

University of Groningen

Aiming for agency. The effects of teacher education on the development of the expertise of early childhood teachers

Oosterhoff, Arda M. G. ; Oenema-Mostert, Ineke C. E. ; Minnaert, Alexander E. M. G.

Published in:
Teaching and Teacher Education

DOI:
[10.1016/j.tate.2020.103176](https://doi.org/10.1016/j.tate.2020.103176)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2020

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Oosterhoff, A. M. G., Oenema-Mostert, I. C. E., & Minnaert, A. E. M. G. (2020). Aiming for agency. The effects of teacher education on the development of the expertise of early childhood teachers. *Teaching and Teacher Education*, 96, [103176]. <https://doi.org/10.1016/j.tate.2020.103176>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.



Aiming for agency. The effects of teacher education on the development of the expertise of early childhood teachers

Arda M.G. Oosterhoff^{a,*}, Ineke C.E. Oenema-Mostert^{a,b}, Alexander E.M.G. Minnaert^c

^a NHL Stenden University of Applied Sciences, Academy of Primary Education, Rengerslaan 8, 9817, DD, Leeuwarden, the Netherlands

^b University of Groningen, Special Needs Education & Youth Care, Grote Rozenstraat 38, 9712, TJ, Groningen, the Netherlands

^c University of Groningen, Special Needs Education, Youth Care & Clinical Educational Sciences, Grote Rozenstraat 38, 9712, TJ, Groningen, the Netherlands

H I G H L I G H T S

- Early childhood teachers' specific expertise expands their agentic capacities within a restricted professional space.
- The initial teacher training experience appears to be fundamental for the development of pedagogical expertise.
- Aiming for agency, teacher education should foster both specific beliefs and pedagogical knowledge and skills.

A R T I C L E I N F O

Article history:

Received 12 September 2019

Received in revised form

2 May 2020

Accepted 22 July 2020

Available online 14 August 2020

A B S T R A C T

Researchers worldwide have emphasized the critical role of teacher education in preparing teachers to respond in a professional manner to the prevailing discourse of accountability. We aimed to investigate the influence of initial teacher training programmes on agency, as part of the professional autonomy of early childhood teachers, vis-à-vis their impacts on teachers' specific professional expertise. Drawing on qualitative data, we elucidate the vital role of early childhood teachers' expertise in fostering their agency and the importance of teacher education for the development of this expertise. A quantitative follow-up study supports the qualitative findings. Implications for practice are discussed.

© 2020 Elsevier Ltd. All rights reserved.

1. Introduction

In the context of generally perceived pressures of accountability within education, early childhood educators have foregrounded specific problematic effects impacting on early childhood education (ECE). Both teachers and researchers have suggested that the intensification of external control has prompted an increased emphasis on teacher-centred didactics along with an emergent culture of standardized testing and a narrowing of educational content at the kindergarten level (Bassok, Latham, & Rorem, 2016; Gordon, Sosinsky, & Colaner, 2019; Roeleveld, 2003; Van Oers, 2013). This is at the cost of learning through play and other holistic developmental activities that are considered to be especially important for this age group (Wildt-Dienske & Wildt, 2013; Oenema-Mostert, 2012; Bodrova, 2008; Boland, 2015; Gallant,

2009; Goorhuis-Brouwer, 2014; Janssen-Vos, 2012; Miller & Almon, 2009; Onderwijsraad, 2010).

Due to accountability pressures, teachers feel compelled to act against their own professional knowledge and values (e.g. Biesta, 2007; Kelchtermans, 2012; Moss & Dahlberg, 2008; Onderwijsraad, 2013; Osgood, 2006). Hence, their professional autonomy is thwarted. Kelchtermans (2009) highlighted the importance of a specific knowledge base for the development of teachers' professional autonomy. Without this knowledge base, teachers are dependent on others who design education for them. As we will argue below, agency is an important part of teachers' professional autonomy. In light of their empirical research into teacher agency, Priestley, Biesta, and Robinson (2015a) emphasized the critical importance of individual expertise, which includes knowledge and beliefs, for teachers' engagement with external demands. Additionally, scholars worldwide have pointed to the important role of teacher education in preparing teachers to respond in a professional manner to the prevailing performativity/accountability discourse (Hara & Sherbine, 2018; Kelchtermans, 2007; Stremmel, Burns, Nganga, & Bertolini, 2015). However, few

* Corresponding author.

E-mail addresses: arda.oosterhoff@nhlstenden.com (A.M.G. Oosterhoff), ineke.oenema@nhlstenden.com, c.e.oenema-mostert@rug.nl (I.C.E. Oenema-Mostert), a.e.m.g.minnaert@rug.nl (A.E.M.G. Minnaert).

empirical studies have investigated this particular role of teacher education (Hara & Sherbine, 2018; Lipponen & Kumpulainen, 2011). Consequently, our aim was to investigate the influence of initial teacher training programmes on teacher agency vis-à-vis their influence on specific professional expertise.

1.1. The Dutch case

The Dutch ECE context provides a valuable case for exploring the role of expertise in fostering agency, as part of professional autonomy. This context enables a consideration of the influence of initial teacher training programmes, given their bearing on particular circumstances and changes that occurred in the Netherlands at the end of the last century.

The findings of a recent empirical study on teachers' professional autonomy in the Dutch ECE context indicated that within their work environments, teachers feel pressured by external actors to act against their own professional beliefs (Oosterhoff, Oenema-Mostert, & Minnaert, 2020). Teachers sense that such actors (e.g., parents, managers, and the educational experts who develop teaching methods) often lack specific expertise on teaching young children. Another study revealed that teachers feel that they must actively defend the interests of young children, protecting them from harmful influences that stem from this deficit of specific expertise among stakeholders in their work environments (Oosterhoff, Oenema-Mostert, & Minnaert, 2019).

In the Netherlands, preschool is integrated into primary school for children aged 4–12 years. Grades 1 and 2 are intended for Kindergarten-level children (age 4–5). The Dutch education system underwent an important change in 1985. Prior to this time, there were two separate educational structures for preschool children aged 4–5 years and primary school children aged 6–12 years. There were also distinct initial teacher training programmes: Pedagogische Academie (PA) for primary school teachers and Kleuter Leidster Opleiding School (KLOS) for preschool teachers. In 1985, a new primary school structure for children aged 4–12 years was introduced, along with one teacher training programme for the entire age group (the Pedagogische Academie Basis Onderwijs (PABO) programme). From the start of this modification of the education system, concerns about the amount of attention paid to the specific developmental characteristics of the young child were raised. Educational experts feared a diminution of specific ECE expertise within the PABO programme, with attendant negative effects on the quality of Dutch ECE (Janssen-Vos, 2012). In 2010, the Dutch Education Council once again acknowledged the persistence of these concerns, noting a potential shortfall in the PABO programme relating to knowledge about young children's learning that was largely based on the perceptions of surveyed KLOS-trained teachers (Voorwinden, 2009). More recently, other scholars also argued that the PABO programme is too broad and general to fully cover 'the specific pedagogical and didactical approaches that target the developmental possibilities and needs of young children' (Boland, 2015, p. 6, translated; see also; Oenema-Mostert, 2012). Given the impending decline in the proportion of currently serving but soon to retire KLOS-trained teachers, these concerns have again resurfaced.

Considering the importance of a specific knowledgebase for the development of teachers' professional autonomy (Kelchtermans, 2009), and more specifically, for their agency (Priestley et al., 2015a), we argue that these concerns about a lack of specific ECE teacher expertise might not only be a threat to the quality of ECE, but also to the professional autonomy of ECE teachers. This is an important issue in the current context, in which teachers feel pressured to act against their professional beliefs (Oosterhoff,

Oenema-Mostert, & Minnaert, 2020).

1.2. Literature review

In this literature review, we will start demarcating the concept of professional autonomy. As part of this, we will discuss the ecological approach to agency and we will argue why we conceive agency, as understood within this approach, as a necessary part of professional autonomy. Next, we will define the concept of teachers' expertise and discuss the role that this expertise plays for teachers' agency.

1.2.1. Professional autonomy and agency

There are ambiguities relating to the identification of the underlying theoretical dimensions of the professional autonomy construct in the context of the teaching profession. Moomaw's (2005) literature review revealed that 'teacher autonomy' is often defined in terms of individuals' perceptions of the space they have for influencing work processes. Many studies have also emphasized autonomy should *not* mean an individual's isolation from others (Stroet, Opdenakker, & Minnaert, 2013; Fullan, 2007; Pearson & Moomaw, 2005). In the field of education, a need for professional cooperation (Minnaert & Meijer, 2018) coexists with the need for teachers to comply with a regulated space resulting from legal regulations, prescribed competences, and core objectives (Onderwijsraad, 2013).

Achieving a balance between regulation and freedom is closely aligned to the term 'professional' in 'professional autonomy'. Evetts (2013) suggested that professionalism is a derivative of the advanced division of labour within modern societies. The public must trust professionals, who must do a good job to be worthy of that trust. Thus, the following important question arises: what is 'good' and, moreover, who decides what is 'good'? Does the professional or the public, represented by the government, decide? Professionalism may be constructed 'from within' and it may be imposed 'from above'. Within professional teaching practice, the determination of 'what is good education' is made by both agents, in a fluctuating balance (Evetts, 2013). Currently there is an increasing tendency to impose professionalism from above as a control mechanism and to improve practice 'from a distance' (Evetts, 2013, p. 787; see also; Kelchtermans, 2007; Biesta, 2009).

Acknowledging this inherent tension between regulation and freedom as part of the teaching profession, the ecological approach to teacher agency (Priestley et al., 2015a) offers an important amplification of the concept of teacher autonomy. This approach shifts the focus from autonomy as mere (perceived) professional space to a perspective in which the teachers themselves actively achieve agency by exploiting that space (Oolbekkink-Marchand, Hadar, Smith, Helleve, & Ulvik, 2017). Within the ecological approach, the aim is to understand 'how teachers might enact practices and engage with policy' (Priestley, Biesta, & Robinson, 2015b, p. 2). Agency is seen as an emergent phenomenon that is achieved in everyday practice through the interplay of personal capacities and environmental conditions. Teachers 'possess unique professional expertise and experience', thus, when it comes to balancing the interests of different stakeholders, 'their professional voice and their professional judgement matter' (Priestley et al., 2015a, p. 5).

The ecological approach to teacher agency entails three closely related key dimensions (see Fig. 1). The first is the iterational dimension comprising everything within teachers' life and professional histories that they bring in to handle a dilemma, including their own education, their initial training, and their teaching experience to date. This accumulated expertise – personal capacities (skills and knowledge), beliefs (professional and personal) and

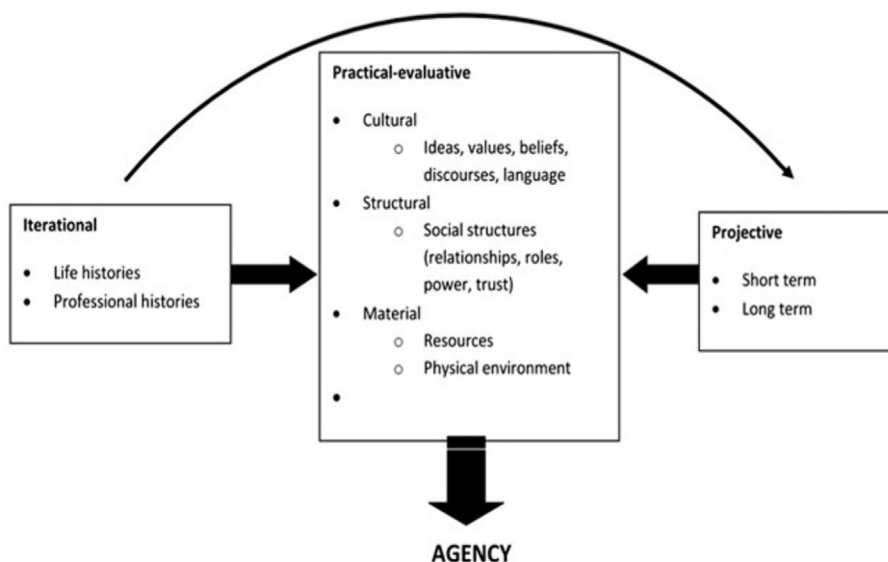


Fig. 1. A three-dimensional model for understanding the achievement of agency (Source: Biesta, Priestley, & Robinson, 2015, p. 627, p. 627).

values – must be used selectively on the basis of reflection to make judgements in response to the emerging ambiguities of day-to-day teaching practices. This points to the second dimension of teacher agency, namely the *practical-evaluative* dimension. Teachers' professional expertise should be a resource for their judgements and actions rather than a mere set of practical skills and competences. Priestley et al. (2015b) highlight an important consequence of this assumption:

Actors able to draw upon a rich repertoire of experience might be expected to develop more expansive orientations to the future and draw upon a greater range of responses to the dilemmas and problems of the present context, than might be the case with their more experientially impoverished compatriots (p. 4).

The above statement foregrounds the third *projective dimension* of agency, comprising the short- and long-term orientations of actions. These future aspirations may support policies or oppose them. Priestley et al. (2015b) warned that they can also become narrowed, often as 'the result of systems of accountability and performativity that create perverse drivers and incentives' (p. 6).

This argument brings to mind the *practical-evaluative* dimension, and points to the role of cultural, structural and material factors pertaining to the context in which agency is enacted. The judgements that teachers have to make in response to the emerging ambiguities of day-to-day teaching practices are practical as well as evaluative, shaped by what is possible or impossible within a given context and based on expected risks or desirable future outcomes. Cultural, structural, and material elements together shape the context in which agency is either facilitated or inhibited.

Within the teaching context, a core professional responsibility for teachers entails meeting short- and long-term objectives, as they engage with their pupils' development in the context of their futures to come. Additionally, as a public service, the teaching profession operates within cultural, structural, and material circumstances that fluctuate in response to the enactment of mechanisms of external control. Thus, we argue, for teacher autonomy to be called 'professional autonomy', teacher agency - as meant in the ecological approach - should be incorporated. In this paper, we will focus on the way this agency is achieved.

1.2.2. Teachers' expertise

The ecological approach to teacher agency reveals that

numerous factors may affect teachers' agency in their day-to-day practice. Because of our particular interest in the role of expertise in fostering agency, as noted in the introduction section, here we focus on one particular element, the iterational dimension, that includes teachers' 'personal capacity (skills and knowledge), beliefs (professional and personal) and values' (Priestley et al., 2015a, p. 31). Following Biesta, Priestley, and Robinson (2015a), in the empirical work presented in this paper, we departed from teachers' beliefs. Beliefs, or 'the personal truths everyone holds' (Pajares, 1992, p. 309), are essential to teaching; guiding teachers' thinking and actions (Pajares, 1992), especially in such ill-defined contexts like the teaching environment (Nespor, 1987). Beliefs are rooted in the past but come to life in the present, playing an important role in teachers' actions and, hence, in the achievement of agency (Priestley et al., 2015a).

Educational beliefs encompass a range of issues that are inter-related (Pajares, 1992); teachers hold beliefs about their responsibilities, about children, about teaching, about aims, about their own capacities, about subject matter, etc. Beliefs about teaching and learning differ among teachers. Within the ECE literature, teacher beliefs are often distinguished through their division into those favouring a highly structured teacher-directed approach and those that favour a loosely structured, child-centred approach (e.g. Minnaert & Meijer, 2018; Gordon et al., 2019; Miller & Almon, 2009; Ranz-Smith, 2007; Van Oers, 1997). However, there is no hard line separating these ECE approaches. The beliefs held by teachers represent a certain balance between the two approaches that are situated at each end of a continuum.

Beliefs develop on the basis of crucial experiences or events that produce detailed episodic memories, which serve as templates for teachers' own practices (Nespor, 1987; Vartuli & Rohs, 2009). Student teachers enter into the professional training stage with pre-established beliefs about teaching based on their own learning experiences within the educational system (Kelchtermans, 2012; Pajares, 1992). Yet, in an empirical study of ECE training programmes, Vartuli and Rohs (2009) demonstrated that 'prospective teachers' beliefs can change through enrolment in a teacher education programme and these changes are relatively enduring' (p. 321). Kelchtermans' (1994) empirical study shows that, specifically for the development of pedagogical-didactic beliefs, the initial teacher training stage is an important source.

Teachers' expertise, however, includes more than teachers' beliefs. Teachers' unique expertise also comprises specific knowledge and skills (Priestley et al., 2015a). Although most literature clearly distinguishes subjective beliefs from cognitive knowledge, and determines beliefs as stronger predictors of behaviour than such knowledge, the complex and mutual interaction between belief systems and cognitive resources is also stressed repeatedly (Pajares, 1992; Nespor (1987). Beliefs themselves possess cognitive components; on the other hand, beliefs also influence what is judged as reliable, suitable or valuable knowledge (Pajares, 1992).

The intertwined nature of knowledge and beliefs is visible in Kelchtermans' (2012), notion of 'subjective educational theory', which denotes 'a personal set of knowledge and opinions about the best ways of conducting specific professional duties and shaping teaching moments' (Kelchtermans, 2012, p. 10, translated). Similar to the iterational dimension of agency in the ecological model, this subjective educational theory is considered essential for professional teachers, enabling them 'to make judgements in specific situations about what is desirable from an educational and pedagogical point of view' (Kelchtermans, 2012, p. 14, translated). In addition to this, Kelchtermans (1994, 2009) pointed to another value of knowledge, specifically related to the achievement of agency. He stressed that the subjective educational theory is often implicit and mostly develops in practice. Such 'practical wisdom' of teachers, Kelchtermans argued, constitutes a weak basis for teachers to defend their choices when they are in conflict with externally imposed courses of action (Kelchtermans, 1994), inducing teachers' dependence on external experts who design education for them (Kelchtermans, 2009). Campbell-Bar (2018) argued that ECE professionals draw on multiple forms of knowledge: theoretical knowledge and experiential knowledge. Specialized, theoretical knowledge must be put into use in situated practice. ECE teachers must therefore be able to evaluate and to apply academic knowledge to solve problems in daily educational practice, in this way developing situated experiential knowledge. Thus, the ability to judge critically in practical situations and possessing the skills to act according to these judgements also requires the availability of (conscious) theoretical frameworks and insights that underpin teachers' choices.

Finally, reflexive skills and the role of professional relationships for the development of expertise has been frequently emphasized. Vähäsantanen and Eteläpelto (2015) argued that the enactment of professional agency is framed by individual resources as well as by social conditions. Reflexivity concerning knowledge and beliefs as part of a robust professional discourse enables the further development of teachers' expertise, leading to expanded possibilities for utilizing this expertise in achieving agency (Achinstein & Ogawa, 2006; Hara & Sherbine, 2018; Priestley et al., 2015a; Vartuli & Rohs, 2009). Here, the important role of teacher education in preparing teachers to respond in a professional manner to the prevailing performativity/accountability discourse becomes apparent (Hara & Sherbine, 2018; Kelchtermans, 2007; Stremmel et al., 2015). Robson and Martin (2019) advocate supporting ECE teachers in their further development of this expertise by reflecting on dilemmas 'through the paradigm of the ethics of care, justice and critique' (p. 101). However, Delaney (2019) warns that current accountability policies encourage teacher training programmes to focus on meeting the quality criteria embedded within the external evaluative measures.

1.3. Research questions

Focusing on the achievement of agency, the research questions in this study are as follows:

- (1) *What role does expertise play in the enactment of ECE teachers' agency?*
- (2) *To what extent do initial teacher training programmes contribute to the development of expertise?*

2. Method

Our paper draws on the results of a larger study that sequentially combined several qualitative and quantitative methods within an investigation of ECE teachers' professional autonomy. Here, while focusing on the achievement of agency, we largely present findings derived from an initial explorative, qualitative study and some additional findings from a quantitative follow-up study.

2.1. Qualitative study

For the qualitative study, we applied an inductive research design, aimed at exploring the lived realities of ECE teachers in the context of their daily work, without attempting to impose pre-conceived theoretical notions. Direct, open interviews were conducted with early childhood teachers, focusing on teachers' perceptions of existing or potential tensions occurring at the intersection of regulation and freedom, and on how they respond to these tensions. Here, we report on the first of a series of interviews.

2.1.1. Sample

Eight experienced Dutch early childhood teachers were selected as the participants in this study. The sample size was deliberately kept small to allow for in-depth analysis. The sample was purposefully stratified to facilitate a comparison of sub-groups (Boeije, 2012; Creswell, 2013). The participants differed in equal measure on two important aspects. Firstly, they were distinguished according to their perceptions on whether or not they had space to act consistently in accordance with their own professional beliefs. We asked them to provide an affirmative or negative response to the following question: *Do you experience pressure, stemming from your work environment, to work with young children in a way that differs from what you perceive as desirable?* Secondly, participants were distinguished in terms of their initial teacher training programmes (KLOS or PABO). These differences in their educational backgrounds enabled us to explore the probable influence of the training programme. Moreover, we ensured balanced regional distribution and included variations in school characteristics (Table 1). All of the participants were female and are referred to using pseudonyms to protect their anonymity. To facilitate the readers' interpretations of the results, the four respondents who perceived their space to act in accordance with their beliefs as constraining were given short, monosyllabic names: Britt, Dyt, Eef, and Fleur. The four respondents who did not feel constrained received longer, multi-syllabic names: Annelien, Charlotte, Geraldien, and Hanneke.

We recruited respondents through our professional networks. Recruitment via the general network yielded just one respondent (Hanneke). Most of the respondents (seven) were recruited via the [details removed for peer review], on behalf of which the research was conducted. Recruitment through this network may have impacted on the selected candidates' political interests (Creswell, 2013). However, by selecting equal numbers of constrained and non-constrained teachers, we believe that we guaranteed a balanced influence with this respect.

2.1.2. Instrument and analysis

Two key topics that were explored in the interviews were *professional beliefs* and *responses to autonomy-limiting influences*. All of the interviews were audiotaped. We applied open and inductive

Table 1
Respondents' and school characteristics.

Pseudonym	Initial teacher training programme	Experienced pressure (negative)	Age (in years)	Experience in grades 1 and 2 of primary education (in years)	Region	School size (no. of students)	Denomination
Annelien	KLOS	No	49	27	NE	92	Catholic
Britt	PABO	Yes	46	20	N	350	Public
Charlotte	PABO	No	43	11	N	300	Protestant
Dyt	KLOS	Yes	56	37	NW	340	Public
Eef	PABO	Yes	48	12	S	400	Public
Fleur	KLOS	Yes	59	27	W	200	Public
Geraldien	KLOS	No	54	34	E	110	Public
Hanneke	PABO	No	38	12	W	230	Catholic

coding within verbatim transcripts of the interviews, which we analysed thematically (Braun & Clarke, 2006). Further analysis entailed querying the data using Atlas.ti software (Friese, 2014).

The interviews and analysis were carried out by the first author. The development of the code tree and the research question memos were regularly discussed by the team members during the research process. The findings were summarized and expanded into comprehensive vertical analysis documents for each respondent (Kelchtermans, 1994). The respondents were then requested to validate the interpretations in these documents. All of the participants confirmed the accuracy of the interpretations and deemed the vertical analyses appropriate.

Next, the results were compared with findings within the relevant literature (Boeije, 2012; Creswell, 2013). Here, the results are presented vis-à-vis the ecological approach to agency (Priestley et al., 2015a). We conducted a comparative analysis of our data on teachers' beliefs in relation to teacher-directed and child-centred beliefs. We deliberately chose this particular framework because the respondents were familiar with it, as evidenced by the fact that they used the concepts to indicate their own beliefs. In order to retain alignment with the frame of reference of the respondents, we used the description of the concepts in a textbook for teacher training (Beets-Kessens & Memelink, 2009). The originally derived 'open' categories were kept intact.

We included a number of the respondents' quotes in the presentation of our results to ground our findings. While these quotes represent the respondents' actual words, they were translated into English and edited for comprehensibility.

2.2. Quantitative follow-up survey

We investigated research questions that emerged from the first qualitative study within a follow-up survey. Here, we present the results obtained for the survey questions aimed at quantifying some questions about the extent to which the Dutch initial teacher training programme contributes to the development of ECE teachers' expertise:

- How do Dutch primary school teachers, who teach grades one and two, judge the quality of the PABO programme as preparatory training for working with young children?
- According to them, should working with young children be accorded more attention within the PABO programme?
- Do KLOS-trained teachers use more of what they have learned in their teacher training programme compared with PABO-trained teachers?

2.2.1. Sample

The sample for this follow-up study comprised Dutch primary school teachers who taught primary school grades one and two.

Multistage sampling was conducted to ensure a balanced distribution of participants across the Netherlands, with random selection performed within each province. A total of 245 teachers completed the entire questionnaire (the response rate was 80% of the 308 teachers who were approached).

Of the 245 teachers in the sample, 98% were female. The respondents' ages ranged between 20 and 64 years, with an average age of 46 years. In terms of their qualifications, the majority of respondents (51.4%) had undergone primary school teacher training (the 4-year PABO programme). Of the remaining respondents, 36.7% had preschool (KLOS) qualifications, 9.4% had undergone the previous primary teacher training (PA), and 2.4% had another pedagogy-related qualification.

2.2.2. Instrument and analysis

A digital questionnaire was developed and distributed with the help of Qualtrics Survey Software.

The three respective questions were translated into the following statements:

- The current PABO programme prepares teacher trainees sufficiently to teach in grades 1 and 2.
- The PABO programme should focus more on working with young children.
- I often apply what I learned during my teacher training programme.

Respondents were asked to rate these statements using a 6-point scale ranging from 1 (*completely disagree*) to 6 (*completely agree*).

The analysis was based on frequency distributions at a descriptive level. Additionally, a Mann-Whitney *U* test was performed to investigate differences between respondents who received their teacher training within the PABO and KLOS programmes, respectively (Field, 2013).

3. Results

Our findings on agency from an ecological perspective are presented in four sub-sections, of which the first three pertain to the qualitative study. The first two sub-sections focus on the research question: *What is the role of ECE teachers' expertise in their agency?* Section 3.1 presents the respondents' articulations of their pedagogical beliefs, revealing their similarities and differences, and section 3.2 shows how their expertise (i.e. beliefs as well professional knowledge) was deployed in circumstances where enactment of their beliefs was constrained by the work environment. The following two sub-sections explore the second research question: *To what extent do initial teacher training programmes contribute to the development of teachers' expertise?* Section 3.3 explores the influence of initial teacher training on respondents' expertise (i.e.

beliefs, knowledge and skills), and section 3.4 presents additional findings from the quantitative follow-up study.

3.1. Articulation of educational beliefs

As a starting point of our findings section, we focus on the articulation of educational beliefs. We do this rather extensively for two main reasons. Firstly, because of the central role of beliefs in guiding teachers' actions (Pajares, 1992) and, hence, in the achievement of agency (Priestley et al., 2015a). Secondly, we do this to provide a basis for analysing the differences between the educational backgrounds of the teachers.

All of the respondents articulated their educational beliefs. The interviews contained statements on what constitutes good early childhood education and provided examples of how these as formative principles manifest within educational practice. They covered various beliefs on didactics, aims, teacher behaviour, and pre-schoolers' characteristics. The belief codes, code definitions, and illustrative quotes are presented in Appendices A and B.

Respondents indicated that they find it difficult to articulate their beliefs. For example, Eef stated: 'Yes, I find it very complicated to put this into words, but I know exactly what I mean'. Her observation on teamwide ECE was similar:

'That is very ... eh ... for all of us, it is all very vague. We have a lot of "yes, you know" and "you get it, right?", and that makes it very difficult now that we have to explain more. We're just very bad at that. Everyone is.'

Geraldien and Dyt both indicated that their colleagues find it difficult to articulate their beliefs. Speaking about her ECE colleague, Geraldien stated: 'She grumbles more about what is demanded by the inspectorate, but she can't explain it very well'. Remarkably, the respondents often expressed their views by providing examples from their own teaching practice.

To enable a comparison of the respondents' beliefs, we further analysed their statements, distinguishing between child-centred and teacher-directed approaches (Beets-Kessens & Memelink, 2009). Those of Annelien, Dyt, and Fleur reflected a child-centred view on ECE. These respondents aim at broad *holistic development*¹ and indicated a preference for *integrated* didactics, whereby their aims are *wrapped up* in meaningful activities. These individuals reject tests in the first two grades (*testing negative*) and provide the children with extensive freedom of action (*let go*). Britt, Charlotte, Eef, and Hanneke expressed a more teacher-directed view. They conceive of the aims of ECE as *separate goals* relating to the development of language and maths as well as motor and social/emotional skills. Accordingly, they believe that their job is to *prepare the children* for formal learning that will commence in the *third grade*. They prefer a teacher-initiated, structured approach in relation to didactics (*being systematic*) and have a more positive attitude towards testing (*testing positive*). Geraldien's view lies somewhere between the above two positions.

More striking than the respondents' differences in educational beliefs, however, is the level of agreement among them in the following areas: *connecting with engagement*; *responding to learning needs*; *learning through experiencing*; *don't force*; *play*; *time*, *patience*. All participants agreed that the development of *emotional security and self-confidence* is an important goal of ECE. Related teacher behaviour entails: *acknowledging capacities* and *responsiveness*. Notably, these shared principles were propounded in relation to the

following developmental characteristics of young children, on which they all mostly concurred too: 'here, now, I ...' (egocentrism); *maturation*; *developmental variations*; *play*, *creativity*, and *spontaneity* (see Fig. 2 for a summary, and Appendix B for a justification). It is notable that the assumptions underlying the developmental characteristics of young children also pertain to the child-centred approach (Beets-Kessens & Memelink, 2009).

3.2. Acts of agency: the practical-evaluative dimension

Our analysis reveals that all eight teachers more or less actively resist changes to education that, in their view, threaten the quality of education for this age group through using their expertise. Firstly, they evaluate the educational changes requested or imposed by actors within their work environment in terms of beliefs on what constitutes 'good' education for children aged 4–7 years. Charlotte, for example:

'I have noticed that the worse the results in the upper and middle classes are, the more prevalent the view "but can't you already do this or that?" is, in relation to pre-schoolers. She [a colleague who teaches the upper grades, who has specialized in language training] comes here, for example, to say, "well, I learned with my training that the children should know 16 letters by the end of grade 2". No. I don't think so. Some things can be done, I understand that, but some things can't because I don't think they are appropriate for toddlers.'

Additionally, the teachers actively foreground their expertise (i.e. beliefs as well as specific knowledge) when resisting undesirable influences. Among the most frequently articulated responses to negative environmental influences were acts of *explaining or convincing*, targeting various actors within their work environments who are compelling the reshaping of young children's education. Geraldien:

'Our supervisor, she is very young, she is still very much guided by "yes, but it must be done by the inspectorate, so we should." I say well, I dare to face the confrontation. If you have any problems, just send them to me. I can justify it. You must of course know why you don't do something, or why you do it.'

According to the respondents, such compelling actors, notably managers, colleagues teaching children in higher grades, inspectors, and parents often have insufficient knowledge of the educational needs of young children. Dyt described introductory sessions for novice parents as follows:

'Each year we start with an evening for parents. We show a PowerPoint presentation with our own pictures and I tell them a story of what we do and why ... When you explain this to parents, they see it. Parents enter the school and they don't know, but judge. And then you have to defend. You often have to defend yourself. By starting in this way, we avoid that.'

Several other responses to constraining forces within the work environment were related to mobilizing personal expertise: *defining and clarifying views*; *expressing opinions*; *inquiring/studying*. These are illustrated consecutively below.

Eef and her teammates, for instance, attempt to *define and clarify* their views on paper. As a result, not only does a clear position emerge but the teachers also learn to articulate why they work as they do. Eef observed: 'I think that we have finally reached the point where we can say things easily and we can say that this is what we

¹ In the text, we make use of the codes derived from the code tree. These codes are presented in italics. See Fig. 2 for an overview.

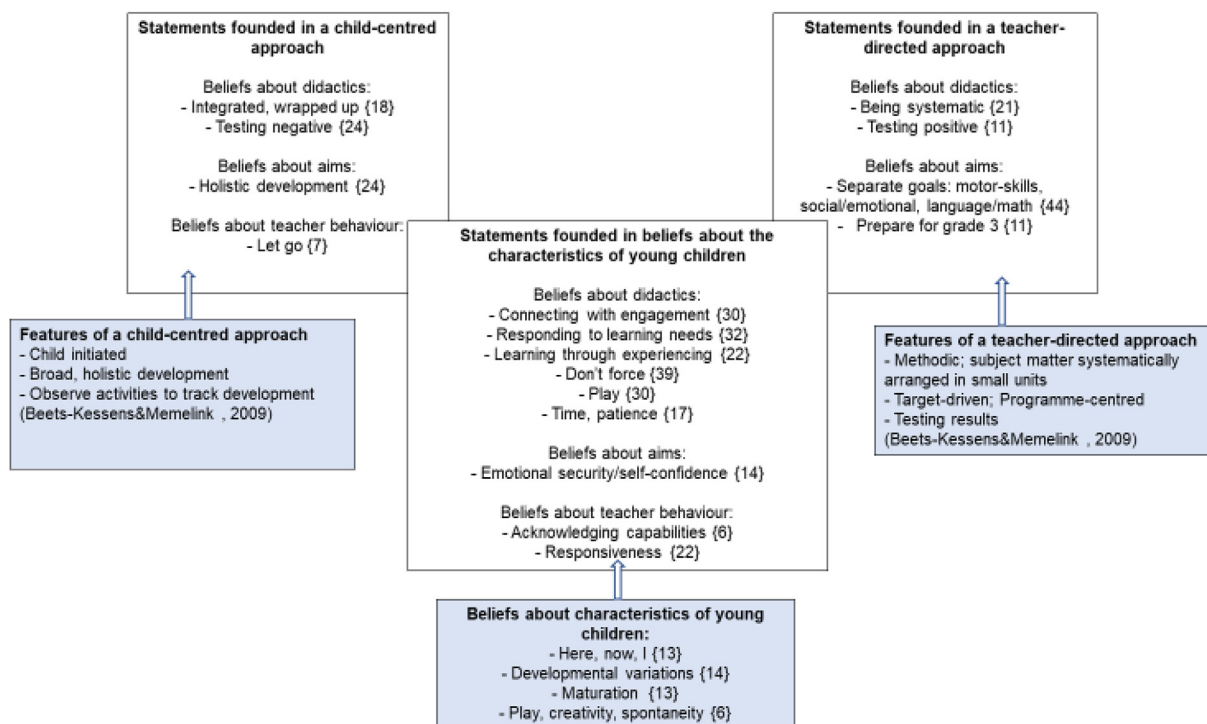


Fig. 2. The foundation of belief codes (the groundedness of the codes – the number of links to quotations – are indicated by the use of {}).

stand for'. When asked why this is important, Eef responded as follows:

'I think, that it will get done that you. . . that eh yes, hold on to how you got it is not exactly what I mean. That sounds like there should be no change. But that we can keep the ease and that we will get some kind of certainty. That we actually know that this is good for children, and how can you justify that'.

Dyt continues to express her opinions within wider school team meetings: 'I'm always talking; I have a hard time keeping my mouth shut. And I also tell my colleagues: like: "ladies, if you think that it is like that, make yourself heard"'. She also expresses her views with the managers, for instance, when she is required to write a remediation plan for children with low scores:

'The child is young and not yet ready. We'll continue with what we are doing, and it will be fine. They say, "that's your opinion," and I reply, "it's my professionalism". Yes, I'm often involved in discussions. I'm critical. And I fight. I fight to protect young children'.

Charlotte deliberately employs inquiry when a dubious appeal is made to preschool. She delves into education theory to enable her to take a well-informed position: 'When someone asks me: "why don't you want toddlers to know 16 letters?" I once again start reading and thinking about it'. By doing this, she has developed self-confidence and feels sufficiently competent to stand up for her views. Charlotte described the importance of an inquisitive attitude for the experience of her agency as follows:

I don't feel a lot of pressure because I really feel that I know why we don't want it, and I can justify why we don't want it. So, I

don't think, "oh dear, now there will be someone who orders us to teach 16 letters."

3.3. The role of the initial teacher training experience: the iterational dimension of agency

Beliefs about what constitutes 'good education' develop over the course of an individual's lifespan (Kelchtermans, 2012; Pajares, 1992). While our data endorses this finding, in this study, the teacher training programme seems to have had a profound influence on the development of beliefs. Firstly, in their responses to the question of where their beliefs stem from, the teachers often referred to both the negative and positive influences of the initial teacher training programme. Secondly, it appears that the two contrasting pedagogical visions, namely the child-centred and teacher-directed positions, were linked to the respondents' educational backgrounds. The KLOS-trained teachers in this study appeared to have stronger child-centred views than the PABO-trained respondents (see Fig. 3). Numbers should not be interpreted in Atlas.ti without further content analysis (Friese, 2014), and they were not. As shown in Fig. 3, clear differences exist between the two groups.

As shown in Fig. 4, each respondent occupies a relative position on the continuum between child-centred and teacher-directed approaches. The scores in Fig. 4 were generated by adding up the number of child-centred statements (including the assumptions linked to pre-schoolers' characteristics) and subtracting the number of teacher-directed statements. Again, while the numbers should not be taken as an absolute, the relative positions indicate that the teachers who underwent PABO and KLOS training, respectively, differ in their beliefs about ECE.

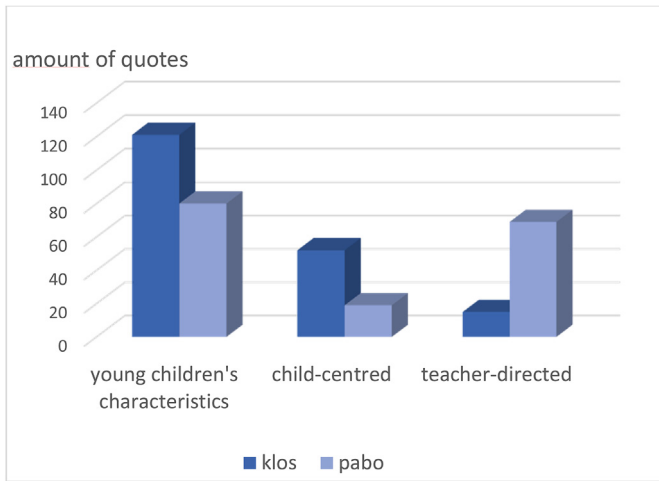


Fig. 3. Statements about beliefs relating to respondents' educational backgrounds.

These differences are confirmed by what PABO and KLOS teachers reported about differences that they experience in practice. Eef (PABO) articulated this most strongly:

'My batch differs from that of my colleagues. . . . Colleagues who have worked here for a very long time have experienced a lot of changes, of course. I have had to adjust to them, and they have had to adjust to me, and after a while I realized that we feel threatened by each other'.

Eef and her teammates succeeded in overcoming this perception of threat by discussing their differences. She noted: 'You know, at one point, we agreed that yes, we could move forward together. . . . What do we want as a team?'

It is also striking in the context of the apparent influence of the initial teacher training programme that all eight teachers with both KLOS and PABO qualifications raised a critical issue with respect to the role of the PABO in developing ECE teachers' expertise (pointing at knowledge, skills and beliefs). Referring to their own careers and to their experiences with trainees and young colleagues, they argued that novice PABO-qualified teachers lack clear ideas about how to teach young children. The PABO-trained teachers indicated that they had been able to overcome their perceived lack of knowledge and skills through teamwork with experienced KLOS-trained colleagues. Hanneke (PABO) observed: 'Well, my training was inadequate and not at all aimed at the kindergarten level. I mostly learned through practice'. Britt (PABO) stated: 'I started at this school, and KLOS-trained teachers who worked here, took me by the hand. They taught me many skills that I didn't learn during the PABO

programme'.

The respondents offered several criticisms of the PABO programme. Firstly, they argued that the programme does not specifically attend to young children's developmental characteristics and to the development of specific skills that are needed for attending to the needs of young children. Annelien (KLOS) stated: 'PABO-trained students really lack a vision on how to teach toddlers'. Charlotte (PABO) noted: 'At the moment, I am supervising a student who wants to teach children in grades 1–2, and she really encounters: "How should this actually be done? How does it work?"'

The respondents emphasized the importance of learning to reflect consciously on pedagogical choices that teachers make, arguing that sensitivity to the needs of the child must be the starting point for developing this critical skill. In their view, the PABO programme should focus more on developing these skills. Geraldien (KLOS) observed:

'It is also about seeing the child. We look at the child in the sandpit and see that this child is learning, and we respond accordingly. "Methodology" was an important subject aimed at developing those skills in our training programme. I don't think that they pay attention to that nowadays'.

A third criticism that is closely connected to the one above relates to the participants' observation that the emphasis in the PABO programme is on learning how to use standard methods and a corresponding lack of attention to skills that are aimed at through-thinking of and deciding on a specific approach for 'this child' at 'this moment'. Diet (KLOS) noted: 'I see that nowadays there is too much training in the use of methods. The teaching method is a goal in itself'. Fleur (KLOS) further noted that her interns are very attached to what 'has to be done' and do not think critically about 'what is right' to be done. Additionally, according to the teachers, a consequence of a deficiency in specific developmental knowledge about young children is that novice teachers depend more on standard methods. Charlotte (PABO) explained:

'Currently, there are too many people who end up teaching the first grades who lack knowledge about the specific needs of young children. So, I can understand these people saying: "Give me a teaching method". But if you use this method unthinkingly, you won't meet your goals. So, I think there is a deficiency in the teacher training programme'.

Priestley et al. (2015a) pointed out that teacher agency is grounded in the iterational dimension - accumulated knowledge, skills, professional beliefs, and values - that serve as repertoires, enabling teachers to select appropriate actions for dealing with dilemmas that arise in daily practice. The respondents signalled a problem on precisely this aspect in relation to the initial teacher

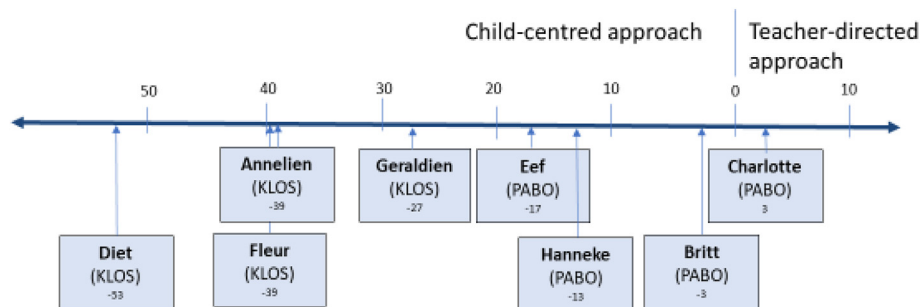


Fig. 4. Depiction of the extent of each respondent's child-centred or teacher-directed position.

training. The teachers in our study were doubtful whether the current PABO-trained generation of ECE teachers is capable of sufficiently judging the quality of their own teaching practice, with PABO-trained respondents including themselves in this appraisal. Charlotte (PABO) opined: *'I can imagine that KLOS-trained colleagues, who know so very much, can see how early childhood education may indeed have worsened. And I, of course, can't'*.

The participants were concerned about the near future when, because of retirement, the proportion of KLOS-trained teachers will quickly shrink. Consequently, a deficiency may arise in the ability to criticize external demands, which carries the risk of teachers taking these demands for granted. Hanneke (PABO) stated: *'In a few years, my older colleagues will be replaced by younger ones, who will be more tempted to do what is demanded because they simply don't know what is right'*.

3.4. Quantitative results on the contribution of the initial teacher training programmes to the development of ECE teachers' expertise

The small sample of teachers in the qualitative study yielded insights into their lived realities, enabling us to explore similarities and differences between them but did not allow for the generalization of findings. The follow-up quantitative study enabled us to investigate the question as to what extent Dutch ECE teachers share the respondents' opinions regarding the contribution of the current initial teacher training programme to the development of ECE teachers' expertise, using a representative sample of Dutch ECE teachers. Overall, the findings of the survey endorsed the views of the eight respondents in the qualitative study regarding the shortcomings of the PABO programme in preparing trainees to teach children in the lower grades.

A large majority of the respondents assessed the quality of the PABO programme to be inadequate. Almost 79% of respondents disagreed with the statement: *'The current PABO programme prepares teacher trainees sufficiently to teach in grades 1 and 2'* (see Table 2; $M = 2.48$; $sd = 1.147$; $N = 245$).

Most (97%) of the participants agreed with the statement: *'The PABO programme should focus more on working with young children'*. A majority (64%) of respondents agreed completely with this

statement. This frequency distribution accords with expectations based on the frequency distribution of the first statement, but the distribution is even more lop-sided (see Table 3; $M = 5.44$; $sd = 0.888$; $N = 245$).

A third finding is that KLOS-trained teachers avail of what they have learnt during their teacher training programme to a significantly greater extent than their PABO-trained colleagues. Only one KLOS-trained teacher compared with 21 PABO-trained teachers disagreed with the statement: *'I often apply what I learned during my teacher training'*. The results of a Mann Whitney U test showed mean ranks of 160.74 and 71.18 for teachers trained in the KLOS and PABO programmes, respectively ($U = 968$; $Z = -10.652$; $p < .000$; $r = -0.72$). This is a fairly substantial effect, with the effect size (r) being well above the 0.5 threshold for a large effect (Field, 2013). Fig. 5 shows the scores for the complete population within a boxplot.

4. Conclusion and discussion

We aimed to investigate the role that teachers' expertise plays in the enactment of teacher agency within the Dutch ECE context. We found that all respondents articulated pedagogical beliefs and that these beliefs were mostly similar and related to shared beliefs about the specific characteristics of young children. We also found that our respondents deploy their expertise (beliefs as well as knowledge) more or less actively when the enactment of their beliefs, and hence their professional autonomy, is constrained by their work environments. Furthermore, by comparing two groups of teachers with different educational backgrounds, we found that the initial teacher education programme seems to be vital in the development of specific ECE teachers' expertise: specific beliefs, knowledge and skills.

4.1. The findings vis-à-vis the ecological approach to teacher agency

4.1.1. The role of expertise for teacher agency

Considering these findings from the perspective of the ecological approach to teacher agency (Priestley et al., 2015a), we found that our data confirmed the importance of expertise in fostering

Table 2
Frequencies of satisfaction scores.

'The current PABO programme sufficiently prepares trainees to teach in grades 1 and 2'.				
		Frequency	Percent	Cumulative Percent
1	Completely disagree	52	21.2	21.2
2	Largely disagree	87	35.5	56.7
3	Somewhat disagree	54	22.0	78.8
4	Somewhat agree	42	17.1	95.9
5	Largely agree	8	3.3	99.2
6	Completely agree	2	.8	100.0
	Total	245	100.0	

Table 3
Frequencies of scores on attention to young children.

'The PABO programme should focus more on working with young children'.				
		Frequency	Percent	Cumulative Percent
1	Completely disagree	2	.8	.8
2	Largely disagree	1	.4	1.2
3	Somewhat disagree	4	1.6	2.9
4	Somewhat agree	28	11.4	14.3
5	Largely agree	54	22.0	36.3
6	Completely agree	156	63.7	100.0
	Total	245	100.0	

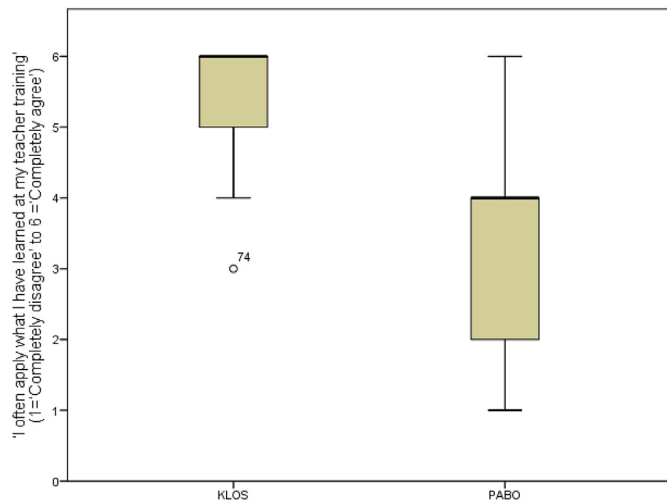


Fig. 5. Boxplot of the application scores.

agency. Our analysis illuminated how teachers' beliefs as well as their professional knowledge strengthen their agentic capacities within restricted agentic spaces (Oolbekkink et al., 2017; Priestley, Biesta, Philippou, & Robinson, 2015). The data also revealed that judicious dialogue among colleagues plays an important role in the development and articulation of shared knowledge and beliefs, confirming the importance of teachers' vocabularies and discourses in the achievement of agency (Priestley et al., 2015a). In addition, the data highlighted the importance of an inquiring attitude (Priestley et al., 2015a) that is closely related to the importance of a consciously applied theoretical framework underpinning teachers' choices (Kelchtermans, 2012). When interpreting these results in relation to agentic behaviour, it is important to bear in mind that the sample may not be representative of the Dutch ECE population as a whole because some of the respondents may have had a specific agentic attitude that informed their engagement with the [removed for peer review]. However, our intention was to investigate the role of expertise in fostering agency rather than to determine the extent to which agentic behaviour is enacted in the Dutch ECE context.

Differing from Priestley et al. (2015a), we did not attempt to investigate the teachers' future orientations by asking the question: what is ECE for? Referring to our data, we may argue that the aims under the umbrella of the teacher-directed vision broadly indicate a narrower and more short-term scope compared with those of the child-centred vision. Whereas the former approach entails a specific set of aims for facilitating learning relating to the child's (near) school career (e.g. preparing for grade 3), the latter approach is more broadly targeted at developing the child's individual potential. However, further analysis of the data on 'teachers' talk' (Biesta, Priestley, & Robinson, 2017) should be conducted before any conclusions are drawn about this dimension of teacher agency.

4.1.2. The role of teacher education for teacher agency

The study's findings highlight the importance of the iterational dimension of teacher agency, revealing that the initial teacher training experience appears to be vital in relation to this agentic dimension. The respondents indicated that novice teachers graduating from the current teacher training programme are insufficiently equipped for their task because of their lack of expertise

regarding young children. The results of the quantitative follow-up survey showed that this opinion is widely shared throughout the population of Dutch ECE teachers. The finding that KLOS-trained teachers avail of what they learned during their training programme to a greater extent than their PABO-trained colleagues endorses this view.

'Excellent subject and pedagogic knowledge, combined with accomplished levels of skills in enacting these in often complex situations' are important for fostering agency (Priestley et al., 2015a, p. 145). According to the respondents, novice teachers may not be able to judge the quality of their own education and may therefore comply uncritically with external demands. In the words of Biesta et al. (2015), they could 'lack a systematic set of professional discourses over and above those provided by the language of', in this case, the current initial teacher training programme (pp. 635–636). Thus, a limited source of specific knowledge about the young child could potentially serve to reduce teachers' agency, narrowing their repertoire of responses to dilemmas they encounter in practice, especially in the current context of a declining proportion of working KLOS-trained teachers induced by the forthcoming retirements of teachers within this group. The random sample recruited for the follow-up study reflects the already unequal ratios (51% PABO and 37% KLOS).

It is striking that the teachers themselves identified this critical issue during the interviews. This act could itself be viewed as an act of agency. The majority of the teachers were conscious of their own beliefs about teaching young children and all of them reflected on how they had developed these beliefs. An important contributing factor was the knowledge and skills acquired either during the previous teacher training programme (KLOS) or through teamwork with KLOS-trained colleagues to overcome experienced incompetence (of PABO-trained teachers). Accordingly, they were able to reflect critically on shortcomings within the current teacher training curriculum from a future-oriented perspective, as the above-mentioned resource for ensuring the quality of ECE will no longer be available because of the retirement of KLOS-trained colleagues. In light of this scenario, in addition to teachers' beliefs about teaching young children, their beliefs about their own roles and responsibilities to defend the interests of young children are pertinent. For almost all of the teachers their concerns about the future quality of ECE and their sense of duty relating to the maintenance of this quality were the reasons for their participation in the study.

A lack of attention to specific areas of ECE knowledge and skills within the current teacher education programme could also explain some of the differences in the beliefs of KLOS-trained and PABO-trained teachers, the former more inclined towards a child-centred approach than the latter. Firstly, prospective teachers need a sound theoretical base on which to develop their own professional beliefs (Vartuli & Rohs, 2009). Specific knowledge about young children's characteristics seems to be closely aligned with child-centred teaching beliefs. Moreover, the lack of specific expertise and related skills appears to increase teachers' dependency on prescribed teaching methods, which are associated with a more structured, teacher-directed approach (Gordon et al., 2019). A continuing shift towards a more teacher-directed approach in the Dutch ECE can be projected, given that KLOS-trained teachers, who played an important role in filling the knowledge gaps of novice PABO-trained teachers in recent decades, will retire and leave the stage during the next decade. This approach has traditionally been considered more appropriate for higher grades (Boland, 2015; Gordon et al., 2019).

Furthermore, according to the teachers in our study, current PABO-trained interns are focused on accomplishing their assignments rather than on critically reflecting on 'the right thing to do'. This tendency as well as the tendency to apply prescribed methods may resonate with the prevailing political climate. Iterational and projective dimensions have their roots in past cultures and structures (Priestley et al., 2015a). Times change, and discourses of performativity and accountability (Kelchtermans, 2012; Priestley et al., 2015a) that have been evident over the last two decades differ from those that prevailed in the 1970s and the early 1980s. Therefore, differences between KLOS-trained teachers and PABO-trained teachers and students could also reflect a generation effect. Teacher training programmes do not exist in a vacuum, they are part of the ecologies of teaching, and novice teachers are educated under a political regime that differs from the previous one. Thus, current accountability policies may have influenced the teacher training curriculum. A recent empirical study of early childhood student teachers conducted in Massachusetts found that 'students experience significant pressures around standardized testing and teacher quality in their own professional training' (Hara & Sherbine, 2018, p. 6). Moreover, primarily because the influence of current policy discourses was not explicitly addressed, they 'perceived powerful explicit and implicit messages from their teacher education program about relationships between standardization, compliance, and performing the role of a "good" teacher' (p.7).

4.2. Implications for practice

Agreeing with the idea that 'any educational institution should cultivate learners' capacity for active and agentic learning' (Lipponen & Kumpulainen, 2011, p. 812), the results raise some uncomfortable issues concerning the influence of the current initial teacher training programme that require further exploration and discussion. Firstly, as scholars have recently advocated (Oenema-Mostert, 2012; Boland, 2015), it seems important to (again) reconsider the attention on specific ECE-related knowledge and skills within the current Dutch teacher training programme. Kelchtermans (2007) indicated the important role of teacher education when it comes to prepare novice teachers for the complex reality of teaching and, especially, in responding in a professional manner to the prevailing performativity/accountability discourse, as well as to the important role of a clear and specific knowledge-base to this end (Kelchtermans, 2009). Moreover, Gordon et al. (2019) found that, also when external directives are received positively, specific expertise is required to implement proposed innovations in a thoughtful way that supports children's learning, as intended.

The empirical work of Fukkink et al. (2019) showed the important role that teacher education can play in the development of specific ECE interaction skills and professional reflection skills. Besides attention to knowledge and skills, more attention should be paid to the development of ECE teachers' beliefs. Since the ECE context differs from the context of higher educational levels, ample time is required to develop specific ECE beliefs by creating rich opportunities for experiences in the ECE context that produce episodic memories, which can then serve as templates for teachers' prospective practices (Nespor, 1987), and by reflecting on these experiences (Vartuli & Rohs, 2009).

Further investigations on the ideas that novice teachers have about appropriate ECE practices are therefore necessary. A study

that examines the extent to which different teacher training institutes succeed in imparting specific ECE-related knowledge and skills and in fostering students' beliefs about teaching young children, showing how the institutes succeed in this, would be salient. In addition, induction programmes and later professional development should be highly considered.

Moreover, Priestley et al. (2015a) have argued convincingly on the importance of the projective dimension as a moral compass for reflections and investigations. Thus, questions we deem important (as we ourselves are engaged in the field of teacher training in the Netherlands) are as follows: To what extent does the current initial teacher training programme scaffold this projective dimension of teacher agency? How often do we ask the question 'what is education for?' (Priestley et al., 2015a). Are we able to create sufficient opportunities to discuss these questions amongst ourselves as lecturers within professional dialogues? Are we actually *aiming for agency*?

Perhaps the following questions are even more important. As institutes, are we able to engage critically with the current political climate that also strongly influences our educational practices? To what extent does our curriculum reflect the performativity discourse? We recognize the tensions experienced by students grappling with two different messages that are evidently conveyed to them: develop your own beliefs on the basis of theoretical inputs and practical experiences within your internships, but also deliver assignments that meet our criteria, and do this on time. Under the current pressure of accreditation and public scrutiny, can we successfully avoid the pitfall whereby the students are 'used' to prove the quality of our institutes for us? (Apple, 2001). To what extent are we as lecturers able to act in an agentic manner, and in doing so, to serve as role models for student teachers?

While acknowledging this influence of current policy discourses on teacher training programmes, Hara and Sherbine (2018) explored an alternative approach. Aimed at fostering agency, they showed how 'episodic visioning' can help students by 'concretizing beliefs and keeping these beliefs at the fore despite a variety of essentializing and reductive pressures in education' (p. 17). Our results elucidate that when aiming for the agency among early childhood teachers, fostering beliefs is important as part of the development of their professional expertise. In addition to this, our study highlights the importance of thorough and specific pedagogical knowledge and skills.

Funding

We did not receive any specific grant from funding agencies within the public, commercial, or not-for-profit sectors for this study.

Author statement

There are no potential influences that may undermine the objectivity, integrity or perceived conflict of interest of the publication of this manuscript.

Declaration of competing interest

There is no actual or potential conflict of interest that could inappropriately influence, or be perceived to influence, our work.

Appendix A

Table A1
Belief codes for young children's characteristics, with definitions and exemplar quotes

Codes	Definitions	Examples
Beliefs about the characteristics of young children (YC)		
	Quotes expressing beliefs that:	
Here, now, I ...	YC have limited capabilities of disengaging from the here and now and from their own perspectives and emotions.	Annelien: 'There is, of course, a high level of egocentrism within this age group'.
Developmental variations	YC demonstrate developmental variations individually (in different developmental areas) which differ between children within the same age group.	Britt: 'You can see interest and disinterest in certain developmental areas. There are a lot of fluctuations'.
Maturation	The YC is seen as essentially 'other' associated with stages of physical and neurological development.	Fleur: 'For example, auditory synthesis; they want me to practice that, but their brains are not yet ready for that'.
Play, creativity, spontaneity	Typical features of YC behaviour are play, creativity, fantasy, and the need to move.	Charlotte: "This age group, you know, they are just spontaneous and enthusiastic."

Appendix B

Table B1
Further belief codes, with definitions and exemplar quotes and associations (a few codes lacking associations were omitted).

Codes	Definitions	Examples	Associated with:
Beliefs about didactics			
	Quotes that express:		
Connecting with engagement.	The importance of connecting with interests, life-worlds, actuality, and engagement.	Annelien: 'I think that good education for young children means that you connect as much as you can with their experiences and emerging curiosities'.	Young children's characteristics: Here, now, I ...
Responding to learning needs;	The importance of responding to individuals' learning needs.	Britt: 'That is what I like so much about early childhood education as it used to be. You could serve the children individually'.	Young children's characteristics: Developmental variation
Integrated, wrapped up.	A preference for offering integrated learning content as part of meaningful activities.	Dyt: 'So, it is far more in conjunction here; it is not separated, like "oh now we do this lesson for a while". It is much more interrelated'.	Child-centred approach Holistic development
Learning through experiencing	The importance of learning through experiencing: seeing, feeling, doing, and being immersed in experiences.	Fleur: 'I mean, in the playroom, they go through the hoop and stand next to it. Then they experience it with their body.'	Young children's characteristics: maturation
Don't force	Imposed learning activities will not work. Starting from child-centred initiatives works better.	Eef: 'And good education is that [in which] they are allowed to make a lot of choices by themselves'.	Young children's characteristics: Here, now, I ... /Maturation/ Developmental variations
Being systematic	Methodical, target-driven education.	Charlotte: 'We use the IGD method for that, and we say that we will now approach this small group of children, for example, children whose language skills are weak, strong, or in the middle'.	Teacher-directed approaches Methodical
Play	The importance of play.	Annelien: 'I think that playing and learning are very closely linked because you learn a lot from playing. You learn to interact, deliberate, and share'.	Young children's characteristics: Play, creativity, spontaneity
Time, patience	The importance of being patient and allowing time to learn.	Geraldien: 'Sometimes you must soak it in for a while, and then it could well be that three weeks later it comes to you like, "oh yes!" And then they understand'.	Young children's characteristics: Developmental variation/maturation
Testing negative	Standardized testing on separate skills is not appropriate or is even harmful.	Annelien: "The disadvantage is that there is a chance that the child gets frustrated and actually that you yourself get frustrated too."	Child-centred approach: Tracking of holistic development
Testing positive	The use or benefits of standardized testing of separate skills.	Eef: "We now test only in grade 2; halfway through grade 2. And the children who fail are tested again at the end of the year. That works out well. Yes, that works out well'.	Teacher-directed approach: Testing results
Beliefs about aims			
	Quotes in which:		
Holistic development	Multiple goals are addressed in conjunction.	Fleur: 'I strive to explicitly name all of the qualities that they individually possess'.	Child-centred approach: Broad development
Motor skills	Motor skills are mentioned as separate goals	Geraldien: 'That's important. First, work on the motor skills'.	Teacher-directed approach Target-driven/small units
Social/emotional goals	Social and emotional goals are mentioned as separate goals	Fleur: 'Yes, how children have to deal with each other; that's something you can only learn at school with more children'.	
Language/maths goals	The teaching goals of language or maths are mentioned as separate goals.	Hanneke: 'The preconditions for reading and maths are rather important'.	
Emotional security/self-confidence	Emotional security and self-confidence are indicated as goals.	Geraldien: 'Good education begins, for me, with ... a child comes to school with pleasure, feeling secure'.	Young children's characteristics: maturation
Prepare for grade 3	The importance of preparing children for grade 3 is described as a target.	Charlotte: 'In grades 3/4, they are expected to work behind a table, to sit still, you know, to be quiet. That is different in kindergarten. So, we work on that'.	Teacher-directed approach: Programme-centred

Table B1 (continued)

Codes	Definitions	Examples	Associated with:
Beliefs about teachers' behaviour (-> related to didactics)			
	Quotes that express that:		
Acknowledging capabilities	Teachers should acknowledge children's capabilities (rather than emphasizing their deficiencies).	Annelien: 'We look at children in a way, yes, we don't look at what they can't do, but at what they are able to do'.	Young children's characteristics: maturation (-> security/confidence)
Let go	Teachers should master the skill of letting go and not wanting to control everything.	Fleur: 'I don't want to restrain children. Those experiences are very important, and children can estimate what they can do themselves. When they climb up something, they will also come down again'.	Child-centred approach: child-initiated (-> Don't force)
Responsiveness	Teachers should be able to see the engagement and learning needs of the children and be able to respond to them.	Britt: 'You deal with those children every day; you see them. You know what a child needs. Then it's your job to respond to that, and this is how you teach children, playfully.'	Young children's characteristics: Here, now, I ... /Variety (-> Connect with/engagement/Responding to learning needs)

References

- Achinstein, B., & Ogawa, R. T. (2006). In)fidelity: What the resistance of new teachers reveals about professional principles and prescriptive educational policies. *Harvard Educational Review*, 76(1), 30–63.
- Apple, M. W. (2001). Comparing neo-liberal projects and inequality in education. *Comparative Education*, 37(4), 409–423.
- Bassok, D., Latham, S., & Rorem, A. (2016). Is kindergarten the new first grade? *AERA Open*, 1(4), 1–31.
- Beets-Kessens, A., & Memelink, D. (2009). *Begeleiden van jonge risicokinderen. Drie visies nader bekeken. [Guiding young children who are at risk. A closer look at three visions] amersfoort, The Netherlands: ThiemeMeulenhoff bv.*
- Biesta, G. J. J. (2007). Why "what works" won't work: Evidence-based practice and the democratic deficit in educational research. *Educational Theory*, 57(1), 1–22.
- Biesta, G. J. J. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21(1), 33–46.
- Biesta, G. J. J., Priestley, M., & Robinson, S. (2015). The role of beliefs in teacher agency. *Teachers and Teaching*, 21(6), 624–640.
- Biesta, G. J. J., Priestley, M., & Robinson, S. (2017). Talking about education: Exploring the significance of teachers' talk for teacher agency. *Journal of Curriculum Studies*, 49(1), 38–54.
- Bodrova, E. (2008). Make-believe play versus academic skills: A vygotskian approach to today's dilemma of early childhood education. *European Early Childhood Education Research Journal*, 16(3), 357–369.
- Boeije, H. R. (2012). *Analyseren in kwalitatief onderzoek: Denken en doen [Analysis in qualitative research. Thinking and doing]*. The Hague, the Netherlands: Boom onderwijs.
- Boland, A. (2015). *Het jonge kind. Lectorale rede. [The young child. Inaugural address]*. Amsterdam: Hogeschool iPabo.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Campbell-Barr, V. (2018). The silencing of the knowledge-base in early childhood education and care professionalism. *International Journal of Early Years Education*, 26(1), 75–89.
- Creswell, J. W. (2013). *Qualitative inquiry and research design. Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Delaney, K. K. (2018). Looking away: An analysis of early childhood teaching and learning experiences framed through a quality metric. *Contemporary Issues in Early Childhood Education*, 19(2), 167–186.
- Evetts, J. (2013). Professionalism: Value and ideology. *Current Sociology*, 61(5–6), 778–796.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. London: Sage Publications.
- Friese, S. (2014). *Qualitative data analysis with ATLAS. ti*. London: Sage Publications.
- Fukkink, R., Jilink, L., Op den Kelder, R., Zeijlman, K., Bollen, I., & Koopman, L. (2019). The development of interaction skills in preservice teacher education: A mixed-methods study of Dutch pre-service teachers. *Early Childhood Education Journal*, 47, 321–329.
- Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York: Teachers College Press.
- Gallant, P. A. (2009). Kindergarten teachers speak out: 'Too much, too soon, too fast!' *Reading Horizons*, 49(3), 201–220.
- Goorhuis-Brouwer, S. (2014). *Peuters en kleuters onder druk. De ziekmakende effecten van de toetscultuur. [Toddlers and pre-schoolers under pressure. The pathogenic effects of the test culture]*. Amsterdam: SWP.
- Gordon, R. A., Sosinsky, L. S., & Colaner, A. (2019). Directors' reports about program-wide pedagogical approaches: Using institutional theory in a mixed methods study of Chicago-area centers serving 3- and 4-year-old children. *Early Childhood Research Quarterly*, 49, 1–17.
- Hara, M., & Sherbine, K. (2018). Be [com]ing a teacher in neoliberal times: The possibilities of envisioning for resistance in teacher education. *Policy Futures in Education*, 16(6), 669–690.
- Janssen-Vos, F. R. (2012). *Baanbrekers en boekhouders: Herinneringen aan 50 jaar kleuters. [Pioneers and bookkeepers. Memories of 50 years of kindergarten]*. Assen, the Netherlands: Koninklijke Van Gorcum.
- Kelchtermans, G. (1994). *De professionele ontwikkeling van leerkrachten basisonderwijs vanuit het biografisch perspectief [The Professional Development of Primary School Teachers from a Biographical Perspective]*. Leuven, Belgium: University Press.
- Kelchtermans, G. (2007). Teachers' self-understanding in times of performativity. In L. F. Deretchin, & C. J. Craig (Eds.), *International research on the impact of accountability systems. Teacher Education Yearbook XV* (pp. 13–30). Lanham, MD: Rowman & Littlefield.
- Kelchtermans, G. (2009). *Gekoesterde kwetsbaarheid als professionele deugd. Verhalende reflecties over goed leraarschap. [Cherished vulnerability as a professional virtue. Narrated reflections on good teaching]*. Lecture May 20 mei 2009. Driebergen, the Netherlands: NIVOZ.
- Kelchtermans, G. (2012). De leraar als (on)eigentijdse professional. Reflecties over de 'moderne professionaliteit' van leerkrachten. *[The teacher as a (non) contemporary professional. Reflections on the 'modern professionalism' of teachers]*. A report commissioned by the Dutch Education Council. Leuven, Belgium: Centrum voor Onderwijsbeleid-, vernieuwing en lerarenopleiding -KULeuven.
- Lipponen, L., & Kumpulainen, K. (2011). Acting as accountable authors: Creating interactional spaces for agency work in teacher education. *Teaching and Teacher Education*, 27(5), 812–819.
- Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. College Park, US: Alliance for Childhood.
- Minnaert, A. E. M. G., & Meijer, W. (2018). Van "ieder voor zich", via samenwerken, op weg naar coöperatief werken in de onderwijsketen. [From "each for themselves" through collaboration on the path to working cooperatively within the education chain]. *Orthopedagogiek: Onderzoek en praktijk*, 57(3–6), 136–142.
- Moomaw, W. E. (2005). *Teacher-perceived autonomy: A construct validation of the teacher autonomy scale. Dissertation*. Pensacola, FL: University of West Florida.
- Moss, P., & Dahlberg, G. (2008). Beyond quality in early childhood education and care—languages of evaluation. *New Zealand Journal of Teachers' Work*, 5(1), 3–12.
- Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies*, 19, 317–328.
- Oenema-Mostert, I. (2012). *De opdracht voor het onderwijs aan jonge kinderen. Een dynamische visie op ontwikkeling. [The duty for the education of young children. A dynamic vision on development]*. Lectorale rede [Inaugural address] Leeuwarden: Stenden Hogeschool.
- Onderwijsraad. (2013). *Leraar zijn. [Being a teacher]*. (Verkenning No. 20130027/1029). Education Council. The Hague: the Netherlands: Onderwijsraad.
- Onderwijsraad. (2010). *Naar een nieuwe kleuterperiode in de basisschool. [Towards a new preschool section in primary school]*. Education council. The Hague: the Netherlands: Onderwijsraad.
- Oolbekkink-Marchand, H. W., Hadar, L. L., Smith, K., Helleve, I., & Ulvik, M. (2017). Teachers' perceived professional space and their agency. *Teaching and Teacher Education*, 62, 37–46.
- Oosterhoff, A., Oenema-Mostert, I., & Minnaert, A. (2019). Ruimte voor autonomie. De mediërende rol van autonomie in de relatie tussen managementstijl en de werkbeleving van leerkrachten [Room for autonomy. The mediating role of autonomy in the relationship between management style and teachers' job perception]. *Pedagogische Studietoën*, 96, 171–189.
- Oosterhoff, A., Oenema-Mostert, I., & Minnaert, A. (2020). Constrained or sustained by demands? Perceptions of professional autonomy in early childhood education. *Contemporary Issues in Early Childhood*, 21(2), 138–152.
- Osgood, J. (2006). Deconstructing professionalism in early childhood education: Resisting the regulatory gaze. *Contemporary Issues in Early Childhood*, 7(1), 5–14.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307–332.
- Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational*

- Research Quarterly*, 29(1), 38–54.
- Priestley, M., Biesta, G. J. J., Philippou, S., & Robinson, S. (2015). The teacher and the curriculum: Exploring teacher agency. In D. Wyse, L. Hayward, & J. Pandya (Eds.), *The Sage handbook of curriculum, pedagogy and assessment* (pp. 78–91). London: Sage Publications.
- Priestley, M., Biesta, G. J. J., & Robinson, S. (2015a). *Teacher agency. An ecological approach*. London: Bloomsbury Academic.
- Priestley, M., Biesta, G. J. J., & Robinson, S. (2015b). Teacher agency: What is it and why does it matter? In R. Kneyber, & J. Evers (Eds.), *Flip the system: Changing education from the bottom up* (pp. 1–11). London: Routledge.
- Ranz-Smith, D. J. (2007). Teacher perception of play: In leaving no child behind are teachers leaving childhood behind? *Early Education & Development*, 18(2), 271–303.
- Robson, J. K., & Martin, E. (2019). How do early childhood education leaders navigate ethical dilemmas within the context of marketised provision in England? *Contemporary Issues in Early Childhood*, 20(1).
- Roeleveld, J. (2003). *Veranderingen in het kleuteronderwijs. Ontwikkelingen in en effecten van het kleuteronderwijs op de cognitieve en niet-cognitieve ontwikkeling van oudste kleuters tussen 1994 en 2000* [Changes in early childhood education. Developments in and effects of early childhood education on cognitive and non-cognitive development of older toddlers between 1994 and 2000]. SCO-report nr. 681. Amsterdam: SCO-Kohnstamm Instituut.
- Stremmel, A. J., Burns, J., Nganga, C., & Bertolini, K. (2015). Countering the essentialized discourse of teacher education. *Journal of Early Childhood Teacher Education*, 36(2), 156–174.
- Stroet, K., Opendakker, M. C., & Minnaert, A. (2013). Effects of need supportive teaching on early adolescents' motivation and engagement: a review of the literature. *Educational Research Review*, 9, 65–87.
- Vähäsantanen, K., & Eteläpelto, A. (2015). Professional agency, identity, and emotions while leaving one's work organization. *Professions and Professionalism*, 5(3), 1394–1410.
- Van Oers, B. (1997). Onderwijsvisies en de vernieuwing van het onderwijs aan jonge kinderen: Aanzet tot een discussiekader. [Pedagogical beliefs and the renewal of education for young children: Introducing a discussion framework]. In B. van Oers, & F. Janssen-Vos (Eds.), *Visies op onderwijs aan jonge kinderen. [Beliefs about early childhood education]* (pp. 1–14). Assen, the Netherlands: Van Gorcum.
- Van Oers, B. (2013). Educational innovation between freedom and fixation: The cultural-political construction of innovations in early childhood education in The Netherlands. *International Journal of Early Years Education*, 21(2–3), 178–191.
- Vartuli, S., & Rohs, J. (2009). Early childhood prospective teacher pedagogical belief shifts over time. *Journal of Early Childhood Teacher Education*, 30(4), 310–327.
- Voorwinden, R. (2009). Kleuters mogen geen kleuters meer zijn. [Pre-schoolers are no longer allowed to be pre-schoolers]. *Het Onderwijsblad 2009*, 19 (28 Nov. 2009).
- Wildt-Dienske, E. de, & Wildt, L. de (2013). *Zwartboek kleuters in de knel [Black book: Pre-schoolers under pressure]. The Netherlands: Werkgroep en steungroep kleuteronderwijs*. Retrieved at 23-08-2019 from <https://www.wsk-kleuteronderwijs.nl/wp-content/uploads/2013/04/Zwartboek-Kleuters-in-de-knel-april-2013-LR.pdf>.