jusslin**, Ed.D., is Postdoctoral Researcher and University Lecturer in Swedish (L1) and Literature Education at Åbo Akademi University, Finland. Her research interests include literacy education, academic writing, as well as arts-based approaches to teaching literacy, literature, and language.

**Gunilla Eklund**, Ed.D., is Docent and works as Assistant Professor at the Faculty of Education and Welfare Studies at Åbo Akademi University, Finland. Her research concerns research-based teacher education and teachers' professional development.

## References

- Afdal, H.W., & Spernes, K. (2018). Designing and redesigning research-based teacher education. Teaching and Teacher Education, 74, 215–228. http://dx.doi.org/10.1016/j.tate.2018.05.011
- Antonsen, Y., Jakhelln, R. E., & Bjørndal, K. E. W. (2020). Nyutdannede grunnskolelæreres faglige fordypning og masteroppgave – relevant for skolen? [Newly qualified teachers with subject specialization and master thesis – relevant to the school?]. Nordisk tidsskrift for utdanning og praksis, 14(2), 103–121. https://doi. org/10.23865/up.v14.2209
- Baan, J., Gaikhorst, L., Noordende, J., & Volman, M. (2019). The involvement in inquiry-based working of teachers of research-intensive versus practically oriented teacher education programmes. *Teaching and Teacher Education*, 84, 74–82. https://doi.org/10.1016/j.tate.2019.05.001
- Baan, J., Gaikhorst, L., & Volman, M. (2020). Stimulating teachers' inquiring attitude in academic and professional teacher education programmes. *European Journal of Teacher Education*, 43(3), 352–367. https:// doi.org/10.1080/02619768.2019.1693994
- Barad, K. (2007). Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Duke University Press.
- Barone, T. (2006). Arts-based educational research then, now, and later. *Studies in Art Education*, 48(1), 4–8. https://doi.org/10.1080/00393541.2006.11650495
- Barone, T., & Eisner, E. (2012). Arts based research. Sage.
- Bayley, A. (2018). Posthuman pedagogies in practice: Arts based approaches for developing participatory futures. Palgrave Macmillan. https://doi.org/10.1007/978-3319-70978-9
- de Kleijn, R. A. M., Bronkhorst, L. H., Meijer, P. C., Pilot, A., & Brekelmans, M. (2016). Understanding the up, back, and forward-component in master's thesis supervision with adaptivity. *Studies in Higher Education*, 41(8), 1463–1479. https://doi.org/10.1080/03075079.2014.980399
- Dimmock, C. (2016). Conceptualising the research-practice-professional development nexus: Mobilising schools as 'research engaged' professional development learning Communities. *Professional Development in Education*, 42(1), 36–53. https://doi.org/10.1080/19415257.2014.963884
- Eklund, G., Aspfors, J., & Hansén, S-E. (2019). Master's thesis a tool for professional development? Teachers' experiences of master's theses in Finnish teacher education. *Nordic Journal of Education and Practice*, *13*(2), 76–92. https://doi.org/10.23865/up.v13.1973
- Ellingson, L. L., & Sotirin, P. (2020). Making data in qualitative research: Engagements, ethics, and entanglements. Routledge.
- Ellis, V., Souto-Manning, M., & Turvey, K. (2019). Innovation in teacher education: Towards a critical re-examination. *Journal of Education for Teaching*, 45(1), 2–14. https://doi.org/10.1080/02607476.2019. 1550602

- Everton, T., Galton, M., & Pell. T. (2000). Teachers' perspectives on educational research: Knowledge and context. *Journal of Education for Teaching*, 26(2), 167–182. https://doi.org/10.1080/0260747005012708
- Ewing, R., & Hughes, J. (2008). Arts-informed inquiry in teacher education: Contesting the myths. European Educational Research Journal, 7(4), 512–522. https://doi.org/10.2304/eerj.2008.7.4.512
- Flores, M. A. (2018). Linking teaching and research in initial teacher education: Knowledge mobilisation and research-informed practice. *Journal of Education for Teaching*, 44(5), 621–636. https://doi.org/10.1080/026 07476.2018.1516351
- Forinash, M. (2016). On supervising arts-based research. Music Therapy Perspectives, 34(1), 41–45. https://doi. org/10.1093/mtp/miv048
- Fox, N. J., & Alldred, P. (2015). New materialist social inquiry: Designs, methods and the research-assemblage. International Journal of Social Research Methodology, 18(4), 399–414. https://doi.org/10.1080/13645579. 2014.921458
- Fox, G. T., & Geichman, J. (2001). Creating research questions from strategies and perspectives of contemporary art. *Curriculum Inquiry*, 31(1), 33–49. https://doi.org/10.1111/0362-6784.00181
- Fullagar, S., Pavlidis, A., Stadler, R. (2017). Critical moments of (un)doing doctoral supervision: Collaborative writing as rhizomatic practice. *Knowledge Cultures*, 5(4), 23–41. https://doi.org/10.22381/KC5420173
- Grant, B. M. (2018). Assembling ourselves differently? Contesting the dominant imaginary of doctoral supervision. Parallax, 24(3), 356–370. https://doi.org/10.1080/13534645.2018.1496584
- Guyas, A. S., & Keys, K. (2009). Arts-based educational research as a site for emerging pedagogy and developing mentorship. *Visual Arts Research*, 35(2), 24–39. https://doi.org/10.2307/20715500
- Hansén, S.-E., Eklund, G., & Sjöberg, J. (2015). General didactics in Finnish teacher education the case of class teacher education at Åbo Akademi University. Nordisk Tidskrift för Allmän Didaktik, 1(1), 7–20.
- Harwood, N., & Petrić, B. (2020). Adaptive master's dissertation supervision: A longitudinal case study. *Teaching in Higher Education*, 25(1), 68–83. https://doi.org/10.1080/13562517.2018.1541881
- Jackson, A. Y., & Mazzei, L. A. (2012). Thinking with theory in qualitative research: Viewing data across multiple perspectives. Routledge.
- Jackson, A. Y., & Mazzei, L. A. (2018). Thinking with theory. A new analytic for qualitative inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (5th ed., pp. 717–737). Sage.
- Jakhelln, R. E., & Pörn, M. (2018). Challenges in supporting and assessing bachelor's theses based on action research in initial teacher education. *Educational Action Research*, 27(5), 726–741. https://doi.org/10.1080/ 09650792.2018.1491411
- Jusslin, S. (2020). Dancing/reading/writing: Performative potentials of intra-active teaching pedagogies expanding literacy education [Doctoral dissertation]. Åbo Akademi University.
- Jusslin, S., & Østern, T. P. (2020). Entanglements of teachers, artists, and researchers in pedagogical environments: A new materialist and arts-based approach to an educational design research team. *International Journal of Education & the Arts*, 21(26), 1–28. https://doi.org/10.26209/IJEA21N26
- Kara, H. (2020). Creative research methods in the social sciences: A practical guide (2nd ed.). Bristol University Press.
- Leavy, P. (2009). Method meets art: Arts-based research practice. Guilford Press.
- Leavy, P. (Ed.). (2018). Handbook of arts-based research. Guilford Press.
- Leavy, P. (2020). Method meets art: Arts-based research practice (3rd ed.). Guilford Press.
- Lenz Taguchi, H. (2012a). A diffractive and Deleuzian approach to analysing interview data. *Feminist Theory*, 13(3), 265–281. https://doi.org/10.1177/1464700112456001
- Lenz Taguchi, H. (2012b). Pedagogisk dokumentation som aktiv agent. Introduktion till intra-aktiv pedagogik [Pedagogical documentation as active agent. Introduction to intra-active pedagogy]. Gleerups.
- Lillejord, S., & Børte, K. (2017). Lærerutdanning som profesjonsutdanning-forutsetninger og prinsipper fra forskning. Et kunnskapsgrunnlag. [Teacher education as professional education – conditions and principles from research. A knowledge basis]. Kunnskapssenter for utdanning. https://www.forskningsradet.no/om-forskningsradet/ publikasjoner/2016/larerutdanning-som-profesjonsutdanning/
- Marnewick, A. L. (2020). A supervision approach to facilitate learning during the master's research journey. *Teaching in Higher Education*. Advance online publication. https://doi.org/10.1080/13562517.2020.1811223
- Mazzei, L. A. (2014). Beyond an easy sense: A diffractive analysis. *Qualitative Inquiry*, 20(6), 742–746. https:// doi.org/10.1177/1077800414530257
- Niemi, H., & Nevgi, A. (2014). Research studies and active learning promoting professional competences in Finnish teacher education. *Teaching and Teacher Education*, 43, 131–142. https://doi.org/10.1016/j. tate.2014.07.006

- Nikolov, F., Saunders, C., & Schaumburg, H. (2020). Preservice teachers on their way to becoming reflective practitioners: The relevance of freedom of choice in research-based learning. *International Perspectives 3*(2), 46–54. https://doi.org/10.18833/spur/3/4/6
- Nordstrom, S. N. (2018). Antimethodology: Postqualitative generative conventions. *Qualitative Inquiry*, 24(3), 215–226. https://doi.org/10.1177/1077800417704469
- Østern, T. P. (2017). Å forske med kunsten som metodologisk praksis med aesthesis som mandat [Doing research with the arts as methodological practice with aesthesis as mandate]. Journal for Research in Arts and Sports Education, 1(5), 7–27. https://doi.org/10.23865/jased.v1.982
- Østern, T. P., Dahl, T., Strømme, A., Petersen, J. A., Østern, A.-L., & Selander, S. (Eds.). (2019). Dybde// leering – en flerfaglig, relasjonell og skapende tilnærming [Deep education – a cross-curricular, relational, and artful approach]. Universitetsforlaget.
- Piirto, J. (2002). The question of quality and qualifications: Writing inferior poems as qualitative research. International Journal of Qualitative Studies in Education, 15(4), 431–445. https://doi.org/10.1080/095183902101 45507
- Puustinen, M., Säntti, J., Koski, A., & Tammi, T. (2018). Teaching: A practical or research-based profession? Teacher candidates' approaches to research-based teacher education. *Teaching and Teacher Education*, 74, 170–179. https://doi.org/10.1016/J.TATE.2018.05.004
- Randi, J., & Corno, L. (2007). Theory into practice: A matter of transfer. Theory Into Practice, 46(4), 334–342. https://doi.org/10.1080/00405840701593923
- Rosiek, J. (2018). Art, agency, and ethics in research. How the new materialism will require and transform arts-based research. In P. Leavy (Ed.), *Handbook of arts-based research* (pp. 632–648). The Guilford Press.
- Sinner, A., Leggo, C., Irwin, R. L., & Grauer, K. (2006). Arts-based educational research dissertations: Reviewing the practices of new scholars. *Canadian Journal of Education*, 29(4), 1223–1270.
- Sitomaniemi-San, J. (2021). Fabricating the teacher as researcher. A genealogy of academic teacher education in Finland [Doctoral thesis, University of Oulu]. http://jultika.oulu.fi/files/isbn9789526209937.pdf
- Springgay, S., & Truman, S. E. (2018). On the need for methods beyond proceduralism: Speculative middles, (in)tensions, and response-ability in research. *Qualitative Inquiry*, 24(3), 203–214. https://doi. org/10.1177/1077800417704464
- Ulvik, M., & Riese, H. (2016). Action research in pre-service teacher education a never-ending story promoting professional development. *Professional Development in Education*, 42(3), 441–457. https://doi.org/10.1080/19 415257.2014.1003089