JYX
JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Skytterstad, Remi; Antonsen, Yngve; Aspfors, Jessica; Heikkinen, Hannu, L.T.

Title: Reframing new teacher induction : Opportunities over deficiencies

Year: 2025

Version: Published version

Copyright: © 2024 The Authors. Published by Elsevier Ltd.

Rights: CC BY 4.0

Rights url: https://creativecommons.org/licenses/by/4.0/

Please cite the original version:

Skytterstad, R., Antonsen, Y., Aspfors, J., & Heikkinen, H. (2025). Reframing new teacher induction : Opportunities over deficiencies. Teaching and Teacher Education, 155, Article 104910. https://doi.org/10.1016/j.tate.2024.104910

The University of Jyväskylä's Rights Retention Strategy (RRS) enables accepted versions (final drafts) to be made openly available through self-archiving. For more information, see: https://www.jyu.fi/en/rrs

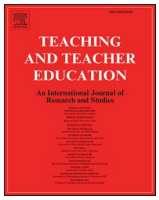
Teaching and Teacher Education 155 (2025) 104910



Contents lists available at ScienceDirect

Teaching and Teacher Education

journal homepage: www.elsevier.com/locate/tate



Research paper



Reframing new teacher induction: Opportunities over deficiencies

Remi Skytterstad [a,*], Yngve Antonsen [a], Jessica Aspfors [b,c], Hannu L.T. Heikkinen [d]

[a] UiT, The Arctic University of Norway, Norway
[b] Nord Universitet, Norway
[c] Åbo Akademi University, Finland
[d] University of Jyväskylä, Finland

ARTICLE INFO

Keywords:
New teachers
Induction
Non-deficit
Subjectification
Natality
Theory of practice architectures

ABSTRACT

Utilising qualitative interviews and the theory of practice architectures, the study identifies how current induction practices, often shaped by deficit views, can undervalue new teachers by highlighting their perceived inadequacies. Contrastingly, embracing an *opportunity perspective* recognises and builds on new teachers' existing strengths and capabilities. This shift not only aids in teacher subjectification, but also positions them as co-producers of educational practices. The results suggest that reimagining new teacher induction to emphasise opportunities rather than deficiencies can better its practices and improve the attractiveness and reputation of the teaching profession.

1. Introduction

Almost 60 years ago, Lortie (1966, pp. 54–66) compared new teachers to Robinson Crusoe, a man famous for being the sole survivor of a shipwreck and then stranded on a deserted island. A couple of years later, Veenman (1984) popularised the concept of "reality shock", a concept defined to indicate "the collapse of the missionary ideals formed during teacher training by the harsh and rude reality of everyday classroom life" (Veenman, 1984, p. 143). Since Lortie and Veenman, others have followed suit, with terms such as "practice shock" (Stokking et al., 2003), "sink or swim" (Howe, 2006), or "lost at sea" (Flores & Day, 2006). Amidst this, numerous studies have explored the imperative of providing support and a sustainable transition for new teachers in their induction (Colognesi et al., 2020; Frederiksen, 2020, pp. 49–70; Ingersoll & Strong, 2011; Thomas et al., 2019), especially considering their substantial attrition rates, governmental directives for teacher quality, and the intricate and diverse nature of today's ever-evolving classrooms and school environments. "Induction" is perceived as encompassing four broad categories of meanings for new teachers: a learning process, a distinctive teaching phase, a specific timeframe, and an organised system of support, often through mentoring (Britton et al., 2003, p. 3). Here research underscores the vulnerability of new teachers as they embark on their teaching careers since they must acclimate to a new school culture, routines, their students, and the subjects they teach (Boshuizen et al., 2004; Kelchtermans & Ballet, 2002). Additionally, new teachers need to gain support and experience in addressing tasks beyond the classroom, such as fostering collaboration among parents and colleagues and offering comprehensive support to their students (Harju & Niemi, 2020). Further, Schaefer et al. (2012) suggest a shift from merely *retaining* to actively *sustaining* new teachers, which aligns with Graham et al. (2020) findings that new teachers do not show greater evidence of lower teaching quality than more seasoned ones.

Over the years, studies have documented the favourable outcomes of formal induction and mentoring programs on teachers' dedication, retention, classroom instruction, and student performance (Ingersoll & Strong, 2011). In the context of mentoring new teachers, a mentor's efforts to nurture expertise usually centres on the mentee's capacity to facilitate learning (Hobson et al., 2009). Effective mentoring requires formally educated mentors, and if there is a lack of structured mentor education, it might have deleterious implications for both mentors and new teachers' professional development (Ulvik & Sunde, 2013; Wang et al., 2008). As a field, mentoring is contested with a variety of terms and models being employed and discussed (Kemmis et al., 2014). Nevertheless, it is crucial to acknowledge that mentoring, like teaching, serve various broader purposes, and more specific actionable objectives. These can involve diverse practices and strategies, occurring at different stages of a mentee's professional development and over varying durations (Hobson et al., 2009). Even though there is a growing shift in the conceptualisations of mentoring, Larsen et al. (2023) found that it can function as a learning partnership and be an arena for mutual learning

* Corresponding author. UiT, The Arctic University of Norway, Post Box 6050 Langnes, 9037 Tromsø, Norway.
E-mail address: rpe039@uit.no (R. Skytterstad).

https://doi.org/10.1016/j.tate.2024.104910
Received 22 May 2024; Received in revised form 15 November 2024; Accepted 13 December 2024
Available online 1 January 2025
0742-051X/© 2024 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

for both mentee and mentor.

More recently, several studies have also raised questions about whether relying solely on formal mentoring is adequate for the induction of new teachers. These studies have specifically explored how new teachers seek and utilize informal support from colleagues during their initial years of service (Harju & Niemi, 2020; Heikkinen et al., 2012b; Helleve & Ulvik, 2011; März & Kelchtermans, 2020). Most new teachers proactively seek out support and collaboration during the induction phase by establishing networks, and the availability of high-quality collegial cooperation is critical. This cooperation encompasses not only professional assistance but also emotional and social support, all of which significantly impact their job satisfaction and motivation to teach (März & Kelchtermans, 2020; Thomas et al., 2019).

As much of research above reveals, Kelchtermans (2019) argues that four key themes have shaped both research and policy concerning the induction of new teachers: overcoming the "practice shock", the socialisation process, the issue of teacher attrition and retention, and mentoring as the best way to support new teachers. However, these four broad categories of the induction of new teachers are often connected to an idea of "deficit, of lacking, of 'not being there yet'" (Kelchtermans, 2019, p. 87). A deficit perspective centres on new teachers' lack of essential knowledge, skills, or competencies for success in the teaching profession, and that these deficits must be fixed through different remedial strategies. As such, a deficit perspective emphasises what new teachers' weaknesses are, rather than what they already possess and excel at. Potential deleterious consequences of deficit perspectives are that in the attention aimed at helping and supporting new teachers, they inadvertently cement new teachers as lacking and position them as "passive and dependent" (Kelchtermans, 2019). However, as both Kelchtermans (2019) and Kvam et al. (2023) remind us, the remedial perspective is not meaningless, and one cannot overlook the very real challenges that new teachers face. Therefore, it is necessary to note that the support needs outlined in the literature above, do not solely come from individual shortcomings in new teachers. They often stem from broader, structural issues within the work community that require collective action. Nevertheless, there is often an implicit idea that the actions required from the work community stems from individual shortcomings of new teachers. Induction practices must therefore involve not just remediation of new teachers, but also open space to create collaborative and inclusive practices (Harju & Niemi, 2020; März & Kelchtermans, 2020). In this sense, the focus is not merely a reaction to individual deficits but an understanding that the work community plays a key role in shaping new teachers' early experiences and professional development and learning.

This paper's understanding of professional development and learning draws on the work of Salo et al. (2024) and their concept of *learning in and for professional practice*. This perspective moves beyond individualistic, decontextualised, and outcome-driven deficit views by adopting a broader conception of professional development as a collaborative, contextually grounded process. Accordingly, professional development is seen as a continuous, site-based practice informed and shaped by local conditions and the unique characteristics of the educational setting. It revolves around participation and engagement, relying on interaction, dialogue, and collaboration among teachers.

The concept of deficit perspectives is underutilised in research concerning new teachers, particularly from an empirical angle, but there are some notable exceptions, although not all explicitly naming it so (Kelchtermans, 2019; Kvam et al., 2023; Niyubahwe et al., 2013; Ulvik & Langørgen, 2012). This article addresses this gap by examining practices that may create or perpetuate deficit views on new teachers and discusses ways of moving beyond them towards non-deficit *opportunity perspectives* on teacher induction. As explored in the context of new teachers' professional knowledge development by Annie Malo (2006, 2008, pp. 103–124), a non-deficit approach requires positioning new teachers not as deficient compared to their more seasoned colleagues, but as developed practitioners with their own unique repertoire of knowledge and experience. Aligned with Salo et al. (2024), rather than framing new teachers' learning as a process of overcoming deficiencies, Malo (2008, pp. 103–124) promotes practices that recognises and values the agency and competence of new teachers, focusing on how they mobilise and transform their existing repertoires in response to any challenges they might face, rather than simply filling gaps compared to more seasoned teachers, or merely adhering to established norms. Therefore, for Malo, a non-deficit approach is the understanding that learning is a dynamic, context-dependent process, where new teachers' own perspectives and reflective practices are central to their professional development.

To elaborate further on the idea of non-deficit approaches (Malo, 2006, 2008, pp. 103–124), we introduce an *opportunity perspective*, by applying Biesta's (2021) concept of subjectification, based on Arendt's (2013) idea of natality. Utilising qualitative interviews with school employees, we use the theory of practice architectures (Kemmis, 2022; Kemmis & Grootenboer, 2008). This framework allows us to investigate how deficit and opportunity perspectives might manifest themselves in the induction of new teachers, assess potential effects, and discuss ways of moving beyond deficit-oriented remedial induction practices by recognising and capitalising on the unique strengths of new teachers. As such, this article aims to describe what arrangements, or practice architectures, might prefigure induction practices. Here, the primary challenge is not merely describing the induction practices, but rather providing knowledge to change them to open space for the subjectification of new teachers through promoting opportunity perspectives.

While this article takes a certain position—of moving beyond deficit perspectives—this is not an attempt to devalue previous research, nor undermine current successful approaches to teacher induction. Therefore, we take a position which might not reflect reality precisely, but which provides us with a focused lens and theoretical foundation aimed at enriching the discourse of teacher induction.

The subsequent sections introduce our theoretical framework, followed by our research questions and the methods applied in this article. Next, we present and discuss results. Lastly, we outline the future implications for the induction of new teachers.

2. Theoretical framework

2.1. The theory of practice architectures

To change practices, such as induction, we must understand what keeps them the way they are. For this purpose, to reveal the *arrangements* which prefigure social practices, we apply the *theory of practice architectures* (TPA)(Kemmis, 2022).

Practices can briefly be described as people's habitual ways of acting in a social and material context. A school is a good example of a social practice: it is a social site in which pupils, teachers, principals, and other staff act in a particular physical and material environment. Building upon Schatzki's (2002, 2010) work, TPA offers an ontological perspective of practice, where the practices are inseparable from their sites and are shaped by existing or introduced arrangements. Thus, TPA postulates that what an individual can do (engage in practices) on a given social site is shaped by a wide variety of things, including specific discourses, the resources or materials available, and social and political

relationships (Kemmis et al., 2014). In other words, the TPA is a theoretical tool that allows us to identify the conditions of possibility (Kemmis, 2022) in educational settings.

While we examine induction practices and the social arrangements that prefigure them, it is crucial to remember that these arrangements do not predetermine practices. Individuals have agency to choose differently from what the social arrangements direct or persuade them to do. Just as a walker is persuaded to follow the footpath through the forest, social arrangements persuade an individual to act in a certain way in a particular social situation. However, individuals can also choose a different route through the forest—or practice—stepping off the path to exercise their agency.

TPA is grounded on three interrelated arrangements—the cultural-discursive, material-economic, and social-political—that are found or brought to a site of practice. The cultural-discursive arrangement refers to the language and discourses (the sayings) that will prefigure both how and what is possible to talk about and understand, for example, how new teachers are positioned through terms like "novice teacher", "beginning teacher", or "newly qualified teacher". The material-economic arrangement involves the physical and economic properties that enable or constrain a practice, but also the organisation of "physical space-time", which prefigure the different things people can do (the doings), for example, by limiting the teaching load of new teachers, and how they might be "supervised" or "supported" (Kemmis et al., 2014) through remedial induction schemes. Finally, the social-political arrangement refers to the relationships, the power dynamics, and the social "structures" that prefigure how people relate to each other in a practice (the relatings). For example, if a new teacher's perceived deficiencies as highlighted, then they might be compelled to conform to the school's way of doing things, or their "practice traditions" (Mahon et al., 2017, p. 12).

Through the lens of TPA, we can understand how new teachers navigate the roles ascribed to them. This includes how the weight of their perceived deficiencies or competencies might position new teachers, while also revealing how specific *sayings, doings,* and *relatings* prefigure the ability to challenge or perpetuate such perceptions.

2.2. Natality and subjectification as the basis for the opportunity perspective

This article introduces an opportunity perspective on teacher induction, inspired especially by Gert Biesta's concept of subjectification. For Biesta (e.g., 2021), education always has three intertwined goals, which he calls qualification, socialisation, and subjectification.

Qualification is not just about formal diplomas or other kinds of certificates, but the actual ability to act as a teacher and the competences required to do so, whereas *socialisation* is the process through which education enables individuals to interact with others and understand essential social behaviours. The induction phase is always very much about socialisation: joining a profession is a process through which the relevant social norms and practices are adopted. Finally, *subjectification* refers to the ways in which an individual constructs their own personality and how education does or does not contribute to it. Subjectification can thus briefly be described as the constitution of one's agency. This paper argues that subjectification in the early stages of a teacher's career has received less attention than qualification and socialisation.

Biesta's concept of subjectification is rooted in Arendt's (2013) notion of natality. Arendt takes the idea of mortality, considered by many philosophers to be the most interesting dimension of life, as the starting point for the development of natality. Even more interesting, Arendt argues, is the fact that we are born into this world, and as human beings we are, metaphorically speaking, both compelled and blessed to be born again through continuous learning and development. Unlike most animal species, which are already at birth much more prepared for the world and better equipped than humans to deal with the issues they face in their living conditions, humans are born in a state of vulnerability and dependence. Natality (Arendt, 2013) refers to a person's capacity to be born and bring something entirely new into the world through their actions. Through birth, individuals strengthen their unique identity and participate in the ongoing evolution of the human world.

Therefore, humans are constant beginners: we have no option but to start over again and again, and it is precisely natality that gives meaning and significance to human existence. It is natality that represents the potential for individuals to exercise freedom and creativity by engaging in spontaneous acts of initiative, such as political action, innovation, and the creation of meaningful relationships and institutions. Natality emphasises the unique potential of each individual to bring those perspectives, ideas, and actions to public life which diverge from pre-established paths and narratives. However, Biesta (2021) makes a distinction from essentialism, stressing that subjectification is not about achieving an identity, or "finding myself", but is a constant necessity of becoming "an I", or "a self". It is never a permanent state, but a temporary flow of natality.

Biesta's (2021) three functions of education, when integrated with TPA, provide a framework to identify often-overlooked aspects of teacher induction. This combination enables us to reconceptualise induction practices—not only as remedial interventions addressing perceived deficiencies, but as opportunities to recognize and develop new teachers' potential for new beginnings. In doing so, we hope to unravel and address the enabling or constraining practices that shape these functions—especially the subjectification of new teachers—creating space for transformative change.

An opportunity perspective of new teachers complements Malo's (2006, 2008, pp. 103–124) conception of a non-deficit approach, by reinforcing the idea that new teacher induction should focus on the active role of new teachers in their professional development, rather than addressing perceived deficiencies. Like Biesta's (2021) concept of subjectification, Malo's non-deficit perspective views new teachers as practitioners who actively construct and transform their professional knowledge through reflective engagement with their practice. This aligns with the idea of natality, where each challenge in the induction process is considered an opportunity for new beginnings, allowing new teachers to adapt and refine their existing knowledge and skills.

If successful, new teachers with an "I" will move beyond merely being integrated into existing frameworks—or be products of practice—and become active co-producers of practice. Here, subjectification refers to the fact that each new (or seasoned) teacher has their own way, deeply personal and human, of doing the job of a teacher, which, at its best, can be realised and experienced as art (Biesta, 2023; Eisner, 2002).

3. Research question

Against this background, our article aims to examine the manifestation and potential impacts of deficit perspectives on the induction practices of new teachers. More precisely, we seek to unravel the implications of viewing new teachers through a lens that emphasises deficiencies rather than strengths, and how such perspectives might prefigure their subjectification and professional development. Further, we discuss ways of moving beyond deficit-oriented remedial induction practices and highlight the importance of recognising and capitalising on the unique strengths and the opportunity of new teachers. Our research question is as follows.

How are practices of teacher induction prefigured by practice

architectures, characterised by deficit or opportunity perspectives?

4. Methodology and methods

4.1. The Norwegian context

Since 2022, all new primary and secondary school teachers in Norway have been required to graduate with a five-year master's degree that includes specialisation in three to four subjects. Additionally, their education equips them with theories of science and research methodologies to evaluate and use research to improve their teaching practices and their schools (Jakhelln et al., 2019). Furthermore, since 2018, all schools are committed to a national framework for the formalised mentoring of new teachers (Kunnskapsdepartementet, 2018). Importantly, the mentoring of new teachers should "include, recognize, and utilize the newly graduated as a resource and contributor in the professional community" (Kunnskapsdepartementet, 2018).

Most schools in Norway are public schools and locally governed by the municipalities as the "school owners." However, variations in local implementation—for example of the national framework—may influence the induction of new teachers and the perspectives we explore. For example, some schools rely on mentors provided by the municipality, whereas other schools have on-site mentors (Jacobsen et al., 2023). These structural differences can influence the nature of induction new teachers receive. As this text argues, the discourse on support needs can be viewed from both a remedial and an opportunity perspective. New teachers might have individual support needs for professional development, but at the same time be valued as contributors to the professional community. This dual role, as explored by Kvam et al. (2023) in the Norwegian context, might complicate the view of induction as purely remedial, or purely as realizing opportunities.

Together these factors make the Norwegian context compelling for our study as the national dedication surpasses that of many comparable countries in formalising education and mentorship for new teachers. Shedding light on how deficit and opportunity perspectives might manifest themselves within this context holds particular interest for research on new teacher induction.

4.2. Interview study

The article's empirical data are based on semi-structured interviews (Kvale & Brinkmann, 2015) of school owners, principals, school colleagues, mentors, and new teachers. All the new teachers have the new Norwegian five-year master's education and graduated in 2022, except for the new teachers from the RELEMAST study who graduated with a piloted master from three cohorts in 2015–2017, while the other school employees differ in education and years spent working in their respective schools. All the participants in both studies provided their written consent to take part. They work in municipalities spread across Norway, and the schools within them vary in size, from smaller rural institutions with few pupils to larger urban schools consisting of several hundred pupils. This way we have ensured a diverse dataset with a range of experiences.

4.2.1. STEP study

STEP is a collaborative project (Partnership for Sustainable Transition from Teacher Education to the Profession) between researchers and relevant stakeholders. All the interviews were conducted on a one-to-one or two-to-one (two researchers) basis, except for the interviews of school owners and teacher colleagues, which were group interviews. The empirical data from STEP includes eight municipal officials in a total of four interviews, nine principals, five mentors, eighteen teacher colleagues in a total of eight interviews, and eight new teachers, all from eight different municipalities in Norway. The municipalities were selected in partnership with the Norwegian Association of Local and Regional Authorities, serving as exemplars with formalised mentoring programmes. We used open-ended semi-structured interview guides for all the different groups (Kvale & Brinkmann, 2015), and while the questions differed somewhat considering whether they were aimed at a new teacher or a principal, the themes were the same. The interview guide was created and conducted in cooperation with the different researchers and stakeholders that are part of the STEP-project. The themes of the interviews were individual and structural frameworks, collaboration, interaction and mutual learning, mentoring of new teachers, and autonomy. While the interviewees were given the themes beforehand, they were not aware of the questions in detail.

4.2.2. RELEMAST study

As it became clear that using only eight new teachers from the STEP study did not include a wide enough range of experiences, this led us to include data from the RELEMAST study (Relevant Master's Degree for Primary School Teachers). Considering we wanted the new teachers' stories of success, the data we included were the 17 teachers who had already been thematically analysed and characterised by practices of mutual exchange, shared responsibility, and open dialogue after one year in service (Antonsen et al., 2023). Using a sample of new teachers from such practices allowed us to focus on the new teachers themselves and the opportunity arrangements that emerged. These self-selected informants participated in response to a written invitation with a comprehensive study description, as we invited teachers' students from three cohorts after completing their master thesis. An open-ended semi structured guide free from theoretical influence was developed to explore new teachers' challenges, opportunities, motivation, self-assessed competence and collaboration with students, parents, colleagues, and school management. In RELEMAST, four of these seventeen new teachers had formalised mentoring, while the others did not.

4.3. Analysis

Our purpose has not been to give a comprehensive picture of how the practices are within the municipalities, but rather to analyse the empirical data to exemplify how and where deficit perspectives or opportunity perspectives might appear or be perpetuated in practice. To do this, we have applied a deductive thematic analysis (Fereday & Muir-Cochrane, 2006), which is a hybrid approach to Braun and Clarke's (2006) thematic analysis, that has been widely used in combination with TPA (Grootenboer & Edwards-Groves, 2024, pp. 71–72). Together, this allowed for an analysis with a predetermined organising framework to code and analyse the data, based on the three dimensions of TP and the deficit and opportunity perspective. Consequently, most of the analysis has been theoretically "top down" (Braun & Clarke, 2006), which provides a more detailed analysis of some *aspect* of the data that has been of interest to our specific research question. Additionally, both the coding and the analysis have been at the "latent" level (Braun & Clarke, 2006, p. 13), where we have identified and examined the underlying "ideas, assumptions, and conceptualizations" that shape or inform the data material.

Therefore, we do not claim that deficit perspectives or opportunity perspectives dominate the views of new teachers in Norway; rather, they represent influential parts of the broader discourse that contribute to the conceptualization of new teachers. These perspectives, alongside more positive themes identified in the data such as supportive environments and mentorship, shape and sustain this discourse. Consequently, our methodology is aligned with our research question.

Based on the above, our coding schemes were informed by our theoretical framework, and the coding and analysis process, led by the

first author, unfolded as follows.

1 **Initial Reading:** The STEP interviews were read openly without coding to gather first impressions, but with some notes taken for future coding. The initial readings indicated that even when specifically asked about strengths of new teachers, the interviewees quickly slipped into a deficit discourse.
2 **Initial Coding:** The top-down coding began with STEP interviews from school owners, principals, mentors, colleagues, and new teachers. Excerpts were classified into *sayings, doings,* and *relatings*, highlighting practice arrangements that were interpreted as stemming from, creating, or perpetuating the deficit perspectives of new teachers, for example, *sayings* that frame new teachers as lacking, *doings* that hinder them from enacting their pedagogical identity, or *relatings* that prioritise seniority over new ideas.
3 **Theme Development:** This stage involved reviewing, defining, and naming the themes, with co-authors contributing to their validation and relevance. Through an iterative process, the material was recoded to identify three prevalent themes: "New Teachers as Survivors", Undervaluing Qualifications", and "Conditional Induction". These themes were interpreted as creating or perpetuating deficit perspectives of new teachers. These themes emerged consistently across the interviews with various stakeholders. Their prevalence was not only about frequency, but also about the depth and significance of the ideas they represented, or what is referred to as "latent ideas, assumptions, and conceptualizations". Other themes that could be related to the deficit perspectives also emerged from the analysis, but not as frequently, and not as prevalent across the different stakeholders, so they were excluded from the rest of the analysis.
4 **Coding of RELEMAST Data:** Interviews from RELEMAST teachers were coded into *sayings, doings,* and *relatings*, focusing on practice architectures that were associated to the opportunity perspective. It then followed similar steps (1, 2, and 3) as the analysis of the STEP study. Here, themes of "Strong Teacher Identity", "Creative Approaches", and "Qualifications and Relations as a Catalyst for Subjectification" emerged through the interviews of the new teachers themselves. The reason the RELEMAST Study is in phase four, is because it was a later idea to include it.
5 **Writing out the Results:** Initially, the results were detailed to enhance the analysis. At a later point, they were written more concisely, and select interview excerpts were used to illustrate the themes. When, we in the end, summarise the *sayings, doings,* and *relatings* of the identified deficit or opportunity practice architectures, it is worth noting that we abstract these practices into theoretical categories, derived from the empirical data. Recognising the intertwined nature of TPA's arrangements, the results section will not attempt to separate these elements before we summarise, but rather show their mutuality, akin to how separating the colours of the rainbow allows you to gain nuances of the colours themselves yet lose the rainbow. Therefore, unlike the tendency to present results from a TPA informed analysis by sectioning it into its three arrangements, we present the themes that emerged from the TPA informed analysis. Further, the abbreviations of the school employees are as follows in the results section: School owners = SO (officials responsible for schools in the municipalities); Principals = P; Mentors = M; Teacher Colleagues = TC; New Teachers (from STEP) = NT; New Teachers (from RELEMAST) = NTR.

5. Results

We first present the results about the prevalent practice architectures characterised by deficit perspectives before the practice architectures characterised by opportunity perspectives.

5.1. Deficit perspective practice architectures

5.1.1. New teachers as "survivors"

The notion of "surviving" the induction period emerged as a significant theme, exemplified in quotes such as "So, it's like the whole package then, and how to *survive*[1]," (P7) with phrases such as "practice shock", "keeping your head above water", and "burn out" being common. Among the principals and teacher colleagues there was also a subtle focus on "taking care" of new teachers instead of leveraging their abilities. While some new teachers internalised this "surviving" perception of their induction, other resisted it:

> I provided feedback on the [municipalities'] induction courses that what frustrated me at the beginning was the initial focus on how difficult it is to be newly educated and that one must endure. There was no focus on the strengths we bring. As a newly educated teacher, you are reduced to being a slightly worse teacher than the others: "but you will probably be good eventually", instead of recognising that you have different strengths. There's so much self-pity and how hard it is to be a teacher. But after a while it improved, and there was more focus on competence development … (NT11).

Further, within this theme new teachers are encouraged to abandon or put on wait their pedagogical principals in an effort to survive, or acknowledge that they cannot be the teachers they envisioned: "There's an expectation that they should create teaching plans and spend a lot of time on such things, and then they actually notice that they really don't have time for it if they are to *keep their head above water*" (TC4), or "I've seen it in far too many, that they *burn out* from autumn to Christmas, because they have so many plans, they have learned so much fun stuff, and they want to bring it to life, but that's not exactly the time for it" (M5).

A consequence of this theme might be that new teachers are positioned as being in need rather than as equal contributors, or as probationary characters waiting "to get over the hump". Examples of this were school employees quickly focusing on new teachers surviving, even when directly asked about expectations of new teachers and their strengths: "More updated on research, what research says is good practice, and then I also know that the *shock of practice* comes for them. As it always does." (P1), or "Analytical approach, of course. I don't really notice that they have it the first year, at least. Then it's mostly about *keeping their head above water*" (M6).

Summarised, the practice architectures of this theme consist of *sayings* that reflect a narrative of endurance over empowerment, *doings* that prioritise coping strategies over innovation and professional development, and *relatings* that frame new teachers as novices in need of support and protection rather than as colleagues with equal contributions.

5.1.2. Undervaluing Qualifications

Undervaluing new teachers' qualifications also emerged as a significant theme. Teacher colleagues in particular often did not see the value of the new qualifications of the new teachers: "… there is nothing yet where in a way we see that this is applicable, in a different way than it has been before" (TC4), or "… I don't know how relevant it is [the master's thesis] … I have heard the topics of some who have written their master's thesis and thought, 'Oh, that was a very narrow area.' How do you use that in regular teaching and in your classroom?" (P1).

Further, while the new teachers themselves considered their master's education and thesis as relevant and applicable, they sometimes found that it was not supported or applied. One remarked, "In such work, I am not used at all really [when asked how the new teacher is used in developmental work] … They know that I have taken a master's because I am newly educated, but we don't use that level of education in development work" (NT4).

[1] Implications of survival are put in cursive.

Also, few of the school employees had much knowledge about what the new teacher education entails and what they had researched in their master's thesis: "To be completely honest, I had to ask them before [the new teachers] we signed up for [the research project]. 'Which of you has what kind of education?' It hasn't been a topic beforehand" (M1), "One of them has written about the implementation of a new curriculum. The other one … I'm not sure, no" (P8), and "No … short stories, not a total view on it, no" (TC6).

Summarised, the practice architectures of this theme consist of *sayings* that centre on undervaluing new teachers' qualifications and rather put focus on perceived deficiencies or "gaps". The main *doings* of this theme lie in what is *not* done (Nicolini, 2012, pp. 167–168), namely not supporting, applying, and developing the skills and knowledge that new teachers have gained from their master's degrees and theses, and *relatings* that might affect new teachers' professional self-understandings (Kelchtermans, 2009), positioning them as having the "wrong" kind of knowledge and competence.

5.1.3. Conditional Induction

A theme of induction practices being conditional refers to the notion that new teachers must first lack something or not yet be fully competent in order for them to receive support or take part in induction practices. For example, "Newly educated [teachers] are very different, ranging from those who need a lot of mentoring, to those who are finished being mentored, as a school leader said, 'this teacher actually needs nothing, he is just absolutely fantastic'" (SO4). Implicitly, the quote illustrates that induction and mentoring is only for those that are lacking something and not for continuous development.

Further, this arrangement is evident in the emphasis on areas where new teachers are seen as deficient, as classroom management and parent-teacher relations were the main deficits and therefore conditions for support of new teachers: "Classroom management, there's no doubt about it. Relationships, or what I should say. Teacher-student relationship, teacher-parent, those things" (TC3). Additionally, a dichotomy between subject knowledge and relational knowledge was often created, and the new teachers are often described as lacking the latter:

> … we see that what the newly educated [teachers] need most mentoring on, is maybe not their subject, not even didactics, but primarily it's … topics that they perhaps feel they have had too little of, such as school-home cooperation, student conversations, learning environment and the roles they have, their own role in the organisation, school culture … And then it makes quite sense that you should not have mentoring to become better in the Norwegian subject, but you should have mentoring in school-home cooperation (SO1).

To summarise, the practice architectures of this theme consist of *sayings* that suggest induction is needed due to a lack of competence, rather than as a part of any professional development required for any new employee in any profession, while *doings* were induction practices offered primarily in areas deemed deficient and *relatings* that which might affect the parity between new teachers and their mentors and colleagues.

5.2. Opportunity perspective practice architectures

In this section we present the results of the new teachers that talked about their transition from education to profession in terms of being a success. We draw attention to some of the themes which made these new teachers assert an "I" in their teaching and developmental work and created new beginnings for themselves, their students, and the schools they work at.

5.2.1. Strong teacher identity[2]

A theme of strong teacher identity and the willingness to act on that identity to assert their agency and initiate something new was prevalent among the new teachers that spoke of their induction in terms of success.

For example, "I was very prepared for the profession and had an identity as a teacher when I started working. And it's clear that one becomes more and more experienced, but I find that I am quite confident in that role [teacher role]" (NTR 32), or "I feel that I have found my teacher identity, and my teaching method is very good in that the students have a lot of trust in me" (NTR 1).

A self-understanding (Kelchtermans, 2009) of strong teacher identity also helped the new teachers in school-home cooperation and classroom management, aspects often mentioned as particularly challenging for new teachers:

> I have received a lot of respect from the parents, they have recognised me as a professional and what I say in development talks and parent meetings is correct in a way, because I am a teacher. I have noticed that they come and ask for advice and simply recognise me. I think that has been very rewarding that you get a bit of professional pride. You become proud to be a teacher, that I am newly educated, and this is what I know (NTR 30).

Summarised, the practice architectures of this theme consist of *sayings* where new teachers express confidence in both their self-understanding and role as a professional teacher. They articulated a sense of professional pride and recognition by others, including parents. *Doings* were situations where they assert their perceived identity in teaching, acting with authority in developmental talks and parent meetings, and cultivating professional respect with their teacher peers, whereas *relatings* regarded establishing strong relationships with pupils and parents, which was mentioned as built on trust and mutual respect. These relationships enhanced the new teachers' sense of teacher identity and professionalism.

5.2.2. Creative Approaches

Additionally, a strong knowledge base from their master's degree positioned the new teachers for success by being able to innovate and create something new: "I'm always looking for new, creative ways to teach. I'm always eager to try out something new" (NTR 29), or "I do notice that being new, I come with a brand-new enthusiasm. That is, I'm very keen on discovering new things that can be done, trying out a variety of things, offering tips to those who work in the same subject as me" (NTR 4). Furthermore, the new teachers presented both their young and older age as a strength: "I have had the advantage that I am very young. There is a lot of humour and laughter" (NTR 10), or "I feel that I am the young teacher at the base who is (laughter) this sounds so stupid, but like, hip and cool" (NTR 33), and "I notice that now when I am 32, I have such a calmness … and that I feel very secure in myself. And I might not have done that if I sat here now and was 25" (NTR 29). The implication might be that it is not about their age at all, but about the new beginnings they represent, which rather reflect their age.

Summarised, the practice architectures of this theme consist of *sayings* where the new teachers expressed the desire and importance of exploring new and creative ways of teaching, demonstrating openness to both experimentation and innovation; *doings* of implementing novel teaching methods which led to new experiences were often inspired by their master's thesis; and *relatings* that positioned them as novel contributors, through sharing innovative practices and experiences with their colleagues and students.

5.2.3. Qualifications and Relations as a Catalyst for Subjectification

Often underpinning both their confidence and capacity for creativity

[2] "Identity" is a tricky concept in educational research, but it is the term the new teachers used themselves. It will be elaborated on in the discussion section.

and initiating something new was the skills and competencies they had acquired from their master's degree and thesis, especially as they related to their subject specialisations. For example, "I notice that my knowledge of mathematics teaching is more up-to-date, and that I perhaps reflect more on my teaching than those who went through the old teacher education" (NTR 30).

Moreover, when the new teachers were utilised as a resource, they felt both more appreciated and necessary: "Yes, I feel that [when asked if they are a resource]. Especially when people come and ask you, then you feel more valued as well" (NTR 27), or "The worst thing I could imagine as a new teacher is that I get the feeling that the school and the colleagues around me are like, because I'm new and don't know much, they should help me. I am motivated by being challenged" (NT 11). Additionally, some new teachers mentioned not being able to apply their master's thesis in negative terms: "I think it's a shame that I haven't been able to use my master's thesis. I do. I've invested quite a lot of time and resources into it, so one would hope to see it applied a bit more" (NTR 27).

Some examples of their successes include yoga and meditation in teaching (NTR 29), winning teacher of the year (NTR 7), teaching other teachers about smartboards (NTR 27), integrating field trips and practical experiments indoors and outdoors (NT 9), or lecturing and creating courses about coding (NT 13). However, while these examples highlight a variety of engaging teaching methods and achievements, these "fun" examples are the more visible glimpses of the new beginnings the new teachers have initiated.

Additionally, the relational aspects of teaching were especially highlighted: "Yes, what's the most fun? I have to say it's actually the relational part of it. It's getting to know these students, and in second place comes the academic aspect, teaching a subject you're passionate about and being able to see the engagement" (NTR 28), and "I think that building relations, I find that very important. If the students feel well-liked, then I will also feel well-liked. I believe that makes for a much better everyday life" (NT 9).

Summarised, the practice architectures of a theme of qualifications consist of *sayings* where new teachers acknowledged the value of their master's degree in providing up-to-date knowledge and reflective teaching practices, and they expressed a desire to see their thesis work applied more. *Doings* involved utilising their knowledge and competencies to both innovate and develop their teaching and schools and *relatings* of feeling valued and appreciated when their new knowledge is recognised and utilised by colleagues, contributing to a sense of empowerment and professional self-understandings.

Further, the practice architectures of a theme of relations consisted of *sayings* where new teachers emphasise the joy and importance of buildings relationships with pupils, placing the relational aspects of teaching above or as equal to academic teaching; *doings* that aimed at creating close relationships, focusing on the well-being and engagement of the pupils, prioritising teacher-pupil interactions; and *relatings* between the teacher and pupils that created a safe and predictable classroom environment, which in turn boosted the new teachers' own sense of belonging and well-being.

6. Discussion

Informed by TPA, we have identified and analysed practice architectures characterised by deficit and opportunity perspectives. While our study focused on these perspectives, we also noted positive themes, such as supportive mentorship. These were considered in relation to the themes discussed, to ensure a more holistic view, though they were not the focus of our research question. In this section we will summarise these results, provide an interpretation of them, and discuss their implications in relation to our theoretical framework and previous research.

6.1. The deficit perspective

As the results suggests, the construction of new teachers as survivors was prevalent and was found across the board from the school employees. As an example, through the lens of TPA, this manifested itself in *doings* prioritising coping strategies over innovation and professional development. These *doings* for surviving show how this theme might prefigure the *relatings* between new teachers and their colleagues and students, such as the need for a supportive network that can provide advice on how to survive and seeking and sharing coping strategies. Obviously, seeking advice from a supportive network is both encouraged and necessary, as shown by the findings by Heikkinen, Tynjälä and Jokinen (2012), Harju and Niemi (2020), and März and Kelchtermans (2020), who emphasise how critical these informal networks are in providing professional and emotional support, but the need for it might be exacerbated if a theme of survival is created and perpetuated, and there might be deleterious consequences for a new teacher not working in a school that is able to accommodate for it. Let us exaggerate to make a point: If the solution for new teachers to survive is to abandon their ambitions, then it is their personal ambitions as a new teacher that is the perceived problem.

The deficit perspective in practice casts the new teachers as being in need and striving to "survive" their induction, overshadowed by the "practice" or "reality" shock. Moreover, the narrative that comes out ahead is one of endurance, not development, or the opportunities they represent (Schaefer et al., 2012). This perspective not only undermines the newly educated teachers' possibilities and potential contributions, but also implies a broader undervaluing of their qualifications. The conditional nature of induction practices further emphasises this, suggesting a need for support that stems from perceived deficiencies rather than viewing induction and mentoring as an integral phase of professional development. Through the school employees, the deficit perspective comes through in a way not found with the new teachers themselves—even though some had also internalised it, especially the issue of "surviving"—perhaps best exemplified in the inconspicuous difference in school employees talking in terms of "taking care" of new teachers, and new teachers' own terms of "being necessary". What these common descriptors of new teachers in their transition from education to profession have in common is the implication of survival: *managing the shock, keeping your head above water*, or *finding your way back to shore*. What lies implicit in this idea is that new teachers "lack" something, that they must be "fixed", that they must "arrive" somewhere, and ultimately, that they must "survive" (Flores & Day, 2006; Howe, 2006; Lortie, 1966, pp. 54–66; Stokking et al., 2003; Veenman, 1984). Consequently, this implication focuses predominantly on the shortcomings of new teachers, potentially overshadowing their potential and what they already possess and excel at (Correa et al., 2015). This risks reducing their early experiences to a mere struggle for survival, potentially undermining their professional development and self-understandings (Kelchtermans, 2009). While undeniably referring to something very real—and most of all, persistent—this has created a narrative and the construction of a crisis, which has permeated both research and the public discourse (Flores, 2023). Any construction of a problem prefigures what the viable and desirable solutions can be, and the crisis of new teachers as "survivors" have arguably been both unhelpful and counterproductive to the induction of new teachers.

Further, a theme of undervaluing the qualifications of new teachers risks creating a narrative where the starting point for new teachers' induction and professional development is "bridging the gap" from their teacher education to profession, or "fixing" what their teacher education failed to address. These notions of the teacher education as being a problem, and a perceived disconnect between theory and practice, misunderstands the purpose of theory in teaching if the expectation is direct blueprints on how to be a teacher, or a predilection for "knowledge-in-practice" over "knowledge-for-practice", or "knowledge-of-practice" (Cochran-Smith & Lytle, 1999). Like the first theme of

survival, this theme might constrain new teachers' potential to contribute and harm their professional self-understanding. Further, when new teachers' qualifications are undervalued, it might make it harder to support, apply, and develop their existing knowledge and skills (Kemmis et al., 2014; Malo, 2008, pp. 103–124). This is a perception of new teachers that have become increasingly more incongruent, considering the recent switch towards a five-year master's degree. The easiest conclusion to make is that their five-year master's education is not relevant for the schools. However, if prefigured by deficit perspectives, another conclusion would be that the school's practices fail to leverage, align with, or create a niche for the new teachers' educational backgrounds. Additionally, when the qualifications of new teachers were taken into consideration, there were concerns about its direct applicability. Similarly, Niyubahwe et al. (2013) argue that the non-recognition of immigrant teachers' qualifications, underemployment, prejudice, and difficulties adapting to foreign teaching practices, hinder their professional integration.

Finally, induction and mentoring being conditional on what new teachers' lack reduces what good induction and mentoring by qualified mentors can be as well as risks neutralising the possibilities for the support, development, and application of what new teachers already know and excel at, as claimed by Kelchtermans (2019). A theme of conditional induction acknowledges the necessity for support—which is both valid and necessary—but primarily for remedying deficits and not for continuous development, which might cement a deficit perspective by emphasising that the induction new teachers take part in is because of perceived shortcomings. However, the qualified mentors were especially implicitly aware of the pitfalls of a deficit perspective and promoted the different opportunities new teachers represented, which reiterates much of the previous research suggesting the importance of qualified mentors (Ulvik & Sunde, 2013; Wang et al., 2008), and the undesirability of unqualified ones (Hobson et al., 2009).

The identified themes, while not created or perpetuated in bad faith, pose a challenge to the subjectification of new teachers. By concentrating on what new teachers lack, it might inhibit their capacity for "new beginnings"—their ability to bring something new and unique into the world. In the next section, we discuss how an opportunity perspective can be used to reimagine the narrative and induction practices around new teachers.

6.2. The opportunity perspective

Here we discuss the themes we identified, which enables new teachers' subjectification—or the manifestations of opportunity. From this perspective, the new teachers emerged as confident professionals, leveraging their strong teacher self-understandings and relations with their pupils and colleagues to create new beginnings. These themes both challenge the deficit perspective and showcase the potential benefits of supporting, developing, and applying the unique potential each new teacher brings.

An opportunity perspective highlights the continuous emergence of an "I", and the way new teachers in the first theme describe their confidence and professional pride in their teacher roles illustrates this. Such self-assurance is a manifestation of natality (Arendt, 2013), where each new teacher brings new skills, knowledge, and perspectives to the schools, effectively "renewing" the practices they enter. Their experiences of a strong teacher identity support and enable new teachers' subjectification (Biesta, 2021), where they are not just filling pre-described roles but actively shape their own, all according to their unique understanding of their professional selves. However, the notion of "identity" is tricky in educational research (Beijaard et al., 2004), but Kelchtermans' (2009) concept of professional self-understanding might be a better fit: "The term refers to both the understanding one has of one's 'self' at a certain moment in time (product), as well as to the fact that this product results from an ongoing process of making sense of one's experiences and their impact on the 'self'" (2009, p. 261). Like subjectification, it is emphasised that one's "self" is both momentary and continuously emergent. Considering that the constant interpretation of one's experiences influences one's understanding of a "self, or an "I", it can be argued that self-understanding is an inherent aspect of subjectification, as it is necessary for becoming a subject. So, while the first theme includes the term "identity", the results we are discussing go beyond a static self—or an essentialist understanding of "identity"—involving a deeper engagement with a self, or an "I", as an evolving entity, constantly prefigured by practices.

While the theme of new teachers' master's degrees and the importance of relations predominantly aligns with the qualification and socialisation aspect of education, they are notably used to create space for their subjectification. When new teachers discuss their master's degrees and thesis, they are not merely talking about their acquired knowledge and skills but how these qualifications empower them to act and position them as valuable resources within their peer group, highlighting the opportunities these qualifications provide. Similarly, the importance of relations goes beyond social integration. New teachers express using their relational skills to create new beginnings founded on trust and equal respect between their pupils, colleagues, and parents. These themes illustrate that for the opportunity of subjectification, their qualifications should be recognised and valued, and through their socialisation, they should be considered equally capable of contributing and innovating during their induction. This aligns with Graham et al. (2020) findings that there is no evidence of lower teaching quality for new teachers, emphasising the importance of ongoing support and professional development and collaboration for all teachers, not just new ones, as also argued by Hargreaves (2019).

If our aim is to attract and *sustain* (Schaefer et al., 2012) new teachers, it might be counterproductive to provide them with remedial measures meant to merely *retain* them, because it is not unrealistic that the answer to the latter is in some opposition to the former. To achieve this, we require induction practices based on both equality and equity. While often used interchangeably, equality and equity are not the same concepts. Where equality means treating everyone identically, regardless of their needs, equity involves providing different levels of support based on what an individual needs. Treating new teachers completely equal to more senior teachers would mean overlooking the challenges that new teachers face, but treating new teachers differently based on their perceived lacks runs the risk of perpetuating the notion that they are deficient. This is the paradox (Kelchtermans, 2019) of new teacher induction: How can induction practices treat new teachers differently, without perpetuating the notion that they are "lesser-than" or patronising them?

Heikkinen et al. (2012a) differ between three forms of parity, where one wants equality on the existential level (as human beings), perhaps on the judicial level (responsibilities and duties), but not on the epistemic level (competence and knowledge). This is because at the epistemic level, equality cannot and should not exist. We all know different things and we all have different experiences, and any attempt to erase that would be an injustice to everyone involved, as also implicitly pointed out by Malo (2008, pp. 103–124). However, remedial induction methods, and deficit perspectives on new teachers, might do exactly that. Here Biesta's (2021) concept of subjectification, qualification, and socialisation offers a different lens to understand new teacher induction. While qualification and socialisation are necessary, subjectification represents a new path where new teachers are encouraged to not merely adapt, but to actively participate in and shape the practices they enter.

Table 1
Ideal counterfactuals to the deficit perspective.

Ideal Counterfactuals to the Three Themes of a Deficit Perspective	New Teachers as Contributors	Valuing Academic and Practical Contributions of New Teachers	Unconditional Induction based on Mutual Professional Development
Sayings	Instead of framing the induction as a time of "survival", sayings would emphasise the necessity of new teachers' potential for innovation and contribution.	The discourse around new teachers' qualifications values their recent academic achievements and explores how these can be used to enrich the current practices.	The narrative changes from focusing on what new teachers lack to what all teachers continuously need to develop.
Doings	Instead of merely coping with the initial teaching experience, the induction can focus on utilising the strengths and fresh perspectives of new teachers.	Recent academic research and knowledge is actively engaged with in developmental work.	Induction practices are designed to offer support tailored not only to remedy perceived deficiencies, but also to strengthen existing skills and explore new areas of interest. This includes mentoring where both mentors and mentees learn and develop together.
Relatings	Relationships between new teachers and senior teachers are framed as collaborative and mutually helpful. Instead of positioning new teachers as "novices that need to be taken care of", they are equal contributors.	New teachers are positioned as bearers of new knowledge and approaches.	The relationship dynamic shifts to one of reciprocal learning and respect. This parity creates a culture of continuous professional development and respect for diverse capabilities.

6.3. Practical implications

Based on the practice architectures (Kemmis, 2022) characterised by both deficit and opportunity perspectives, we tentatively propose what could be considered the "ideal"[3] practice architectures for new teacher induction that enable an opportunity arrangement. We imagine these ideal (Kalleberg, 2009, p. 265) counterfactuals to the three themes that emerged (New Teachers as "Survivors", Undervaluing Qualifications, and Conditional Induction), which we have discussed might create or perpetuate deficit perspectives, as a basis for future empirical studies and theoretical development (see Table 1).

These imagined counterfactuals align with research on collaboration and informal learning (Colognesi et al., 2020; März & Kelchtermans, 2020), which show the importance of sustaining new teachers in practices that value their contributions through everyday informal interactions and collegial collaboration. They also connect with the peer-group mentoring model (Heikkinen et al., 2012a, 2020), promoting reciprocal development where mentors and mentees both contribute to and benefit from the mentoring relationship. Further, the concept of inter-generational learning (Geeraerts et al., 2018), supports these imaginations by emphasising the reciprocal development opportunities between different generations. Together, they help reframe new teacher induction as a path of collaborative and continuous professional development, focused on realizing opportunities, not merely remedying deficits.

6.4. Future research

For future research, there is a need to investigate the practice architectures perpetuated and prefigured by colleagues of new teachers—not only their mentors or principals—especially related to the opportunity perspective, which is a curiously underdeveloped area of research considering that it is colleagues new teachers spend most of their time with. Future research with similar aims employing observational methods or quantitative studies could complement the results of this article.

6.5. Limitations

Not all new teachers would embrace an opportunity perspective, and not everyone would have the possibility, for example, new teachers' experiencing too much tension between the need for support and being an equal contributor (Kvam et al., 2023), or teachers' own beliefs on agency and institutional norms constraining new teachers' ability to exert it (Biesta et al., 2015).

While our study's methodological approach and consequential analysis were pre-configured to explore the specific manifestations of deficit and opportunity perspectives and how they might be perpetuated in new teacher induction practices, we acknowledge that this approach will have resulted in an underrepresentation of alternative views or themes. Deficit perspectives, which broadly involve the assumption that new teachers require remediation due to something they lack, are often only discussed in general terms. By applying the TPA, we sought to identify how this perspective might manifest in concrete doings, relationships, and discourses within the new teacher induction practices. This focused approach provided a detailed examination of the emerging themes relevant to our research question, but also limited the scope of represented perspectives in the data material.

Further, how different stakeholders prefigure the opportunity perspective is an underdeveloped area of research and thus a limitation of this paper. However, given the theoretical framework of subjectification and natality, it was necessary to explore it through the new teachers themselves. Specifically, how they—themselves as producers of practice—experience, navigate, and shape their induction.

The reliance on interviews rather than observational methods may limit our understanding and interpretation of the actual practices within the schools (Desimone, 2009). However, while qualitative research findings typically do not apply universally across all contexts, a thorough account of this particular case might allow others to apply the findings to similar social contexts, a process referred to as naturalistic generalisation by Stake and Trumbull (1982).

7. Conclusion

We found that practice architectures characterised by a deficit perspective prefigured new teacher induction by casting them as "survivors", undervaluing their qualifications and assuming that their induction hinges on the condition that they lack something which must be remedied. We have argued that this might inadvertently position them as deficient and in need of remediation, which can prove to be counterproductive to their subjectification. Conversely, practice architectures characterised by an opportunity perspective prefigured new

[3] Ideal insofar as they are related to the theoretical framework and prevalent themes of the dataset of this study. To say that these are the catch-all themes would, of course, be an oversimplification.

teacher induction in a way that provided them with the space to emerge as an "I", and by leveraging their relations and qualifications, they were equipped to create new beginnings for themselves, their pupils, and the schools they work at. We have argued for the importance of new teachers—through an opportunity perspective—to be co-producers of practice, not merely products of it.

Due to these findings, we have imagined a new beginning of our own: a teacher induction that balances the qualification, socialisation, and subjectification (Biesta, 2021) of new teachers. By reimagining induction through this opportunity-based framework, we can better support new teachers' subjectification, and we suggest that shifting the perspective from remedying deficiencies to realizing opportunities challenges the self-fulfilling prophecy of the "deficient new teacher". We argue this will help us reimagine the narrative of new teachers and their education of being the "problem" (Mockler, 2019), and improve the attractiveness and reputation of the teaching profession itself.

CRediT authorship contribution statement

Remi Skytterstad: Writing – review & editing, Writing – original draft, Project administration, Methodology, Formal analysis, Conceptualization. **Yngve Antonsen:** Writing – review & editing, Conceptualization. **Jessica Aspfors:** Writing – review & editing, Conceptualization. **Hannu L.T. Heikkinen:** Writing – review & editing, Conceptualization.

Funding

This work was supported by The Research Council of Norway under Grant 320273, Partnership for Sustainable Transition from Teacher Education to the Profession (STEP): Becoming a Professional Teacher.

Declaration of competing interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Data availability

The authors do not have permission to share data.

References

Antonsen, Y., Jakhelln, R., Aspfors, J., & Bjørndal, K. E. W. (2023). Solo, collaborative or collective? Newly qualified teachers' experiences of being stirred into induction practices. *European Journal of Teacher Education*, 1–19. https://doi.org/10.1080/02619768.2023.2227339

Arendt, H. (2013). *The human condition*. University of Chicago press.

Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education, 20*(2), 107–128. https://doi.org/10.1016/j.tate.2003.07.001

Biesta, G. (2021). *World-centred education: A view for the present*. Routledge.

Biesta, G. (2023). Outline of a theory of teaching: What teaching is, what it is for, how it works, and why it requires artistry. In *Theorizing teaching: Current status and open issues* (pp. 253–280). Cham: Springer International Publishing.

Biesta, G., Priestley, M., & Robinson, S. (2015). The role of beliefs in teacher agency. *Teachers and Teaching, 21*(6), 624–640. https://doi.org/10.1080/13540602.2015.1044325

Boshuizen, H., Bromme, R., & Gruber, H. (2004). *On the Long Way from Novice to Expert and How Travelling Changes the Traveller*, 3–8. https://doi.org/10.1007/1-4020-2094-5_1

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Cochran-Smith, M., & Lytle, S. L. (1999). Chapter 8: Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education, 24*(1), 249–305. https://doi.org/10.3102/0091732X024001249

Colognesi, S., Van Nieuwenhoven, C., & Beausaert, S. (2020). Supporting newly-qualified teachers' professional development and perseverance in secondary education: On the role of informal learning. *European Journal of Teacher Education, 43*(2), 258–276. https://doi.org/10.1080/02619768.2019.1681963

Correa, J. M., Martínez-Arbelaiz, A., & Aberasturi-Apraiz, E. (2015). Post-modern reality shock: Beginning teachers as sojourners in communities of practice. *Teaching and Teacher Education, 48*, 66–74. https://doi.org/10.1016/j.tate.2015.02.007

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38*(3), 181–199. https://doi.org/10.3102/0013189X08331140

Eisner, E. W. (2002). From episteme to phronesis to artistry in the study and improvement of teaching. *Teaching and Teacher Education, 18*(4), 375–385. https://doi.org/10.1016/S0742-051X(02)00004-5

Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods, 5*(1), 80–92. https://doi.org/10.1177/160940690600500107

Flores, M. A. (2023). Teacher education in times of crisis: Enhancing or deprofessionalising the teaching profession? *European Journal of Teacher Education, 46*(2), 199–202. https://doi.org/10.1080/02619768.2023.2210410

Flores, M. A., & Day, C. (2006). Contexts which shape and reshape new teachers' identities: A multi-perspective study. *Teaching and Teacher Education, 22*(2), 219–232. https://doi.org/10.1016/j.tate.2005.09.002

Frederiksen, L. L. (2020). Support for newly qualified teachers through teacher induction programs–a review of reviews. *New teachers in Nordic countries–ecologies of mentoring and induction*. https://doi.org/10.23865/noasp.105

Geeraerts, K., Tynjälä, P., & Heikkinen, H. L. (2018). Inter-generational learning of teachers: What and how do teachers learn from older and younger colleagues? *European Journal of Teacher Education, 41*(4), 479–495. https://doi.org/10.12973/eu-jer.13.3.1275

Graham, L. J., White, S. L. J., Cologon, K., & Pianta, R. C. (2020). Do teachers' years of experience make a difference in the quality of teaching? *Teaching and Teacher Education, 96*, Article 103190. https://doi.org/10.1016/j.tate.2020.103190

Grootenboer, P., & Edwards-Groves, C. (2024). *The theory of practice architectures: Researching practices*. Springer Nature.

Hargreaves, A. (2019). Teacher collaboration: 30 years of research on its nature, forms, limitations and effects. *Teachers and Teaching, 25*(5), 603–621. https://doi.org/10.1080/13540602.2019.1639499

Harju, V., & Niemi, H. (2020). Newly qualified teachers' support needs in developing professional competences: The principal's viewpoint. *Teacher Development, 24*(1), 52–70. https://doi.org/10.1080/13664530.2019.1685588

Heikkinen, H. L., Jokinen, H., & Tynjälä, P. (2012a). *Peer-group mentoring for teacher development*. Routledge.

Heikkinen, H. L., Jokinen, H., & Tynjälä, P. (2012b). Teacher education and development as lifelong and lifewide learning. In *Peer-group mentoring for teacher development* (pp. 19–46). Routledge.

Heikkinen, H. L., Pennanen, M., Markkanen, I., & Tynjälä, P. (2020). A brief history of the peer-group mentoring model in Finland: Struggling for space in a contested niche. *New teachers in nordic countries: Ecologies of mentoring and induction*.

Helleve, I., & Ulvik, M. (2011). Is individual mentoring the only answer? *Education Inquiry, 2*(1), 127–139. https://doi.org/10.3402/edui.v2i1.21967

Hobson, A. J., Ashby, P., Malderez, A., & Tomlinson, P. D. (2009). Mentoring beginning teachers: What we know and what we don't. *Teaching and Teacher Education, 25*(1), 207–216. https://doi.org/10.1016/j.tate.2008.09.001

Howe, E. R. (2006). Exemplary teacher induction: An international review. *Educational Philosophy and Theory, 38*(3), 287–297. https://doi.org/10.1111/j.1469-5812.2006.00195.x

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research, 81*(2), 201–233. https://doi.org/10.3102/0034654311403323

Jacobsen, H. M., Jensen, R., & Lejonberg, E. (2023). Tracing ideas about mentoring newly qualified teachers and the expectations of school leadership in policy documents. *International Journal of Leadership in Education*, 1–23. https://doi.org/10.1080/13603124.2023.2218110

Kalleberg, R. (2009). In *Can normative disputes be Settled Rationally? On Sociology as a Normative Discipline* (Vol. 2). The Bardwell Press.

Kelchtermans, G. (2009). Who I am in how I teach is the message: Self-understanding, vulnerability and reflection. *Teachers and Teaching, 15*(2), 257–272. https://doi.org/10.1080/13540600902875332

Kelchtermans, G. (2019). Early career teachers and their need for support: Thinking again. In A. Sullivan, B. Johnson, & M. Simons (Eds.), *Professional learning and development in schools and higher education: Vol. 16. Attracting and keeping the best teachers: Issues and opportunities*. Singapore: Springer. https://doi.org/10.1007/978-981-13-8621-3_5.

Kelchtermans, G., & Ballet, K. (2002). The micropolitics of teacher induction. A narrative-biographical study on teacher socialisation. *Teaching and Teacher Education, 18*(1), 105–120. https://doi.org/10.1016/S0742-051X(01)00053-1

Kemmis, S. (2022). *Transforming practices*. Springer Singapore. https://doi.org/10.1007/978-981-16-8973-4

Kemmis, S., & Grootenboer, P. (2008). Situating praxis in practice: Practice architectures and the cultural, social and material conditions for practice. In *Enabling praxis* (pp. 37–62). Brill.

Kemmis, S., Heikkinen, H. L., Fransson, G., Aspfors, J., & Edwards-Groves, C. (2014). Mentoring of new teachers as a contested practice: Supervision, support and collaborative self-development. *Teaching and Teacher Education, 43*, 154–164. https://doi.org/10.1016/j.tate.2014.07.001

Kvale, S., & Brinkmann, S. (2015). *Det kvalitative forskningsintervju*. Gyldendal.

Kvam, E. K., Roness, D., Ulvik, M., & Helleve, I. (2023). Newly qualified teachers: Tensions between needing support and being a resource. A qualitative study of newly qualified teachers in Norwegian upper secondary schools. *Teaching and Teacher Education, 127*, Article 104090. https://doi.org/10.1016/j.tate.2023.104090

Larsen, E., Jensen-Clayton, C., Curtis, E., Loughland, T., & Nguyen, H. T. M. (2023). Re-imagining teacher mentoring for the future. *Professional Development in Education*, 1–15. https://doi.org/10.1080/19415257.2023.2178480

Lortie, D. C. (1966). Teacher socialization: The Robinson Crusoe model. *The real world of the beginning teacher*.

Malo, A. (2006). La construction du sens et la part de la voix du chercheur: une illustration basée sur une recherche menée dans le champ de recherche sur la formation à l'enseignement à partir d'une perspective non déficitaire: (niveau 1). *Recherches qualitatives, 26*(2), 66–84. https://doi.org/10.7202/1085372ar

Malo, A. (2008). Le stagiaire comme praticien réflexif: un point de vue constructiviste et non déficitaire du développement du savoir professionnel en enseignement. *Les stages en formation à l'enseignement: pratiques et perspectives théoriques*.

März, V., & Kelchtermans, G. (2020). The networking teacher in action: A qualitative analysis of early career teachers' induction process. *Teaching and Teacher Education, 87*, Article 102933. https://doi.org/10.1016/j.tate.2019.102933

Mockler, N. (2019). Shifting the frame: Representations of early career teachers in the Australian print media. *Attracting and keeping the best teachers: Issues and opportunities*, 63–82. https://doi.org/10.1007/978-981-13-8621-3_4

Nicolini, D. (2012). *Practice theory, work, and organization: An introduction*. Oxford: OUP.

Niyubahwe, A., Mukamurera, J., & Jutras, F. (2013). Professional integration of immigrant teachers in the school system: A literature review. *McGill Journal of Education, 48*(2), 279–296. https://doi.org/10.7202/1020972ar

Salo, P., Francisco, S., & Olin Almqvist, A. (2024). Understanding professional learning in and for practice. *Professional Development in Education, 50*(3), 444–459. https://doi.org/10.1080/19415257.2024.2311108

Schaefer, L., Long, J. S., & Clandinin, D. J. (2012). Questioning the research on early career teacher attrition and retention. *Alberta Journal of Educational Research, 58*(1), 106–121. https://doi.org/10.11575/ajer.v58i1.55559

Schatzki, T. R. (2002). *The site of the social: A philosophical account of the constitution of social life and change*. Penn State University Press.

Schatzki, T. R. (2010). *The timespace of human activity: On performance, society, and history as indeterminate teleological events*. Lexington Books.

Stake, R. E., & Trumbull, D. J. (1982). Naturalistic generalizations. *Review Journal of Philosophy and social science, 7*(1), 1–12.

Stokking, K., Leenders, F., De Jong, J., & Van Tartwijk, J. (2003). From student to teacher: Reducing practice shock and early dropout in the teaching profession. *European Journal of Teacher Education, 26*(3), 329–350. https://doi.org/10.1080/0261976032000128175

Thomas, L., Tuytens, M., Devos, G., Kelchtermans, G., & Vanderlinde, R. (2019). Beginning teachers' professional support: A mixed methods social network study. *Teaching and Teacher Education, 83*, 134–147. https://doi.org/10.1016/j.tate.2019.04.008

Ulvik, M., & Langørgen, K. (2012). What can experienced teachers learn from newcomers? Newly qualified teachers as a resource in schools. *Teachers and Teaching, 18*(1), 43–57. https://doi.org/10.1080/13540602.2011.622553

Ulvik, M., & Sunde, E. (2013). The impact of mentor education: Does mentor education matter? *Professional Development in Education, 39*(5), 754–770. https://doi.org/10.1080/19415257.2012.754783

Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research, 54*(2), 143–178. https://doi.org/10.2307/1170301

Wang, J., Odell, S. J., & Schwille, S. A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of teacher education, 59*(2), 132–152. https://doi.org/10.1177/0022487107314002