Journal of Teacher Education and Educators
Volume 14, Number 3, 2025, 240 – 258
Original Article

Navigating Dual Roles: Professional Competence and Agency among School-Based Subject Teacher Educators

(Received on June 17, 2025 – Accepted on December 25, 2025)

Eliisa Vähä[1], Riikka Hirvonen[2], Kari Sormunen[3] and Lasse Eronen[4]

Abstract
School based subject teacher educators (SBSTE) work at the intersection of teaching and teacher education. This study explores Finnish SBSTEs self-perceived professional competences and professional agency in their dual roles, based on cross-sectional survey data (N=118) from university teacher training schools. Using subject-centered socio-cultural framework, the findings show that professional competences, especially content and contextual ones, were perceived as significantly stronger in the role of teacher than that of teacher educator. Similarly, professional agencies, particularly being heard and exerting influence at work, were weaker in the educator role. While SBSTEs' higher professional competence often supported stronger agency, commitment to the work did not require deep contextual knowledge. A postgraduate degree, mentoring education, or work experience influenced perceived agency only in some cases, whereas the professional role made a difference in most cases. These role-based differences can be interpreted through socio-cultural workplace conditions, traditions of autonomy, and power dynamics, as supported by both earlier international studies and current findings.

Keywords: teacher education, teacher training schools, school-based teacher educators, professional competence, professional agency

Introduction

School-based teacher education offers opportunities to align teacher training closely with classroom experiences fostering the integration of practical skills with theoretical knowledge (Korthagen et al., 2001; Korthagen, 2010). For example, in Finland, the multidimensional role of subject teacher in the teacher training school as a teacher and teacher educator is reflected in their daily work and professional agency in many ways. Unlike a typical teacher, teacher training schoolteachers have a significant number of tasks to perform as a teacher but also as a teacher educator (Vähä, 2025). Their job description requires three different areas of practice. On the one hand, there are two levels in the school context (secondary school and upper secondary school), but on the other hand, also a third level in the framework of teacher education, including teaching practice. Considering this, instead of mentor teacher, a better term to describe subject teachers working in training schools is "school-based subject teacher educator" (SBSTE).

In understanding the teaching profession, one of the key concepts is competence. Competence is more than qualification. Qualification, referring to the professional skills required by the job and defined

[1] Corresponding author, University of Eastern Finland, FINLAND, eliisa.vaha@uef.fi, ORCID: 0009-0007-0788-9518
[2] University of Eastern Finland, FINLAND, riikka.hirvonen@uef.fi, ORCID: 0000-0001-5348-4801
[3] University of Eastern Finland, FINLAND, kari.sormunen@uef.fi, ORCID: 0000-0002-4620-3458
[4] University of Eastern Finland, FINLAND, lasse.eronen@uef.fi, ORCID: 0000-0002-7773-6476

by the employer, can be seen as the eligibility criteria for teachers that have served and continue to serve as a license to teach, validating teaching skills. However, qualifications do not necessarily guarantee the employee's competence in performing their work. Competence as a concept refers to professional skills from the employee's perspective — the readiness of the employee to perform their tasks and to meet the demands of each specific situation (Carr, 2005).

The concept of professional agency is a process whereby the knowledge and skills, that is, competences and resources, of individual actors are combined to achieve shared goals, and to shape the future of the (work) community (Giddens, 1984). In the framework of professional agency, for example Billet (2006), emphasizes a humanistic tradition where the work environment can function as a resource as well as a constraint for agency. The socio-cultural and material conditions of the workplace build workers' understanding of their professional agency. Professional agency and human actions are always connected with structural factors of the work environment, such as rules and resources (Giddens, 1984; Priestley et al., 2015). They are also always shaped by cultural, historical, and social structures (Lasky, 2005). The professional agency is exercised through participating in decision-making, expressing opinions, having capacity and competences, as well as participating in or affecting work practices or career (Harteis & Goller, 2014; Toom et al., 2015; Vähäsantanen et al., 2019). Individuals may also have a common belief concerning their collective capability to achieve goals as an organization (Bandura, 2006).

Strong professional agency includes the ability to choose ways of working and to look for alternative solutions. It enables professional development of the teacher as well as the development of the whole school as a work community (Eteläpelto et al., 2013; Priestley et al., 2015). The SBSTE's professional agency is perceived, for example, as efforts at making choices and acting deliberately in ways that make a difference, and as a possibility of expressing their opinions and participating in the decision-making process concerning their work in the social context of the school and teacher education environment. Agency refers to activity and initiative, as well as involvement and experience in managing a person's own work and life, as well as real opportunities for exerting influence (Pyhältö et al., 2014; Vähäsantanen, 2019).

The common understanding of teachers as active agents of school development has long been central to educational practices and policies (Toom et al., 2015). Previous research has primarily focused on the development of teachers' professional agency (see, e.g., Maaranen et al., 2010; Maaranen et. al., 2025; Van de Heijden et al., 2015). Nevertheless, research on teachers' professional agency remains relatively limited, particularly within the context of subject teachers, although some studies—such as Mutlu's (2017) study on language teachers' agency—have begun to address this gap. University-based teacher educator agency has been studied, for example, by Hökkä et al. (2012; 2017) and Vu (2020). However, exploring the professional agency of SBSTEs within the specific context of teacher training schools offers valuable insight that complement and extend existing research (see, e.g., Cochran-Smith et al., 2022; Imants & Van der Val, 2020). SBSTEs give subject student teachers one example of how to work as a subject teacher in the significant early stages of their professional development. Thus, understanding SBSTEs' professional agency opens the base for future subject teachers to start building their own professional agency. This study focuses on school-based teacher educators' (SBSTEs) perceptions of their professional competences and agency in their dual roles as teachers and teacher educators within the context of the teacher training schools in Finland.

Theoretical Framework and Literature Review

Subject-centered socio-cultural approach and SBSTES' role-based professional agency

Teachers' influence in their work can be understood by distinguishing three analytically separate but interrelated concepts: professional competence, self-efficacy, and professional agency. Professional competences refer to the knowledge and skills required for effective performance in professional tasks

(Carr, 2005). Self-efficacy, in turn, concerns individuals' perception of their capability to use and fulfill these competences in specific situations, contexts and tasks (Bandura, 2006). *Subject-centered sociocultural approach* to professional agency means that professional agency is understood as a combination of the socio-cultural conditions and context of the workplace and the subject's individual ideas of professional identity, competences, and work history (Eteläpelto et al., 2013; Hökkä et a. 2017; Priestley et al., 2015; Roumbanis et al., 2023; Toom et al., 2015). The following sections elaborate on the theoretical foundations and the interrelationships of these concepts.

Professional agency is exercised when professional subjects influence their work, make choices, and take stances in ways that shape their work and professional identities (Ruohotie-Lyhty & Moate, 2016). Professional agency is especially important when trying to understand how teachers shape the possibilities to change their work practices in specific professional roles (Hökkä et al., 2017). The concept of professional role can be understood as a personal interpretation of acting in a specific position, based on a systematically organized and transferable knowledge and on expectations from the working environment (Lunenberg et al., 2014). As concepts, professional roles, and professional agency are intertwined and can be viewed as a two-way process. Acting in various professional roles is shaped by previously learned patterns or traditions. Conversely, a given professional agency can be chosen in order to achieve a certain role and carry out certain activities (Davey, 2013; Lasky, 2005; Hökkä et al. 2017).

Work environment as a socio-cultural context is a ground for collective professional agency. Collective agency is determined by the historical nature of social practices (Archer, 2000). Billet (2006) emphasizes that understanding human professional agencies and cultural change requires careful attention to individuals' agency, intentionality, identity, and subjectivity within their professional roles. Individuals exercise agency in specific roles by choosing what kind of issues and problems they will tackle, and this has consequences on how they develop their own work and, eventually, how the work organization develops. A persons' own values, ethical commitments, and ideals have a strong influence on the choices they make as an employee, the direction in which they develop their work, and the ideas they prioritise in their work (Biesta et al., 2015; Eteläpelto et al., 2013; 2015). Commitment is an important aspect when discussing professional agency. Agency involves engagement in and commitment to advancing what is meaningful for workers and determining which achievements are important to them (Archer, 2000).

Professional agency is a dynamic, context-dependent, and processual concept (Imants & Van der Val, 2020). Subject-centered socio-cultural approach also emphasizes reflective professional identity and how it engages ethical commitments, ideals, motivations, and goals, as well as areas of interest (Eteläpelto, 2017; Hökkä et al., 2017). The concept of professional identity and thus of the practice of professional agency is closely intertwined with a sense of temporal continuity: agency develops over time through past experiences (Emirbayer & Mische, 1998). Professional agencies can manifest either resistance or adherence to social expectations and role norms (Hitlin & Elder, 2007).

Professional agencies do not rely only on individual competences or self-efficacy but are also shaped by institutional and organizational structures and power relations (Giddens, 1984; Priestley et al., 2015). Opportunities to be heard, role expectations, decision-making practices, and the distribution of resources can either support or constrain teachers' agency (Lasky, 2005; Vähäsantanen et al., 2019). For SBSTEs, these factors are particularly salient because their work takes place at the intersection of two institutional contexts—the school and the university—where differing expectations and organizational practices may strengthen or weaken their agency as teacher educators.

Professional agency consists of subjects' interests and identities and is shaped by historical nature of social practices, past patterns (Emirbayer & Mische, 1998; Biesta et al., 2015), which are not always goal-oriented or appropriate (Eteläpelto et al., 2013). Tradition forms an important part of teachers' narrative and discursive professional identities (Beauchamp & Thomas, 2009; Rodgers & Scott, 2008).

Teachers' professional agency operates within a multi-layered work environment, influenced by socio-cultural conditions and interactions with students, colleagues, and parents (Toom et al., 2015). Tradition creates stories about "ideal teacherhood", and it is strongly related to the rational idea of what kind of a teacher or a SBSTE one *should* be. Goodwin & Kosnik (2013) have suggested that SBSTEs have built their professional identity and agency, especially at the beginning of their careers, on the experience of what they have observed about memorable previous teachers or mentor teachers in the past, particularly if they have limited education in mentoring. This has strengthened the permanence of SBSTE perceptions of their own professional identity, especially as the teacher educator.

The subject-centered sociocultural approach to professional agency (Eteläpelto et al., 2013; Hökkä et al., 2017) forms the theoretical foundation of this study. Accordingly, professional agency is understood as a dynamic interplay between the socio-cultural conditions and context of the workplace, and individual's perceptions of professional identity, being heard and influenced at work, commitment and professional development, as well as competences and work history.

The relation between professional competences and professional agencies

Teachers' perceptions of their self-efficacy have a significant impact on how and what kind of professional agency they practice. Weak self-efficacy is related to low agency and high self-efficacy to active agency. The core competences of teacher educators vary between different countries, and they are based on historical, structural, or cultural issues, for example, in terms of competences in teaching, research, education, and professional growth (Goodwin & Kosnik, 2013). However, SBSTEs´ contextual competence is also divided in accordance with two different socio-cultural work environment conditions: school and university. SBSTEs are also adult educators who need to understand not only pupils, but also the way university students develop and learn, and how they define studying and learning (Smith, 2005).

Employees' competences define the guidelines for the professional agency of the person or the working community. The competences of teacher and teacher educator are partly same and partly different. However, they are strongly culturally linked. Teacher competences are widely examined and reported, for example, in the multidimensional adapted process (MAP) model of teaching (Metsäpelto et al. 2020). The MAP model combines the full spectrum of teacher competencies, such as subject and pedagogical knowledge, pedagogical content knowledge, contextual competences, and personal orientations, as well as wellbeing and competences in interaction and communication.

Based on previous studies (Goodwin & Kosnik, 2013; Koster et al., 1996; Lunenberg et al., 2014), the competences based on the teacher educator role can be summarized as five areas: (1) personal knowledge: autobiography and philosophy of teaching; (2) contextual knowledge: understanding learners, schools, and society; (3) pedagogical knowledge: content, theories, teaching methods, and curriculum development; (4) sociological knowledge: diversity, cultural relevance, and social justice; and (5) social knowledge: cooperative, democratic group processes, and conflict resolution. In this study, we focus on the teacher and teacher educator competences outlined above.

Context of the study and research questions

In the Finnish teacher education system, pedagogical training takes place in university teacher training schools, known as Normal schools. These ten specialized teacher training schools operate under the Faculties of Education and are dedicated to teacher training. Teachers in these schools engage in educational and pedagogical development through various projects initiated by the National Board of Education, the European Union, and university research initiatives (Maaranen & Stenberg, 2020; Tirri, 2014). Since 2001, subject and class teachers at teacher training schools in Finland have had the opportunity, and have been strongly encouraged, to participate in a three-module mentoring program organized by the Finnish teacher education network, eNorssi. Participation has steadily increased, and

a significant part of novice teachers have taken part at least in the program first module since 2009. The program comprises approximately 20 ECTS credits in total. The core contents of the modular training include themes related to professional identity, the philosophy of mentoring, and supporting professional growth (Vähä ym., 2025; Mouhu, 2021). Finnish university teacher training schools have a long-standing tradition of professionalism and hold a prestigious position within the education system.

To qualify as a subject teacher in Finland, one must complete a 60 ECTS pedagogical program. The curriculum, designed under the direction of university educational departments, integrates theoretical and practical components (Stüber & Jyrkiäinen, 2020; Maaranen et al., 2025). Approximately one-third of these studies consist of teaching practice, primarily conducted in university teacher training schools. For instance, at the University of Eastern Finland, teaching practice comprises 21 weeks of the academic year, nearly two-thirds of the entire school year. During these practice periods, subject teachers in teacher training schools simultaneously guide both their students and student teachers (Chung, 2023; Maaranen & Stenberg, 2020; Ropo et al., 2020; Tirri, 2014). These teachers play a crucial role in subject teacher education by mentoring student teachers and fostering their professional development.

The professionalism of Finnish subject teachers is deeply rooted in strong autonomy, with school-level decision-making regarding educational, social, and developmental matters predominantly in the hands of teachers (Salokangas et al., 2020). The first subject teacher training school was established in 1864, and for over a century, these institutions—previously called normal lyceums—were responsible for subject teacher students' pedagogical studies and teaching practice (Vähä, 2016).

Workplace structures, community norms and available resources contribute to the perpetuation of social practices, including both established and outdated methods. These structural elements embed forms of power and control (Giddens, 1984). In this context, professional agency can be conceptualized as the capacity to act intentionally and effect change,"power to". Conversely, agency may also manifest as hierarchical authority, "power over", where decision making is concentrated in the hands of a few (Eteläpelto et al., 2011)

In teacher training schools, the negotiation between individual professional autonomy and collective decision-making occurs at the intersection of teacher training schools and university-based teacher education. Agency is expressed both through teachers' professional self-conceptions as professionals and their aspirations for development. For example, if teachers feel that they can have enough influence on their own work in specific role, they may undertake very demanding teaching experiments (Pappa et al., 2017). Correspondingly, the limited possibilities for influence lead to very limited opportunities for shaping one's work. Due to limited possibilities to influence, it is difficult to cross professional boundaries and evolve as a professional, even when temporary opportunities are offered for this purpose (Collin et al., 2015).

To enact lasting change in work culture or practices, professionals must exercise some form of power – whether to be heard, to influence or to initiate transformation (Eteläpelto et al., 2011). However, professional power is not unbounded; it is shaped and often constrained by the broader power relations embedded in the workplace.

A significant shift in Finnish teacher education occurred in 1973–1974, when responsibility for teacher education as a whole was transferred to universities, leading to the establishment of university-affiliated teacher training schools. As a result, didactic instruction transitioned from training school subject teachers to university lecturers specializing in educational sciences (Castren, 1974; Vuorenpää, 2003). Many former normal lyceum teachers remained in teacher training schools, focusing on mentoring during teaching practice. This reform reshaped power dynamics and posed enduring challenges for collaboration between teacher training schools and university education departments (Vähä, 2016).

Previous international research (e.g., Andreasen et al., 2019; Czerniawski et al., 2023; White et al., 2015; White & Berry, 2022) has shown that professional agency can be challenged by the cross-pressure of multiple roles and diverse stakeholders in teacher training schools. While the Finnish teacher training school system offers a unique context to examine the pronounced dual role of school-based teacher educators (SBSTEs) as both teachers and teacher educators, this phenomenon has, somewhat surprisingly, not yet been explored through the lens of professional agency. This study serves as an initial exploration and mapping of SBSTEs' professional agency and competences across professional roles of teacher and teacher educator, laying a foundation for more targeted and in-depth future research.

Research questions:

1) To what extent do SBSTEs' professional competences (e.g., in content knowledge and contextual knowledge) and sense of professional agency (e.g., commitment and influence at work) differ between the roles of teacher and teacher educator? (RQ1)
2) To what extent are SBSTEs' perceptions of their professional competences associated with their sense of professional agency? Do the associations between competences and agency differ between the roles of a teacher and teacher educator? (RQ2)
3) To what extent do SBSTEs' educational background, work experience, and acquired mentoring education contribute to their sense of professional agency in the roles of teacher and teacher educator? (RQ3)

Methodology

Data collection and participants

The data collection from Finnish SBSTEs took place between January and August 2021. A questionnaire was distributed via email to eight teacher training schools specializing in subject teacher education. To ensure comprehensive participation, the participants were contacted through email reminders. The questionnaire, composed in Finnish, targeted all SBSTEs who supervised teacher students during the teaching practice periods of the 2020–2021 academic year. Participation in the study was entirely voluntary. The researchers complied with the ethical guidelines for research in the humanities, social sciences, and behavioral sciences as established by the Finnish National Board on Research Integrity. Informed consent was obtained from all respondents upon the submission of their complete questionnaires. To facilitate informed decision-making, participants were provided with a clear explanation of the study's objectives and detailed instructions for completing the questionnaire.

The estimated total population of SBSTEs mentoring during the academic year 2020-2021 was approximately 340 teachers across the eight teacher training schools, as indicated by estimates from the school principals contacted by email. Consequently, our final sample (N = 118) represents at least one third of all SBSTEs mentoring in that year.

In terms of teacher work experience in teacher training schools, 28.8% of Finnish SBSTEs have worked up to 5 years at teacher training school. Likewise, 28.8% of them have worked there 6-15 years and 42.4% have more than 15 years' working experience as the SBSTE. 83.9% of our SBSTEs respondents have a Master's degree, and 16.1% have a licentiate or doctoral degree. Altogether 58.5% of respondents have completed at least one module of teacher training mentoring module education. The three-step mentoring module education is organized by teacher training school network (eNorssi), and education is also currently recommended for all Finnish teachers in training schools. Altogether 90.1% of SBSTEs have had some sort of mentoring education during their work career, and 9.9% of all SBSTE respondents had no education in teacher training mentoring of any kind.

The work description of the respondents varies depending on the teacher training school. All respondents worked as teacher educators. Of the SBSTEs, 24.2% worked only at a lower secondary school (classes 7-9) and 6.6% worked only at upper secondary school (classes 10-12). The majority of

respondents, 69.2%, worked both at lower and upper secondary school teaching pupils aged between 13-19 years.

Measures

SBSTEs competences as a teacher and teacher education

To evaluate how SBSTEs defined their competences concerning the knowledge base for teaching and learning as a teacher and teacher educator, the participants were requested to "Evaluate your competence in the following areas of teaching". The request was followed by a list of 24 indicators of SBSTEs' knowledge about teaching and learning in the teacher training school context, separately in the teacher and teacher educator roles (12 indicators each). These indicators were formed based on a multidimensional adapted process model of teaching (MAP), teacher competence model (Metsäpelto et al., 2020, 7), complemented by the most relevant features of teacher educator competences found in previous studies (Goodwin & Kosnik, 2013; Koster, 1996; Lunenberg et al., 2014). Each teacher and teacher educator competence were rated on a five-point scale (1=weak to 5=excellent).

Following an exploratory factor analysis and theory-based considerations, the indicators were further divided into three competence dimensions in both roles. Competence dimension of *content knowledge* included two items: as a teacher, these items were the main content objectives of the subject and subject curriculums (α= .586), and as a teacher educator, the items were pedagogical studies curriculum and the curriculums of teacher practice periods (α= .761). Competence of *pedagogical and pedagogical content knowledge* consisted of 7 items: As a teacher (α= .841), these included 7 items, such as guiding learners in specific subject, evaluation, and the use of diverse teaching methods. As a teacher educator, this dimension included 7 items (α= .842) such as supporting the development of professional identity, motivation, and supporting teacher-specific thinking. *Contextual knowledge* included 2 items, which were knowledge about Finnish school system and societal dimension of education in the teacher role (α= .786), and the knowledge about teacher education zation and societal dimensions of teacher education in the teacher education role (α= .930). Practical knowledge included only one item in each professional role and was thus excluded from further analyses. The composite scores for all constructs were created as means across the respective items.

SBSTEs professional agency

To evaluate SBSTEs image about their professional agency in the survey, respondents were asked to "Evaluate the validity of claims in the following dimensions of the professional agency", followed by a list of 18 indicators. These indicators were mostly based on former professional agency instrument created by Vähäsantanen and colleagues. Their instrument of professional agency includes three broader dimensions: Influencing at Work, Developing Work Practices, and Negotiating Professional Identity. A set of indicators covering 17 claims can be used to assess professional agency and increase understanding of the different dimensions of professional agency in working life, as well as to strengthen the professional agency of employees (Vähäsantanen et al., 2019).

In a survey for SBSTEs at the training school, the professional agency instrument was modified to suit the socio-cultural conditions of the Finnish teacher training schools. The focus of the interest was commitment and influence to work in both professional roles, teacher and teacher educator. To reach that goal, in particular, questions were selected that were related to meaningfulness and commitment of work, ownership, opportunities for influencing and being heard in a multi-level work environment, and negotiation of professional identity, namely, goal-orientation and professional development at work.

To assess professional agency, the participants we asked to rate 18 indicators on a five-point scale (1= It never applies to 5=It always applies). Using exploratory factor analysis, the 18 indicators were divided into four broader agency dimensions (*influence on work, being heard at work, commitment* and *professional development),* both in terms of teacher and teacher educator. Influence at work included

two items: involvement in the preparation of matters and decision-making processes, in separate roles as a teacher (α = .758) and as a teacher educator (α = .913). Being heard at work included items such as respondents actively expressing their own opinions and being heard at the schoolteacher (α=.601) or teacher education level (α= .804). Commitment included two items about commitment and experience of meaningfulness of work separated into both roles, teacher (α= .627) and teacher educator (α = .701). Professional development included two items: the implementation and development of professional goals at work, separately as a teacher (α = .705) and as a teacher educator (α= .686). The composite scores for all constructs were created as means across the respective items.

Background Variables

As background information, respondents were asked to inform their educational level, education in student teacher mentoring, and work experience at teacher training school. The variables were recoded as follows: self-reported level of education (0 = Master's degree, 1 = Licentiate or Doctoral degree), education in teacher training mentoring (0 = no mentoring training, 1 = completed at least one part of the three-part mentoring training), and work experience in training schools (1 = less than five years, 2 = 6–15 years, 3 = more than 15 years).

Statistical analyses

First, we examined the differences in how SBSTEs evaluate their competences and sense of professional agency as a teacher or as a teacher educator (RQ 1). The mean-level differences in competences and in the sense of professional agency between the teacher and teacher educator roles were analysed with a set of paired samples t-tests. Three composite variables represented competences (content knowledge, pedagogical and pedagogical content knowledge, and contextual knowledge) both as a teacher and teacher educator. To represent professional agency, four composite variables (influencing at work, being heard at work, commitment, and professional development) were compared in the roles of teacher and teacher educator.

Secondly, bivariate correlations were calculated to determine the linear relationship of the professional competences with the perception of professional agency (RQ2). The correlation coefficients were calculated separately for the teacher and teacher educator roles, and potential differences in the correlations across the two roles were compared using an online calculator of the Cocor package for comparing correlations (Diedenhofen & Musch, 2015).

Finally, repeated measures ANOVA was used to examine the effects of the background variables (self-reported level of education, education in mentoring, and work experience in training schools) on the perceptions of professional agency as a teacher and teacher educator (RQ3). Each dimension of professional agency (influencing at work, being heard at work, commitment, and professional development) were examined in separate models. The analysis method enabled the simultaneous examination of both roles (teacher vs. teacher educator), background variables, and their unique and interactive effects on the dimensions of professional agency. All analyses (except for comparing correlations) were conducted using IBM SPSS Statistics (29.02).

Findings

Differences in competences and professional agency between the roles

The results of paired samples t-tests for the three dimensions of competences between different SBSTEs role, teacher and teacher educator, are presented in Table 1.

Table 1
Mean Level Differences Between Competences as a Subject Teacher and a Teacher Educator

Competence	Subject teacher *M (SD)*	Teacher educator *M (SD)*	*t*(df)	*p*	Cohen's *d*
Content knowledge	4.50 (0.46)	4.03 (0.69)	7.95 (117)	< .001	0.73
Pedagogical knowledge	4.09 (0.59)	4.09 (0.43)	–0.04 (117)	.967	-0.00
Contextual knowledge	4.09 (0.70)	3.39 (0.86)	10.07 (117)	< .001	0.93

N = 118.

As can be seen from Table 1, in the role of subject teacher, competencies regarding content knowledge and contextual knowledge were, on average, assessed higher than in the role of teacher educator. In content knowledge, the difference in the means can be considered moderate (d = .73), whereas in contextual knowledge the difference was large in effect size (d = .93). On the other hand, there was no statistically significant difference in pedagogical knowledge competence between the roles.

Mean level differences between the roles of a teacher and teacher educator were also found in the dimensions of professional agency fulfilment, see Table 2.

Table 2
Mean Level Differences Between Professional Agencies as a Subject Teacher and a Teacher Educator

Agency dimension	Subject teacher *M (SD)*	Teacher educator *M (SD)*	*t*(df)	*p*	Cohen's *d*
Influence at work	3.73 (0.72)	2.90 (1.10)	8.94 (117)	<.001	0.82
Being heard at work	3.67 (0.62)	3.26 (0.81)	6.84 (117)	<.001	0.63
Commitment	4.70 (0.40)	4.68 (0.42)	0.62 (117)	.539	0.06
Professional development	4.37 (0.55)	4.27 (0.54)	2.72 (117)	.007	0.25

N=118.

On average, the sense of professional agency in the teacher educator role was significantly lower in three of the four agency dimensions compared to the same agency dimension in the teacher role. Especially in the dimension of influence at work, the difference between the means was large (d = .82). The dimension of being heard at work was assessed to be on average lower as a teacher educator than as a teacher, with a moderate effect size (d = .63). Professional development was also considered stronger as a teacher, although the effect size was small (d = .25). There was no statistically significant difference between the roles in professional commitment.

The relationship between competences and professional agency in different roles

The bivariate correlations between competences and professional agencies are presented in table below 3. Analysis of correlation results indicated, in most cases, significant positive correlations suggesting that higher professional competences were associated with higher professional agency. More specifically, when first focusing on competence and professional agency as a subject teacher, moderate positive correlations between almost all three competence dimensions and four agency dimensions were found. However, there was no statistically significant correlation between competence in contextual knowledge and agency dimension commitment. Moreover, competence in content knowledge had no significant correlation with the agency dimension of influence at work.

Table 3
Correlations Between Competences and Work Dimensions in Teacher and Teacher Educator Roles

Competences / Work Dimensions	Influencing at work	Being heard at work	Commitment	Professional development
Competence as a subject teacher				
Content knowledge	.16	.25**	.29**	.46***
Pedagogical knowledge	.27**	.31***	.32***	.49***
Contextual knowledge	.30**	.30***	.14	.23*
Competence as a teacher educator				
Content knowledge	.47***	.38***	.23*	.29**
Pedagogical knowledge	.37***	.36***	.41***	.47***
Contextual knowledge	.30***	.33***	.06	.17

$N = 118$. * $p < .05$; ** $p < .01$; *** $p < .001$.

In terms of teacher educator role, a similar overview can be seen as in the role of a subject teacher. In most cases, there was a significant, moderate positive correlation between competences and professional agency. However, as in the teacher role, there was no correlation between competence of contextual knowledge and agency dimension commitment as a teacher educator. Unlike in the role of a teacher, there was no correlation between contextual knowledge and professional development in teacher educator role either. Likewise, unlike in the teacher role, as a teacher educator, there was a statistically significant correlation between content competence and influencing at work.

When comparing the correlation coefficients between the roles, the difference was statistically significant only regarding the correlation between content competence and influence at work: the moderate correlation $r = .470$ in the teacher educator role was significantly higher ($p = .003$) than the non-significant correlation $r = .161$ in the teacher role. However, when comparing the correlation between contextual competence and professional development, the small correlation $r = .230$ in the teacher role did not significantly differ ($p = .516$) from the statistically non-significant correlation $r = .167$ in the teacher educator role.

The effects of education, mentoring training, and work experience on professional agency between the roles

To examine the unique and interactive effects of the background variables on SBSTEs' perceptions of professional agency in different roles, a series of repeated measures ANOVAs was conducted. Separate models were run for each four dimensions of professional agency as the dependent variable. In each model, the two roles, subject teacher and teacher educator, were treated as the within-subject factor, whereas the categorical background variables (education, education in mentoring, and work experience) were included as between-subject factors. The models included conditional main effects for the within- and between-subject factors, as well as two-way interaction effects between each of the between-subject factors with the within-subject factor are presented in Table 4.

The results of Repeated Measures ANOVAs indicated that education and mentoring education had neither a main effect nor an interaction effect with the role in any of the four agency dimensions. In other words, SBSTEs' level of education or whether they had completed any mentoring education did not influence their perceptions of professional agencies in different roles.

Table 4

Results of Repeated Measures ANOVAs to Examine the Effects of Role, Education, Mentoring Education, and Work Experience on the Professional Agency Dimensions

	Influence at work			Being heard at work			Commitment			Professional development		
	F (1, 117)	p	Partial η^2	F (1, 117)	p	Partial η^2	F (1, 117)	p	Partial η^2	F (1, 117)	p	Partial η^2
Roles	46.87	< .001	.90	1638.34	< .001	a.94	8890.28	.001	.99	4334.76	.001	.98
Education	0.78	.38	.01	0.30	.58	.00	2.46	.12	.02	1.67	.12	.02
Education in mentoring	0.11	.74	.00	0.28	.60	.00	0.02	.88	.00	.49	.48	.00
Work experience	0.56	.56	.01	1.15	.32	.02	0.85	.43	.02	2.27	.11	.04
Roles × Education	0.22	.64	.00	0.11	.74	.00	0.19	.66	.00	0.28	.60	.00
Roles × Education in mentoring	0.11	.74	.00	0.07	.80	.00	0.02	.88	.00	0.09	.77	.00
Roles × Work experience	1.71	.19	.03	0.36	.70	.01	0.14	.87	.00	3.24	.04	.05

Work experience also showed no main or interaction effects with the role in other agency variables, except for a significant interaction effect on professional development. In other words, respondents' professional agency in professional development across different roles depended on their work experience. To investigate this interaction further, paired-sample T-tests for professional development between the two roles were conducted separately in the three levels of work experience. For those with 6-15 or over 15 years of experience in practice schools, the perception of professional development was statistically significantly lower in the teacher educator role compared to the teacher role (see Table 5). In contrast, those with less than 5 years of work experience perceived their agency in professional development equally high in both roles.

Table 5
Mean Level Differences of Professional Development Agency with Different Work Experience in a Subject Teacher and a Teacher Educator

Work experience	Subject teacher *M (SD)*	Teacher educator *M (SD)*	*t*(df)	*p*	Cohen's *d*
Under 5 years	4.32 (0.60)	4.38 (0.54)	–7.51 (33)	.458	–0.13
6–15 years	4.54 (0.53)	4.40 (0.53)	3.27 (33)	.002	0.56
Over 15 years	4.29 (0.51)	4.11 (0.52)	3.00 (49)	.004	0.42

Discussion and Conclusion

Using a subject-centered socio-cultural framework, this study explores Finnish training schools' subject teachers' (SBSTEs) perceptions of their professional competences and professional agency and investigates the relationship between the two. This study investigates the relationship between professional competences and professional agencies. It also analyzes to what extent background variables contribute to professional agency when acting in the roles of both subject teacher and teacher educators. A role-based examination of subject teacher educators' agency and competencies in Finnish university-affiliated teacher training schools provides a new perspective on recent teacher educator's professional identity and agency research (see e.g. Andreasen et al., 2019; Vähä et al., 2025; Czerniawski et al., 2023; Czerniawski et al., 2019; E. White et al., 2015; E. White, et al., 2022; S. White & Berry, 2022) about school-based subject teacher educators and their professional roles and agency. The results shed light on this specific professional group and are also relevant on an international scale. The findings can inform and promote collaboration between teacher education institutions and faculties of education in established systems and in designing and implementing new models.

Specific professional roles are based on expectations, and each role defines previously learned patterns and traditions (Hitlin & Elder, 2007). In the Finnish system, the socio-cultural conditions of the teacher training schools as a working environment are multilayered, as are the roles and traditions. SBSTEs work in both roles as a teacher and teacher educator more than half of the academic year. Professional agencies arise not only from individual capacities but to a significant extent from institutional and sociocultural conditions, such as organizational norms, role expectations, and resource arrangements (Priestley et al., 2015). That shape teachers' possibilities to act, a dynamic particularly salient for SBSTEs working between school and university contexts.

The role of teacher educator constitutes an important part of SBSTEs professional responsibilities (Mouhu, 2021). However, our research indicates that Finnish SBSTEs perceived content competence

and contextual competence to be significantly stronger in the role of a teacher than in their role of a teacher educator. A weaker sense of competences manifested particularly in the contextual competence of teacher education – the knowledge about or teacher education as a wider societal actor. Like competence, there were also clear differences in how SBSTEs defined their professional agency depending on their role as a teacher or a teacher educator. When comparing the SBSTE roles of teacher and teacher educator, being heard at work and exerting influence at work were significantly weaker in the role of teacher educator than in the role of teacher. Socio-cultural conditions of the workplace can explain the differences in competences and professional agency across roles. Power structures create established relationships of autonomy and dependence between actors and groups in social interaction context (Eteläpelto et al., 2011; Wrong, 1980). Our findings underline that SBSTEs' professional agency, particularly in being heard and exerting influence at work, were strong in the school context, but they experienced uncertainty and weaker agency in the role of teacher educator.

Workplaces' power structures are shaped by social and cultural as well as time- and place-bound elements, but they also tend to maintain continuity over time. In particular, power relations linked to decision-making and influence at work are related to the historical nature of social practices (Giddens, 1984). Work environments' power and social relations, professional roles and established work cultures appear as resources as well as constraints for professional agency (Billet, 2006). The experience of lower professional agency as teacher educator can partly be explained by the tradition of Finnish teacher training schools. The century of strong autonomy and decades of long-standing hierarchical relationships between educational departments have shaped role and power relations.

Previous research on agency (e.g., Vähäsantanen et al., 2019; Toom, 2015) has shown that strong agency enables individuals to tackle work-related challenges, develop innovative solutions and pursue professional growth. Conversely, weak agencies make it difficult for individuals to keep up with developments, let alone act as active agents of change. In this light, our research showed that SBSTEs do not feel they have opportunities to influence their work as teacher educators. When opportunities to be heard and influenced are limited, the realization of shared professional goals can also be constrained (Pappa et al., 2017). Given that Finnish subject teacher education, including teacher training, has indeed remained structurally partly unchanged over the decades (Vähä, 2016, Vähä et al., 2025), these historical and institutional structures may continue to contribute to the persistence of weaker agency in the role of teacher educator even today.

Alongside socio-cultural factors, professional agency is dependent on competences. High self-efficacy is related to active and strong agency, whereas weak self-efficacy and perception of professional competence is related to low professional agency (Bandura, 2006). Our research indicated an association between SBSTEs' professional competences and professional agencies, with most cases showing at least a moderate relationship underlying the idea of stronger competences promoting stronger professional agency. SBSTEs' level of contextual competence was the lowest especially in the teacher educator role, and this was significantly related to their perceived lower ability to influence their work and be heard at work.

Our findings indicate that the competence of contextual knowledge was not related to the agency dimension of commitment in either role (as a teacher or as a teacher educator), suggesting that commitment is shaped by factors other than institutional embeddedness. This finding is particularly interesting in the Finnish context, where subject teachers are characterized by extensive autonomy (Salokangas & Harvey, 2020). Our results further reinforce the notion - even in the context of a training school, where one might expect that the teacher educator role would require stronger contextual knowledge to foster institutional ties and commitment. However, Finnish teacher training school system differs from many other European countries (Vähä et al., 2025; Czerniawski et al., 2023; White et al., 2015), in that it is more permanently structured and not based on temporary contracts between educational departments or faculties and schools. Teachers in these schools are autonomous and

traditionally highly committed to their role as teacher educators, which may help explain why their commitment remains strong despite relatively limited contextual competence, meaning broader knowledge of the teacher education system as a whole.

The aim of the third research question was to explore the influence of various background variables on SBSTEs' perceived agency. Finnish SBSTEs are highly experienced and highly educated teacher educators. In our sample, all teachers working at teacher training schools had a Master's degree, and 16 % had a licentiate or doctoral degree. Over 40 % had worked for over 15 years at the teacher training school. The results of our study indicate that all respondents, regardless of their educational and experiential backgrounds, perceived their agency in the commitment area to be equally strong in both roles. However, in the areas of influence at work and being heard at work, they felt stronger agency as subject teachers than as teacher educators, regardless of their level of education, acquired education in mentoring, or work experience.

In the professional development area, experienced teachers perceived their agency stronger as subject teachers than as teacher educators, while novice teachers did not perceive a difference between the two roles. This may occur because, according to previous studies, developing as a teacher is the primary professional role for experienced teachers, while being a teacher educator can be seen as a secondary task (Andreasen et al., 2019; Swennen & Volman, 2018). Because experienced teachers were the largest group in our sample, this difference between roles can be seen as a hindrance for professional development in the teacher education context. In recent years, mentoring education has strengthened in teacher training schools, and newly appointed teachers in teacher training schools are strongly encouraged to participate in eNorssi mentoring education (Mouhu, 2021). As our research showed, teachers who had under 5 years of working experience at the teacher training school shared ideas about an equal opportunity of professional development in both professional roles. Novice teachers have received mentoring education early in their careers, which could be one reason why they perceive their role as teacher educators to be just as important as their role as teachers. This may manifest in the future as strengthening the possibility of a stronger professional development dimension of agency as a teacher educator.

Research in different educational cultures have pointed out that the relation between teacher training schools and educational departments at the universities is not always an easy one in general (Andreasen et al., 2019; Davey, 2013; Smith, 2005). According to Andreasen (2023), university educational departments play a crucial role in facilitating the collaboration, promoting sense of safety and acceptance, and making the co-operation between teacher training schools and faculty possible. SBSTEs teachers should be seen as legitimate members of the teaching education community (see, e.g., Jackson & Burch, 2019; Lunenberg & Hamilton, 2008). In the Finnish teacher training school system, SBSTEs perceive their professional agency as significantly weaker in the role of teacher educator than in the role of teacher. However, they see themselves as autonomous professionals whose lower professional agency or teacher educator competences in some areas are not an obstacle their commitment to work or to professional development. Is the weaker professional agency caused by insufficient collaboration between university teacher training schools and departments of education, or does this situation lead to poor collaboration?

Limitations

The first limitation concerns the contextual nature of the study. Although partially context-specific, the findings regarding the constraints of professional agency provide insights that can also be applied beyond Finland – particularly in developing collaborative structures between teacher training schools and Faculties of Education. The study was conducted in 2021 and targeted all subject teachers who supervised teaching practice that year; therefore, with N=118, the sample represents more than one-third of the total population, indicating a strong level of representativeness. Because the study was exploratory

in nature, the reliability coefficients (Cronbach's alpha) of some of the subscales fell below the generally accepted threshold of 0.70, particularly for the items concerning the teacher's role. This can be partly explained by the limited number of items in the measures and their preliminary stage of development. In future work, reliability should be strengthened by further developing instruments and paying closer attention to the wording of the items. Moreover, since the sample includes subject teachers from all school subjects, the phrasing of the items must ensure clearer contextual relevance across different subject domains.

However, to gain a deeper understanding of the competences and professional agency of subject teachers in training schools, further research should focus also on qualitative data. It would be important to examine more thoroughly the reasons why teachers are equally committed to their work both as teachers and teacher educators, even though their perceived opportunities to exert influence at work are often limited. One important issue concerns the perceived weakness of content knowledge related to the teacher educator role. It is also essential to consider whether SBSTEs are sufficiently involved in the development of teacher education, such as curriculum design. In future, research should investigate in more depth how the opportunities for influence in the teacher educator role could best be strengthened. Is it a matter of SBSTEs' stronger participation in key areas, such as teacher education curriculum development, addressing power relations between educational departments, or clarifying the division of labour among stakeholders, so that all actors are genuinely included in the broader development of teacher education?

The article provides an overview of the competencies and agency of subject teachers in teacher training schools. Competence research often relies on competence theories, which emphasize the development and application of skills, knowledge and abilities in various situations. In this article, we have used the concept of competence to examine the skills of subject teachers in teacher training schools. Future research should expand also the concept of expertise and possibly examine the teaching practices and mentoring of subject teachers from the perspective of expertise research (see, e.g., Blömeke et al., 2015; Gruber, 2018; Krauss et al., 2020), which highlight deep knowledge, practice, and experience in a specific field.

References

Andreasen, J. K. (2023). School-based mentor teachers as boundary-crossers in an initial teacher education partnership. *Teaching and Teacher Education*, *122*, 103960. https://doi.org/10.1016/j.tate.2022.103960

Andreasen, J. K., Bjørndal, C. R. P., & Kovač, V. B. (2019). Being a teacher and teacher educator: The antecedents of teacher educator identity among mentor teachers. *Teaching and Teacher Education*, *85*, 281–291. https://doi.org/10.1016/j.tate.2019.05.011

Archer, M. S. (2000). *Being Human: The Problem of Agency*. Cambridge University Press.

Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and teacher education*, *20*(2), 107-128.

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, *1*(2), 164–180.

Billett, S. (2006). Relational Interdependence Between Social and Individual Agency in Work and Working Life. *Mind, Culture, and Activity*, *13*(1), 53–69. https://doi.org/10.1207/s15327884mca1301_5

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

Blömeke, S., Gustafsson, J. E., & Shavelson, R. J. (2015). Beyond dichotomies. *Zeitschrift für Psychologie*.

Carr, D. (2005). *Professionalism and ethics in teaching*. Routledge.

Castren, Matti J. (1975). Opettajankoulutuksen uudistus ja normaalilyseon opettajat [Teacher Education Reform and Teachers at the Normal Lyceum]. *Kasvatus, 6*(2), 372–377.

Chung, J. (2023). Research-informed teacher education, teacher autonomy and teacher agency: The example of Finland. *London Review of Education*, *21*(1), Article 1. https://doi.org/10.14324/LRE.21.1.13

Cochran-Smith, M., Craig, C. J., Orland-Barak, L., Cole, C., & Hill-Jackson, V. (2022). Agents, agency, and teacher education. *Journal of Teacher Education*, *73*(5), 445-448. https://doi.org/10.1177/00224871221123724

Collin, K., Paloniemi, S., & Vähäsantanen, K. (2015). Multiple Forms of Professional Agency for (non)crafting of Work Practices in a Hospital Organization. *Old Site of Nordic Journal of Working Life Studies*, *5*(3a), Article 3a. https://doi.org/10.19154/njwls.v5i3a.4834

Czerniawski, G., Guberman, A., MacPhail, A., & Vanassche, E. (2023). Identifying school-based teacher educators' professional learning needs: An international survey. *European Journal of Teacher Education*, 1–16. https://doi.org/10.1080/02619768.2023.2251658

Czerniawski, G., Kidd, W., & Murray, J. (2019). We are all teacher educators now: Understanding school-based teacher educators in times of change in England. In J. Murray, A. Swennen & C. Kosnik (Eds.), *International Research, Policy and Practice in Teacher Education* (pp. 171–185). Springer. https://link.springer.com/chapter/10.1007/978-3-030-01612-8_12

Davey, R. (2013). *The Professional Identity of Teacher Educators: Career on the cusp?* Routledge. https://doi.org/10.4324/9780203584934

Diedenhofen, B. & Musch, J. (2015). cocor: A Comprehensive Solution for the Statistical Comparison of Correlations. *PLoS ONE, 10*(4): Aticle e0121945. https://doi.org/10.1371/journal.pone.0121945

Emirbayer, M., & Mische, A. (1998). What is agency? *American Journal of Sociology, 103*(4), 962-1023.

Eteläpelto, A. (2017). Emerging Conceptualisations on Professional Agency and Learning. In Goller, M. & Paloniemi, S. (Eds.), Agency at Work. Professional and Practice-based Learning, vol 20. Springer, Cham. https://doi.org/10.1007/978-3-319-60943-0_10

Eteläpelto, A., Heiskanen, T., & Collin, K. (2011). Vallan ja toimijuuden monisäikeisyys [The Complexity of Power and Agency]. In A. Eteläpelto, T. Heiskanen & K. Collin (Eds.), *Valta ja toimijuus aikuiskasvatuksessa [Power and Agency in Adult Education]. Aikuiskasvatuksen vuosikirja*, *49*, 9–30.

Eteläpelto, A., Vähäsantanen, K., & Hökkä, P. (2015). How do novice teachers in Finland perceive their professional agency? *Teachers and Teaching*, *21*(6), 660–680. https://doi.org/10.1080/13540602.2015.1044327

Eteläpelto, A., Vähäsantanen, K., Hökkä, P., & Paloniemi, S. (2013). What is agency? Conceptualizing professional agency at work. *Educational Research Review*, *10*, 45–65. https://doi.org/10.1016/j.edurev.2013.05.001

Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. University of California Press.

Goodwin, A. L., & Kosnik, C. (2013). Quality teacher educators = quality teachers? Conceptualizing essential domains of knowledge for those who teach teachers. *Teacher Development*, *17*(3), 334–346. https://doi.org/10.1080/13664530.2013.813766

Gruber, H., Harteis, C., Gruber, H., & Harteis, C. (2018). Supporting the Acquisition of Expertise: Fostering Individual Development and Creating Professional Communities. *Individual and Social Influences on Professional Learning: Supporting the Acquisition and Maintenance of Expertise*, 87–114. https://doi.org/10.1007/978-3-319-97041-7_5

Imants, J., & Van der Wal, M. M. (2020). A model of teacher agency in professional development and school reform. *Journal of Curriculum Studies*, *52*(1), 1–14. https://doi.org/10.1080/00220272.2019.1604809

Harteis, C., & Goller, M. (2014). New Skills for New Jobs: Work Agency as a Necessary Condition for Successful Lifelong Learning. In T. Halttunen, M. Koivisto, & S. Billett (Eds.), *Promoting, Assessing, Recognizing and Certifying Lifelong Learning: International Perspectives and Practices* (pp. 37–56). Springer Netherlands. https://doi.org/10.1007/978-94-017-8694-2_3

Hitlin, S., & Glen H. Elder, J. (2007). Time, Self, and the Curiously Abstract Concept of Agency. *Sociological Theory*. https://journals.sagepub.com/doi/abs/10.1111/j.1467-9558.2007.00303.x

Hökkä, P., Eteläpelto, A., & Rasku-Puttonen, H. (2012). The professional agency of teacher educators amid academic discourses. *Journal of Education for Teaching*, *38*(1), 83–102. https://doi.org/10.1080/02607476.2012.643659

Hökkä, P., Vähäsantanen, K., & Mahlakaarto, S. (2017). Teacher educators' collective professional agency and identity–Transforming marginality to strength. *Teaching and Teacher Education*, *63*, 36-46. https://doi.org/10.1016/j.tate.2016.12.001

Jackson, A., & Burch, J. (2019). New directions for teacher education: Investigating school/university partnership in an increasingly school-based context. *Professional Development in Education*, *45*(1), 138–150. https://doi.org/10.1080/19415257.2018.1449002

Korthagen, F. A. J. (2001). *Linking practice and theory: The pedagogy of realistic teacher education*. Erlbaum.

Korthagen, F. A. J. (2010). Situated learning theory and the pedagogy of teacher education: Towards an integrative view of teacher behaviour and teacher learning. *Teaching and Teacher Education, 26*(1), 98–106. https://doi.org/10.1016/j.tate.2009.05.001

Koster, B., Korthagen, F. A. J., Wubbels, T., & Hoornweg, J. (1996). Roles, competencies and training of teacher educators, a new challenge. In E. Befring (Ed.), *Teacher Education for Equality* (pp. 397–411).

Krauss, S., Bruckmaier, G., Lindl, A., Hilbert, S., Binder, K., Steib, N., & Blum, W. (2020). Competence as a continuum in the COACTIV study: the "cascade model". *ZDM*, *52*, 311–327. https://doi.org/10.1007/s11858-020-01151-z

Lasky, S. (2005). A sociocultural approach to understanding teacher identity, agency and professional vulnerability in a context of secondary school reform. *Teaching and Teacher Education*, *21*(8), 899–916. https://doi.org/10.1016/j.tate.2005.06.003

Lunenberg, M., Dengerink, J., & Korthagen, F. (2014). *The professional teacher educator: Roles, behaviour, and professional development of teacher educators*. Springer Science & Business Media.

Lunenberg, M., & Hamilton, M. L. (2008). Threading a Golden Chain: An Attempt To Find Our Identities as Teacher Educators. *Teacher Education Quarterly*, *35*(1), 185–205.

Maaranen, K., Cornér, T., Kynäslahti, H., Sintonen, S., Byman, R., & Jyrhämä, R. (2025). The Professional Development of Teacher Educators in Digital Pedagogy Amid Change. *Journal of Teacher Education and Educators*, *14*(1), 20–36.

Maaranen, K., & Stenberg, K. (2020). Making beliefs explicit – student teachers' identity development through personal practical theories. *Journal of Education for Teaching*, *46*(3), 336–350. https://doi.org/10.1080/02607476.2020.1749994

Metsäpelto, R.-L., Poikkeus, A.-M., Heikkilä, M., Heikkinen-Jokilahti, K., Husu, J., Laine, A., Lappalainen, K., Lähteenmäki, M., Mikkilä-Erdmann, M., & Warinowski, A. (2020). Conceptual framework of teaching quality: A multidimensional adapted process model of teaching [OVET Project working paper], *PsyArXiv*. https://doi.org/10.31234/osf.io/52tcv

Mouhu, H. (2021). *Harjoittelukoulussa opetusharjoittelua ohjaavien opettajien ammatillisen identiteetin neuvottelu* [Teacher training school mentoring teachers' professional identity negotiation]. JYU Dissertations. https://urn.fi/URN:ISBN:978-951-39-8793-0

Mutlu, G. (2017). Professional space and agency: The case of in-service language teachers. *Journal of Teacher Education and Educators*, *6*(2), 157-176.

Pappa, S., Moate, J., Ruohotie-Lyhty, M., & Eteläpelto, A. (2017). Teachers' pedagogical and relational identity negotiation in the Finnish CLIL context. *Teaching and Teacher Education*, *65*, 61–70. https://doi.org/10.1016/j.tate.2017.03.008

Pyhältö, K., Pietarinen, J., & Soini, T. (2014). Comprehensive school teachers' professional agency in large-scale educational change. *Journal of Educational Change*, *15*(3), 303–325. https://doi.org/10.1007/s10833-013-9215-8

Priestley, M., Biesta, G., & Robinson, S. (2015). *Teacher agency: an ecological approach*. Bloomsbury.

Rodgers, C. R., & Scott, K. H. (2008). The development of the personal self and professional identity in learning to teach. In *Handbook of Research on Teacher Education* (3rd ed.) (pp. 732-755). Routledge.

Ropo, E., Jaatinen, R., & Autio, T. (2020). Introduction: The history of Finnish subject teacher education with special reference to the development at the University of Tampere. In Ropo, E. & Jaatinen, R (Eds.), *Subject Teacher Education in Transition: Educating Teachers for the Future*. (pp. 9–24) Tampere Univerity Press.

Roumbanis Viberg, A., Forslund Frykedal, K., & Sofkova Hashemi, S. (2023). "The teacher educator's perceptions of professional agency – a paradox of enabling and hindering digital professional development in higher education". *Education Inquiry*, *14*(2), 213–230. https://doi.org/10.1080/20004508.2021.1984075

Ruohotie-Lyhty, M., & Moate, J. (2016). Who and how? Preservice teachers as active agents developing professional identities. *Teaching and Teacher Education*, *55*, 318–327. https://doi.org/10.1016/j.tate.2016.01.022

Salokangas, M., Wermke, W., & Harvey, G. (2020). Teachers' autonomy deconstructed: Irish and Finnish teachers' perceptions of decision-making and control. *European Educational Research Journal*, *19*(4), 329–350. https://doi.org/10.1177/1474904119868378

Smith, K. (2005). Teacher educators' expertise: What do novice teachers and teacher educators say? *Teaching and Teacher Education*, *21*(2), 177–192. https://doi.org/10.1016/j.tate.2004.12.008

Stüber, O., & Jyrkiäinen, A. (2020). Student teachers' professional growth. *Developing interreligious competence in teacher education*. In Ropo E & Jaatinen R. (Eds.). *Subject Teacher Education in Transition: Educating Teachers for the Future Tampere* (pp. 311–334). Tampere University Press.

Swennen, A., & Volman, M. (2018). The Development of the Identity of Teacher Educators in the Changing Context of Teacher Education in the Netherlands. In C. Kosnik, A. Swennen, & J. Murray (Eds.), *International Research, Policy and Practice in Teacher Education* (pp. 107–121). Springer International Publishing. https://doi.org/10.1007/978-3-030-01612-8_8

Tirri, K. (2014). The last 40 years in Finnish teacher education. *Journal of Education for Teaching*, *40*(5), 600–609. https://doi.org/10.1080/02607476.2014.956545

Toom, A., Pyhältö, K., & Rust, F. O. (2015). Teachers' professional agency in contradictory times. *Teachers and Teaching*, *21*(6), 615–623. https://doi.org/10.1080/13540602.2015.1044334

Vuorenpää, Jouko 2003. Yliopistollisen opettajakoulutuksen kehittyminen Suomessa 1970-luvulta 2000-luvulle [The Development of Teacher Education in Finland from the 1970s to the 2000s]. Turun Yliopiston julkaisuja, Sarja C, 1999.

Vu, T. N. (2020). Examining teacher agency among teacher educators: An action research in Vietnam. *Australian Journal of Teacher Education (Online)*, *45*(7), 94–113. https://doi.org/10.3316/informit.526139228044245

Vähä, E. (2016). Maamme opettajiston eturivissä-normaalilyseoiden yliopettajuus 1873–1973. [In the Frontline of Our Nation's Teachers: SBSTEs in Finnish Normal Lyceums, 1873–1973] *Koulu ja menneisyys*, *54*, 25-55.

Vähä, E., Hirvonen, R., Sormunen, K., Eronen, L., & Väisänen, P. (2025). School-based subject teacher educators' professional roles and professional dimensions at the Finnish teacher training schools. *Scandinavian Journal of Educational Research*, 1-14. https://doi.org/10.1080/00313831.2025.2506389

Vähäsantanen, K., Räikkönen, E., Paloniemi, S., Hökkä, P., & Eteläpelto, A. (2019). A Novel Instrument to Measure the Multidimensional Structure of Professional Agency. *Vocations and Learning*, *12*(2), 267–295. https://doi.org/10.1007/s12186-018-9210-6

White, E., Dickerson, C., & Weston, K. (2015). Developing an appreciation of what it means to be a school-based teacher educator. *European Journal of Teacher Education*, *38*(4), 445–459. https://doi.org/10.1080/02619768.2015.1077514

White, E., Timmermans, M., & Dickerson, C. (2022). Learning from professional challenges identified by school and institute-based teacher educators within the context of school–university partnership. *European Journal of Teacher Education, 45*(2), 282–298. https://doi.org/10.1080/02619768.2020.1803272

White, S. (2019). Teacher educators for new times? Redefining an important occupational group. *Journal of Education for Teaching, 45*(2), 200–213. https://doi.org/10.1080/02607476.2018.1548174

White, S., & Berry, A. (2022). School-based teacher educators: Understanding their identity, role, and professional learning needs as dual professionals. In *The Palgrave handbook of teacher education research*: 1,2 (1, pp. 257–276). PalgraveMacmillian, Cham. https://doi.org/10.1007/978-3-030-59533-3_11-1

Wrong, D.H. (1980). *Power: Its forms, bases and uses*. Routledge