Identifying school-based teacher educators' professional learning needs: an international survey

Gerry Czerniawski, Ainat Guberman, Ann MacPhail & Eline Vanassche

Published online: 30 Aug 2023.

Submit your article to this journal ☐

Article views: 1001

View related articles ☐

View Crossmark data ☐

Routledge
Taylor & Francis Group

Identifying school-based teacher educators' professional learning needs: an international survey

Gerry Czerniawski[a], Ainat Guberman[b], Ann MacPhail[c] and Eline Vanassche[d]

[a]The School of Education and Communities, University of East London, London, UK; [b]The MOFET Institute for Teacher educators' Professional Development, Tel-Aviv, Israel; [c]Faculty of Education and Health Sciences at the University of Limerick, Limerick, Ireland; [d]University of Leuven, Leuven, Belgium

ABSTRACT

Though teachers in schools are increasingly being asked to take responsibility for the education and training of prospective and practicing teachers, little empirical research has been undertaken into the support that they require to perform their duties effectively. This study provides an international needs analysis of the professional learning needs of this occupational group through a survey of 1680 school-based teacher educators (SBTEs) conducted in 12 countries. While the findings from this study reveal that most SBTEs receive some form of preparation for their role, they require that preparation to be more collaborative and target the pedagogic and research-related aspects of their work. The findings also indicate how much more needs to be done to recognise, address and support SBTEs' learning needs in relation to the rapidly-changing socio-economic, cultural and technological contexts that underpin the work of all teacher educators.

Introduction

In what, in many countries, has been described as a 'pendulum swing' away from the dominance of Higher Education Institutions (HEIs) towards a greater role for schools and teachers in the development of teachers (Murray and Mutton 2016; Mutton, Burn, and Menter 2017; White, Timmermans, and Dickerson 2021), increasing attention is being paid to the policy shift, internationally, towards more school-based teacher education models (Boyd and Tibke 2012; Lunenberg, Dengerink, and Korthagen 2014; Powell 2021). As argued by Vanassche (2022), the (re)emphasising of practice in teacher education policy and reform is a global pattern which has played out differently across jurisdictions. Countries like England, Australia and parts of the US have placed heavy emphasis on school-led and apprentice-style teacher education programs, whereas in other countries, particularly in continental Europe, 'the practice turn has rather taken shape as a "practicum turn" (Mattsson et al. 2011), resulting in an increase in field experience and partnership models' (Vanassche 2022, 6). Regardless of the specific shape this turn to

practice takes, large and various groups of school-based teacher educators have joined the ranks of teacher education. However, there has been little research evidence of commensurate and dedicated professional learning opportunities for school-based teacher educators (SBTEs) (specifically related to their role as teacher educators), a point emphasised by White (2019, 206):

> Mentors and supervisory teachers are typically not prepared to understand a pedagogy of teacher education (Loughran 2013). Their role is viewed as one of master-apprentice, with pre-service teachers following what they do but with little understanding of the reasoning behind such actions.

This article addresses this lack of evidence by presenting findings from the largest international survey ($n = 1680$), to date, on SBTEs' professional learning needs. This article uniquely contributes to an understanding, internationally, of who these people are, how they are prepared to become SBTEs and what their professional learning needs are. The study, carried out by the *International Forum for Teacher Educator Development* (InFo-TED), builds on an earlier international study (Czerniawski, MacPhail, and Guberman 2017) that focused on the professional learning needs of higher education-based teacher educators. As SBTEs increasingly take on larger roles and responsibilities in the initial and ongoing education of *all* teachers across many countries – the timeliness and importance of this current study is of particular significance. Research on the disruptive experiences of classroom teachers transitioning into teacher education (a.o. Ben-Peretz et al. 2011; Trent 2013) suggests being an experienced teacher does not automatically imply both an understanding of and proficiency in the pedagogy of teacher education. Furthermore, the COVID-19 pandemic, technological transformation, culture wars, environmental change, changing migration flows and increasing pupil diversity are just some of the many factors driving an urgent need to critically (re)consider how best we professionally develop those teachers in schools held responsible for the education and training of both prospective and practicing teachers. This article starts by reviewing literature on the multiple roles SBTEs engage with and the implications of that engagement for their professional learning. After describing the methodology deployed in this study, the findings will then be presented and discussed around the following themes: SBTEs' professional learning experiences; their research-related attitudes and experience; variables influencing their engagement in professional learning activities; and the extent to which SBTEs are interested in further professional learning that is directed to their roles as teacher educators.

School-based teacher educators' multiple roles

While teachers in schools are increasingly being expected to take responsibility for the education and training of prospective as well as practicing teachers, little empirical research has been undertaken into the support that SBTEs require and receive to perform their duties effectively. One of the many reasons for this lack of evidence is the lack of recognition SBTEs have, as teacher educators, in addition to their role as school teachers (Feiman-Nemser 1998; Taylor, Klein, and Abrams 2014). We use 'teacher educator' as the overall and inclusive term to encompass all types of people who are professionally involved and engaged in the initial and ongoing education of teachers. That broad

definition follows one used by the European Commission (2013) who describe teacher educators as 'all those who actively facilitate the (formal) learning of student teachers and teachers' (p. 8). The Donaldson report, a review of teacher education in Scotland, states that 'all teachers should see themselves as teacher educators and be trained in mentoring' (Donaldson 2011, 94). And yet, despite this policy attention, many SBTEs are often not recognised as teacher educators by those who work with (e.g. other teachers; teaching assistants; senior leadership) and do not identify as teacher educators (Czerniawski, Kidd, and Murray 2019; Livingstone 2014). The latter observation is particularly consequential as it suggests an important shift in identity, practices, and pedagogical expertise that has not been made. Increasing attention from both academics and policy makers *is* being given to the complexity in this identity work and its implications for professional learning (Cochran-Smith et al. 2020; Izadinia 2014; Loughran 2014; White and Timmermans 2021). SBTEs are simultaneously both first and second-order practitioners (Murray 2002), i.e. both teachers and teacher educators. The schools in which they work are complex and often hectic institutions that have structurally developed over time to prioritise pupil learning above that of the professional learning of teachers and teacher educators. Furthermore, while teacher education models vary from school to school and from country to country, some SBTEs work independently and/or with private providers and/or networks of schools, while others work with higher education-based teacher educators adding greater complexity to the task of understanding what their professional learning needs might be. In addition to their role as schoolteachers teaching pupils, SBTEs' work focuses, in the main, on the professional learning of two groups – student/trainee teachers and more experienced teachers who are engaged in their own continuing professional development (CPD) (Parker, Zenkov, and Glaser 2021; Salo et al. 2019). White et al. (2015, 443) divide SBTE roles into three areas, namely, those associated with a traditional mentoring role (e.g. daily supervision of a student-teacher), those associated with a supervisory role across a school or schools (e.g. the coordination of the professional learning of both student and qualified teachers) and those associated more commonly with institute-based teacher educators (e.g. engaging in research activity). For many, this work also includes being responsible for organising some or all aspects of Initial Teacher Education (ITE) including the recruitment of trainees; the design, implementation and evaluation of course components and their assessment (Czerniawski, MacPhail, and Guberman 2017; McNamara, Murray, and Phillips 2017). Despite these many roles, and SBTE's importance in the development of a future work force, they are still acknowledged to be a 'hidden profession' (Richter, Lazarides, and Richter 2021; Symeonidis and Gajewska-Dyszkiewicz 2017).

School-based teacher educators' professional learning

The professional learning of teacher educators has, over nearly two decades, emerged as a research area, with much of its earlier literature focussing on higher education-based teacher educators and drawing on work associated with teachers' CPD in schools (e.g. Bates, Swennen, and Jones 2011; Kennedy 2005). Since then, several notable studies within this growing body of work exist (e.g. Czerniawski, MacPhail, and Guberman 2017; Gong, MacPhail, and Guberman 2021; Lunenberg, Dengerink, and Korthagen 2014; Van der Klink et al. 2017; Vanassche et al. 2015) and

systematic reviews are starting to emerge into how best higher-education-based teacher educators learn (see, Ping, Schellings, and Beijaard 2018). Within the literature on mentor teachers, attempts have been made to distinguish mentors and SBTEs conceptually (White, Timmermans, and Dickerson 2021); understand mentor perceptions of their roles as SBTEs (Rakes et al. 2022); and understand the roles of cooperating teachers within school–university partnerships who in turn might position themselves as SBTEs (Parker, Zenkov, and Glaser 2021). However, these studies have not, specifically, focussed on the professional learning of SBTEs. Researchers are, nevertheless, beginning to address this gap (e.g. Zenkov and Glaser 2021). A study carried out in the Netherlands (Dengerink, Lunenberg, and Kools 2015) has indicated, for example, that the professional learning preferences of SBTEs vary over time and to the level of experience as a SBTE. Those with less experience were, in that study, interested in coaching skills, pedagogical content knowledge, their own role within wider communities of teacher educators and opportunities to contribute to the knowledge development of the profession as a whole. However, more experienced SBTEs were interested in learning about the policy context of school–university partnerships, curriculum issues at the progamme level and the pedagogy of teacher education.

The presumption that, if you can teach young people in schools you can therefore also teach adults how to teach and how to teach more effectively, is one that has permeated many teacher education systems and policies (Butler and Cuenca 2012; Feiman-Nemser 1998; Parker, Zenkov, and Glaser 2021). This assumption is, perhaps, one explanatory factor for why, until relatively recently, few formal professional learning opportunities have existed for SBTEs and, where such opportunities exist, they vary in quality and relevance (Childre and Van Rie 2015; Ulvik and Sunde 2013). But other factors can also account for variations in provision of, and accessibility to, professional learning opportunities. SBTEs can, for example, experience a lack of access to such opportunities depending on the extent to which schools and universities, working in partnership, cooperate in its provision (Ng and Chan 2012; Salo et al. 2019). White et al's (2015 study on SBTEs raises questions about not just access but the quality of provision and its impact. In their study, the authors consider the perspectives of SBTEs in England, where over 50% of student teachers are in school-led teacher education, exploring the impact that this role has on them, their student teachers and their schools. The authors argue that 'for initial teacher education to be postgraduate rather than training in teaching skills, there are implications for the professional learning of SBTEs' (p. 457). These implications include the ramifications of not being (or feeling) part of a professional learning community of teacher educators, the subsequent restrictive impact that might have on developing pedagogies for teacher education and a research-informed inquiry stance in student teachers.

This study

Drawing on earlier work exploring the professional learning needs of higher education-based teacher educators (Czerniawski, MacPhail, and Guberman 2017), the authors of this current study have, through an international survey with SBTEs, addressed two main research questions:

(1) What types of professional learning activities do SBTEs suggest would address their professional learning needs?
(2) How can those activities best be realised?

The research questions for this study are significant when considering that many SBTEs working in schools engage in activities supporting student teachers and more experienced colleagues as a secondary professional role in addition to their primary role as school teachers – a role that, understandably perhaps, is more likely to be prioritised in terms of their professional learning opportunities.

Method

Participants

The participants of this study were 1680 SBTEs (see Table 1) from mainly 12 countries (Australia; Austria; Belgium; England; France; Ireland; Israel; Norway; Portugal; Romania; Scotland; and The Netherlands) associated with InFo-TED. The participants included teachers who self-identified as SBTEs and included teachers who mentor student teachers, interns and early-career teachers, as well as teachers who lead and facilitate their colleagues' professional learning. Variables' frequencies are presented both in raw numbers and as valid percentages, excluding respondents with missing data. There were 1075 (75.9%) women and 341 men (24.1%). Their median age group was 45–54 years old, and that was the most frequent age category, including 36% of the sample. Half of the participants had a Master's degree, 39.4% had a Bachelor's degree, 8.4% had a doctorate and 2.1% did not have an academic degree at all. About half of the participants (48.9%) had high-school teaching qualifications; 22.9% - elementary school; 16.4% - post 16; 14.1% - special education; and 4.7% had preschool teaching qualifications. The median category of years of experience prior to being appointed as SBTEs was 6–10 years, and that was also the median category of experience as SBTEs. 46.4% worked with student teachers, 12.9% worked with in-service teachers, and 40.7% worked with both groups. Most of the participants (88.4%) worked full time.

Table 1. The participants' countries.

Country	Number of participants	Valid percentages
Australia	65	3.94
Austria	220	13.33
Belgium	67	4.06
England	159	9.63
France	55	3.33
Ireland	86	5.21
Israel	151	9.15
Norway	160	9.69
Portugal	143	8.66
Romania	265	16.05
Scotland	138	8.36
The Netherlands	123	7.45
Other countries	19	1.15
Missing	29	–
Total	1680	100

Table 2. Professional learning preferences.

Areas of interest in advanced training	Academic Interests	Pedagogical Interests	Learning with and from Colleagues	CFA Loadings
Writing and publishing for teachers	0.92	−0.10	−0.09	0.76
Writing and publishing for students	0.87	−0.11	0.03	0.73
Presenting at conferences	0.80	−0.01	0.01	0.80
International exchanges	0.56	0.04	0.03	0.59
Scholarly writing	0.55	0.28	−0.13	0.63
Attending conferences	0.53	0.20	0.09	0.77
Sabbatical	0.52	−0.09	0.10	0.43
Award bearing courses	0.52	0.11	0.01	0.59
Secondment	0.51	−0.04	0.10	0.49
Coaching and mentoring students	−0.24	0.85	0.05	0.54
Coaching and mentoring teachers	−0.07	0.77	−0.04	0.57
TE Pedagogy	0.12	0.67	0.00	0.76
Leadership skills	0.07	0.60	0.01	0.50
Current developments in TE	0.22	0.57	−0.08	0.76
Integrating ICT	−0.02	0.55	0.13	0.50
Subject knowledge	0.06	0.53	−0.01	0.55
Observation of colleagues	−0.02	0.00	0.88	0.49
Observation by colleagues	0.05	−0.07	0.80	0.56
Informal conversations	0.06	0.19	0.40	0.62
training within the institution	0.20	0.08	0.30	0.66
Eigenvalue	6.42	1.52	1.43	
Percentage of total variation	32.10	7.59	7.14	
Scale reliability (Cronbach's alpha)	.876	.837	.740	
Means	3.88	4.88	5.14	
Standard Deviation	1.25	1.25	1.16	
	N=1,158	N=1,047	N=1,158	

EFA results: KMO measure of adequacy: .868; Bartlett's Test of Sphericity: $\chi2(190)=4{,}134.34$, $p<.001$; Percent variance explained by three factors: 46.83%.
CFA results: CFI=.951, TLI=.938, RMSEA=.053, 95% CI[.047059], $\chi2=398.40$, df=150, $p<.001$, SRMR=.047.

However, 77.7% reported that their work with qualified teachers took 20% or less of their time, and 69.9% reported similar amount of time spent on instructing student teachers.

The questionnaire

The survey was based on a questionnaire used by Czerniawski and his colleagues (2017) to explore the professional development needs of higher education-based teacher educators. Participants were asked about their *professional learning preferences* (30 items); *attitudes towards research and research experience* (18 items); *variables considered before a professional learning activity is engaged in* (9 items); *role description* and *background information* (15 items). Most of the items (58) were multiple-choice questions with a 7-point scale, ranging from 1 (= not at all) to 7 (= very much). Twelve items had other multiple-choice options, and four items were open questions, for example, *what term they use to describe their role*; and *the most important professional learning opportunities they had experienced as SBTEs*? The survey was translated into each country's local language (adjusting for country nuances, e.g. types of schools) and distributed online to SBTEs by the higher education institutions with which they worked, and through professional networks. A mixture of exploratory and confirmatory factor analyses models (EFA and CFA respectively) were used throughout. For the EFA, a random half of the data were used as a training sub-sample and for the CFA the other sample half was used as a test sub-

sample (Hefetz and Liberman 2017; Osborne 2015). Tables 2, 3, 4, 5 below present the set of items in each factor, the factor loadings, the internal consistency (Cronbach's Alpha), and indices of fit. Overall, seven items were dropped due to multiple loadings (less than 0.2 difference between items' factor loadings).

Results

SBTEs' opportunities for professional learning

Just under half of SBTEs completing the survey reported they received preparation and support for their role as SBTEs: 831 (49.5%) participated in a teacher education programme and 779 (46.4%) received on-the-job guidance in relation to the work they do either with student teachers or with experienced teachers. Only 210 participants (12.5%) reported they received no formal or informal support. The mean value of satisfaction with past opportunities for professional learning was moderately positive: 4.94 (SD = 1.45), with 39.5% expressing high levels of satisfaction.

SBTEs' professional learning preferences

Three distinct factors became evident (see Table 2) when participants were asked about their learning preferences: *Academic Interests* that comprises research-related activities such as attending and presenting at conferences and scholarly writing; *Pedagogical Interests* that consists of acquiring knowledge and skills related to teaching and mentoring; *Learning with and from colleagues* includes observations of and by colleagues and informal conversations with them. While the first two factors cast light on *what* SBTEs want to focus on in their professional learning, the third factor reveals *how* they want to learn and develop.

SBTEs' research related attitudes and experience

One of the many motivations for the practice-turn mentioned at the start of this paper was a desire to close the theory-practice gap (Resch, Schrittesser, and Knapp 2022) by providing student teachers with ample experience and reflection on practice. However, this solution (one would hope) relies on the assumption that SBTEs are well acquainted with educational research and its ability to inform critical analysis of their practices. Three significant factors emerged when participants were asked about their attitudes towards research and their research experience (see Table 3): *Personal Attitudes towards research* describe the importance that participants attribute to research in improving their knowledge and practices as teacher educators; *actual involvement in research*, for example, any experience in conducting and publishing research; and *school attitudes towards research* a factor that explored school leadership and staff interest in relation to research.

SBTEs' attitudes towards research involvement are moderate-high (*M* = 4.51, SD = 1.55). However, they view their school's attitudes towards research and their colleagues' research expertise as moderate (*M* = 3.54, SD = 1.78). The actual involvement of SBTEs in research is low (*M* = 2.70, SD = 1.52). The differences between these factors are significant (repeated measures ANOVA, repeated contrasts: $F_{(1, 1294)} = 414.48$, *p* < .001, $\eta^2 = 0.24$; $F_{(1, 1294)} = 211.61$, *p* < .001, $\eta^2 = 0.14$, respectively).

Table 3. Research-related attitudes and experience.

Research involvement	Attitudes	Actual Involvement	School attitudes	CFA Loadings
SBTEs should conduct research to extend TE knowledge	0.98	−0.10	−0.02	0.75
SBTEs should conduct research to improve their practice	0.96	−0.12	0.00	0.72
I read TE papers	0.69	0.14	0.03	0.74
I attend conferences and seminars	0.69	0.09	0.05	0.73
My SBTE role is informed by research	0.67	0.12	−0.03	0.77
SBTEs need training in research skills to conduct research	0.61	−0.07	−0.06	0.49
I have written textbooks	−0.13	0.79	−0.06	0.52
I have edited journals/books	−0.10	0.76	−0.05	0.58
I have written book reviews	−0.06	0.65	−0.02	0.50
I was actively involved in research and presented at conferences	0.21	0.55	0.05	0.75
I have mentored colleagues in research	0.11	0.48	0.16	0.69
I have written support materials for colleagues	0.08	0.47	−0.02	0.44
I was actively involved in research and published my findings	0.27	0.46	−0.01	0.69
Colleagues in my school welcome research opportunities	0.01	−0.06	0.89	0.89
School leadership encourages me to conduct research	−0.11	0.06	0.81	0.79
School staff has research expertise	0.05	−0.05	0.73	0.76
Eigenvalue	5.68	1.62	1.24	
Percentage of total variation	35.47	10.14	7.75	
Scale reliability (Cronbach's alpha)	.884	.815	.841	
Means	4.44	2.67	3.34	
Standard Deviation	1.52	1.47	1.68	
	N=897	N=1014	N=1018	

EFA results: KMO measure of adequacy: .866; Bartlett's Test of Sphericity: $\chi2(120)=3571.99$, $p<.001$; Percent variance explained by three factors: 53.35%.
CFA results: CFI=.975, TLI=.967, RMSEA=.045, 90%CI=[.036054], $\chi2=193.29$, df=93, $p<.001$, SRMR=.045.

Table 4. Variables influencing engagement in professional learning activities.

Factors influencing the choice of advanced training	Internal factors	External factors	CFA Loadings
Networking	0.75	−0.12	0.53
Addressing pedagogy	0.67	0.07	0.81
Addressing research and writing	0.67	−0.12	0.50
The providers	0.52	0.25	0.67
Addressing SBTE	0.47	0.14	0.62
The location	−0.09	0.84	0.83
The cost	−0.01	0.60	0.73
Cover availability	0.09	0.50	0.60
Eigenvalue	2.46	0.97	
Percentage of total variation	30.80	12.06	
Scale reliability (Cronbach's alpha)	.769	.714	
Means	4.83	4.55	
Standard Deviation	1.18	1.56	
	N=1093	N=1092	

EFA results: KMO measure of adequacy: .780; Bartlett's Test of Sphericity: $\chi2(28)=1000.33$, $p<.001$; Percent variance explained by three factors: 42.86%.
CFA results: CFI=.947, TLI=.908, RMSEA=.087, 95% CI [.069106], $\chi2=82.90$, df=16, $p<.001$, SRMR=.049.

Variables that influence SBTEs' choice to engage in professional learning activities

Two factors represent variables that could influence participants' choice to engage in professional learning (see Table 4): *Internal Variables*, such as who the providers are and the contents of the activities; and *External Variables*, such as their location and cost.

Both internal and external variables affect SBTEs' decisions on whether to participate in a professional learning activity or not. The effect of internal variables, such as the subject

Table 5. SBTESs' level of interest in specific professional learning activities.

	N	Mean	Std. Deviation
Informal conversations with colleagues	1566	5.38	1.506
Observation of colleagues	1573	5.30	1.620
Visits to other schools/colleges/teacher education institutions	1571	5.18	1.559
Teacher Education Pedagogy	1459	5.14	1.671
Reading	1576	5.13	1.514
Coaching and mentoring students	1458	5.09	1.768
Subject knowledge	1456	5.05	1.764
Observation by colleagues	1571	4.95	1.753
Current developments in Teacher Education	1453	4.93	1.719
Integrating ICT	1456	4.91	1.786
Action/practitioner research	1565	4.91	1.670
Coaching and mentoring teachers	1451	4.89	1.874
Attending conferences	1565	4.60	1.673
training outside the institution	1560	4.56	1.687
training within the institution	1569	4.52	1.697
Participation in professional organizations	1556	4.50	1.715
Award bearing courses	1567	4.50	1.846
International exchanges	1554	4.43	1.930
Leadership skills	1452	4.43	1.966
Online learning	1547	4.34	1.703
Researching my own practice	1455	4.33	1.938
Other forms of data gathering	1535	4.26	1.640
Participation at conferences	1457	4.25	1.934
Research skills in general	1443	4.12	1.931
Presenting at conferences	1541	4.02	1.863
Writing and publishing for students	1541	3.95	1.801
Writing and publishing for teachers	1551	3.93	1.848
Scholarly writing	1458	3.74	1.968
Secondment	1501	3.06	1.794
Sabbatical	1506	2.81	1.839

of the activity and the providers, is moderate-high ($M = 4.88$, SD = 1.27), whereas the effect of external variables such as the cost of the activity and its location is moderate ($M = 4.47$, SD = 1.61). The difference between them is, however, significant ($t_{(1511)} = 10.02$, $p < .001$).

SBTEs' interest in further professional learning

The mean value of interest in specific professional learning activities is presented in Table 5. The most highly valued activities are as follows: informal conversations with colleagues, observation of colleagues and visits to other schools/colleges/ teacher education institutions. All activities involve learning from and with each other.

The level of interest in further professional learning activities in all three factors is moderate-high. Nonetheless, it is significantly higher with respect to pedagogical interests ($M = 4.93$, SD = 1.34) and working with colleagues ($M = 4.94$, SD = 1.26) than with respect to academic activities ($M = 4.18$, SD = 1.30) related to research and publications (repeated measures ANOVA, simple contrasts: $F_{(1, 1461)} = 488.68$, $p < .001$, $\eta^2 = 0.25$; $F_{(1, 1461)} = 561.99$, $p < .001$, $\eta^2 = 0.28$, respectively).

Discussion

The knowledge, skills, creativity and emotional endeavour required to teach others how to teach varies considerably in content, form, process and pedagogy to that required when teaching children. The dual identity that SBTEs possess (as both teachers and teacher educators) therefore adds additional complexity in understanding what sorts of professional learning activities are of most value to them. While scant evidence is said to exist in relation to dedicated professional learning opportunities and qualifications for SBTEs to train and educate other teachers (Andreasen 2023; Salo et al. 2019), one of the immediate surprises from our data, in general, was the degree of preparation that many (but not all) SBTEs have for their role as teacher educators. This level of preparation was in sharp contrast to our survey findings on the same theme with higher education-based teacher educators back in 2016 in a survey that highlighted the paucity of opportunities afforded to them (Czerniawski, MacPhail, and Guberman 2017). In other words, you are more likely to receive some form of professional development activity to become a teacher educator in schools than in universities. However, the nature of that preparation varies significantly from country to country and is situated, within varying degrees, on a spectrum ranging from informal to more formal forms of professional development activity. In Austria, for example, educational teaching reforms were introduced in 2013 (*PädagogInnenbildung NEU)* aimed at developing accredited training programmes and certification for SBTEs (Symeonidis 2020). In England, one of the outcomes of governmental policy in ITE since 2010 has been the expanding provision of *professional development* for some teacher educators in some schools albeit in fragmented and particularised forms (Murray, Lunenberg, and Smith 2017). In other countries like Belgium and Ireland, no such standardised training exists at the time of writing this paper although developments are afoot.

Acknowledging the potential dangers of generalisation, the factor analyses deployed in this study and the three areas of interest for professional learning it revealed (i.e. *academic interests*, *pedagogical interests* and *learning with and from colleagues*) highlighted the importance placed on informal learning opportunities (see Table 4). These preferred modes of learning were, in many cases, similar to those of higher education-based teacher educators described by MacPhail et al. (2018), e.g. informal learning conversations, personal reading and observations by/of other colleagues (providing those observations were not connected to some form of performative assessment). Academic and pedagogical interests received medium to medium high rankings, with higher rankings being aligned with writing and publishing for teachers and students (academic) and coaching and mentoring students and teachers (pedagogical). There was a greater level of variability from low to high rankings for learning with others with observations of and by colleagues ranked higher. The same three factors were identified from a survey of Chinese higher-based teacher educators (Gong, MacPhail, and Guberman 2021).

When SBTEs deliberate on whether to take part in a professional learning activity, they may consider several factors including the topics the activity addresses, its potential contribution to their professional development trajectory, time and cost constraints. Our factor analyses resulted in two types of considerations: internal versus external factors. Internal factors are those that inherently contribute to SBTEs'

professional competence (for example, by addressing pedagogy or research and writing), and sense of relatedness to others (through networking). Enhanced knowledge and connection with others can further promote SBTEs' sense of professional autonomy, all associated with internal motivation (Ryan and Deci 2000). In contrast, external factors (such as the cost or the location of the activity) are conditions that are separable from the professional learning activities' contents, aims or results, but can nonetheless either support or hinder participation in those activities. Both types of considerations received medium to medium – high rankings. However, in view of SBTEs' high workload and the relatively small amount allocated to teacher education in their work remit, it is noteworthy that the internal factors received higher rankings than the external ones. This surprising finding is another indicator of SBTEs' need for professional learning opportunities that will enhance their professional competences. Teacher educators, in general, have often been overlooked in terms of targeted professional development support and this seems to be no different (if not worse) for SBTEs. The identification of this oversight indicates just how important it is to provide dedicated and targeted professional development support, i.e. activities which directly focus on these teachers' roles and responsibilities as SBTEs.

The championing of teachers as researchers has a significant tradition internationally and with many powerful voices. 'Classroom inquiry', 'action research', 'close-to-practice research' and 'teacher research' are just some of the terms that have been used, over the last 70 years, to describe, in different ways, the nature and value of school-based research by teachers (Hammersley 1993; Rudduck 1987; Wyse et al. 2018). Our findings evidence that SBTEs have generally acculturated the importance of research in informing their work. SBTEs' attitudes towards research involvement are moderate-high, particularly in relation to the need to conduct research to extend teacher education knowledge and improve their practice. They also view the leadership of their schools and colleagues as moderately interested in research and having the expertise to conduct research. Yet, their actual involvement in research is low, and significantly smaller than we had found in our earlier study with colleagues working in HEIs (Czerniawski, MacPhail, and Guberman 2017). While this finding is perhaps unsurprising, it is noteworthy that SBTEs who are willing to conduct research, acknowledge its importance to inform their work and that of their colleagues in teacher education, do not engage in research. This suggests that actual involvement in research is contingent, at least in part, on the working conditions in schoolsin particular, the degree to which SBTEs consider their school leadership and colleagues as supportive of research. The authors of this paper agree that support on the school level, in terms of dedicated time to read and write research, targeted professional development provision to build research expertise amongst staff, and support to attend and present at conferences is crucial to continue to nurture this group's scholarly and researcherly dispositions (Tack and Vanderlinde 2016). SBTEs' researcherly disposition is a prerequisite for authentic and enduring professional learning. It is also a prerequisite for future practice in teacher education that will support a new generation of teachers to go beyond 'what works' to engage in genuine educational transformation of the system and its learners. Our findings, however, also suggest that these dispositions are necessary but not sufficient conditions for research to occur in schools. Institutional support and teamwork may be required in addition to individual SBTEs' positive attitudes and suitable skills (Guberman et al. 2021).

The limitations of an article of this nature are acknowledged by the authors, not least, the extent to which one article can address the in-depth specificities of SBTEs' professional learning on a country-by-country basis. For example, as stated in the literature review, one such specificity is that SBTE's professional learning preferences can vary over time and to the level of their experience (Dengerink, Lunenberg, and Kools 2015). The results in this study are treated globally and, as such, this treatment is a limitation of the study. Nevertheless, the first part of this ongoing study ('Phase One'), reported here, addresses the lack of research into the professional development of SBTEs and, moreover, can begin to determine what is effective in supporting them in their professional growth (Lunenberg, Dengerink, and Korthagen 2014). Follow-up interviews ('Phase Two') underway at the time of writing, with a volunteering sample of SBTEs from this study, will in future publications, provide deeper insight into the relationship between professional learning opportunities and the learning processes and outcomes gained from these.

Concluding thoughts

Our study celebrates the integrity, commitment and passion that SBTEs bring to their work with teachers in all phases of their professional development. But it does more than this. This study affirms existing literature that professional learning for SBTEs is, currently, deemed more valuable when they are available through informal workplace learning (Boyd, Harris, and Murray 2011; Murray, Lunenberg, and Smith 2017). Different globalised, internationalised and localised understandings exist about how to train and educate teachers and what it means to be a professional teacher educator (Darling-Hammond and Lieberman 2012; Gewirtz et al. 2009). Even within national borders, differences within the constellations and patterns of professional relationships ensure the experience of being a SBTE varies considerably for different individuals even within broadly similar contexts and settings (Czerniawski, Kidd, and Murray 2019). Nevertheless, this study provides empirical evidence of the need for much wider recognition and professional learning support for SBTEs in their different jurisdictions at a time when many countries are increasingly developing their own school-based models of teacher education as part of a wider international practice or practicum-turn.

Acknowledgments

Disclosure statement

Notes on contributors

Gerry Czerniawski runs the doctoral programmes in education at the School of Education and Communities, University of East London (UEL). He is a National Teaching Fellow of the Higher Education Academy, chair of the British Curriculum Forum, council member of the International

Forum for Teacher Educator Development (InFo-TED) and a member of the leadership committee of the British Educational research Association (BERA).

Ainat Guberman, PhD, is the head of the research Authority at The MOFET Institute for teacher educators' professional development in Tel-Aviv. She is a lecturer at the David Yellin College of Education, as well as the Hebrew University. Guberman received her BA, MA and PhD (all cum laude) from the Department of Psychology at the Hebrew University, Jerusalem, Israel.

Ann MacPhail is Assistant Dean Research in the Faculty of Education and Health Sciences at the University of Limerick, Ireland. Her main research and teaching interests revolve around (physical education) teacher education, curriculum development, instructional alignment, methodological issues in working with young people and ethnography.

Eline Vanassche (PhD in Education) is a tenure track professor at the University of Leuven, Campus Kulak. She is a former Marie Skłodowska-Curie fellow at the University of East London and assistant professor at Maastricht University. Her research interest includes the nature of teacher educators' professionalism and its development throughout their careers. She has a particular interest in the interaction between teacher educators and the social and structural contexts of their work.

Data availability statement

The data that support the findings of this study are available from Gerry Czerniawski upon reasonable request.

Ethics of approval

This research was given via University of East London ethics approval – number 1920–0004

References

Andreasen, J. K. 2023. "School-Based Mentor Teachers as Boundary-Crossers in an Initial Teacher Education Partnership." *Teaching & Teacher Education* 122 (2023): 103960. https://doi.org/10.1016/j.tate.2022.103960.

Bates, T., A. Swennen, and K. Jones. 2011. *The Professional Development of Teacher Educators*. London: Routledge.

Ben-Peretz, M., S. Kleeman, R. Reichenberg, and S. Shimoni. 2011. "Educators of Educators: Their Goals, Perceptions and Practices." In *The Professional Development of Teacher Educators*, edited by T. Bales, A. Swennen, and K. Jones, 119–137. NY, USA: Springer.

Boyd, P., K. Harris, and J. Murray. 2011. *Becoming a Teacher Educator: Guidelines for Induction*. Bristol, UK: Higher Education Academy, Subject Centre for Education (ESCalate), University of Bristol Graduate School of Education.

Boyd, P., and J. Tibke. 2012. "Being a School-Based Teacher Educator: Developing Pedagogy and Identity in Facilitating Work-Based Higher Education in a Professional Field." *Practitioner Research in Higher Education* 6 (2): 41–57.

Butler, B. M., and A. Cuenca. 2012. "Conceptualising the Roles of Mentor Teachers During Student Teaching." *Action in Teacher Education* 34 (4): 296–308. https://doi.org/10.1080/01626620.2012.717012.

Childre, A. L., and G. L. Van Rie. 2015. "Mentor Teacher Training: A Hybrid Model to Promote Partnering in Candidate Development." *Rural Special Education Quarterly* 34 (1): 10–16. https://doi.org/10.1177/875687051503400104.

Cochran-Smith, M., L. Grudnoff, L. Orland-Barak, and K. Smith. 2020. "Educating Teacher Educators: International Perspectives." *The New Educator* 16 (1): 5–24. https://doi.org/10.1080/1547688X.2019.1670309.

Czerniawski, G., W. Kidd, and J. Murray. 2019. "We are All Teacher Educators Now: Understanding School-Based Teacher Educators in Times of Change in England." In *International Research, Policy and Practice in Teacher Education: Insider Perspectives*, edited by A. Swennen, C. Kosnik, and J. Murray, 171–185. London: Springer. https://doi.org/10.1007/978-3-030-01612-8_12.

Czerniawski, G., A. MacPhail, and A. Guberman. 2017. "The Professional Development Needs of Higher Education-Based Teacher Educators: An International Comparative Needs Analysis." *European Journal of Teacher Education* 40 (1): 127–140. https://doi.org/10.1080/02619768.2016.1246528.

Darling-Hammond, L., and A. Lieberman. 2012. "Teacher Education Around the World: What Can We Learn from International Practice." In *Teacher Education Around the World - Changing Policies and Practices*, edited by L.-D. Hammond and A. Lieberman, 151–169. London: Routledge. https://doi.org/10.4324/9780203817551.

Dengerink, J., M. Lunenberg, and Q. Kools. 2015. "What and How Teacher Educators Prefer to Learn." *Journal of Education for Teaching* 41 (1): 78–96. https://doi.org/10.1080/02607476.2014.992635.

Donaldson, G. 2011. *Teaching Scotland's Future: A Report of the Review of Teacher Education in Scotland*. Edinburgh: Scottish Government.

European Commission. 2013. *Supporting Teacher Educators for Better Learning Outcomes*. Brussels: European Commission.

Feiman-Nemser, S. 1998. "Teachers as Teacher Educators." *European Journal of Teacher Education* 21 (1): 63–74. https://doi.org/10.1080/0261976980210107.

Gewirtz, S., P. Mahony, I. Hextall, and A. Cribb. Eds. 2009. *Changing Teacher Professionalism: International Trends, Challenges and Ways Forward*. London: Routledge. https://doi.org/10.4324/9780203887264

Gong, Y., A. MacPhail, and A. Guberman. 2021. "Professional Learning and Development Needs of Chinese University-Based Physical Education Teacher Educators." *European Journal of Teacher Education* 1–17. https://doi.org/10.1080/02619768.2021.1972967.

Guberman, A., M. Ulvik, H. Oolbekkink-Marchand, and A. MacPhail. 2021. "Teacher Educators' Professional Trajectories: Evidence from Ireland, Israel, Norway and the Netherlands." *European Journal of Teacher Education* 44 (4): 468–485. https://doi.org/10.1080/02619768.2020.1793948.

Hammersley, M. 1993. "On the Teacher as Researcher." *Educational Action Research* 1 (3): 425–445. https://doi.org/10.1080/0965079930010308.

Hefetz, A., and G. Liberman. 2017. "The Factor Analysis Procedure for Exploration: A Short Guide with Examples." *Culturay Educación* 29 (3): 526–562. https://doi.org/10.1080/11356405.2017.1365425.

Izadinia, M. 2014. "Teacher Educators' Identity: A Review of the Literature." *European Journal of Teacher Education* 37 (4): 426–441. https://doi.org/10.1080/02619768.2014.947025.

Kennedy, A. 2005. "Models of Continuing Professional Development: A Framework for Analysis." *Journal of In-Service Education* 31 (2): 235–250. https://doi.org/10.1080/13674580500200277.

Livingstone, K. 2014. "Teacher Educators: Hidden Professionals?" *European Journal of Education* 49 (2): 218–232. https://doi.org/10.1111/ejed.12074.

Loughran, J. 2013. "Pedagogy: Making Sense of the Complex Relationship Between Teaching and Learning." *Curriculum Inquiry* 43 (1): 118–141. https://doi.org/10.1111/curi.12003.

Loughran, J. 2014. "Professionally Developing as a Teacher Educator." *Journal of Teacher Education* 65 (4): 271–283. https://doi.org/10.1177/0022487114533386.

Lunenberg, M., J. Dengerink, and F. Korthagen. 2014. *The Professional Teacher Educator: Roles, Behaviour, and Professional Development of Teacher Educators*. Rotterdam, The Netherlands: Sense Publishers. https://doi.org/10.1007/978-94-6209-518-2.

MacPhail, A., M. Ulvik, A. Guberman, G. Czerniawski, H. Oolbekkink-Marchand, and Y. Bain. 2018. "The Professional Development of Higher Education-Based Teacher Educators: Needs and Realities." *Professional Development in Education* 45 (5): 848–861. https://doi.org/10.1080/19415257.2018.1529610.

Mattsson, M., T. V. Eilertsen, D. Rorrison, M. Mattsson, T. V. Eilertsen, and D. Rorrison. 2011. *A Practicum Turn in Teacher Education*. Rotterdam, The Netherlands: Sense Publishers. https://doi.org/10.1007/978-94-6091-711-0.

McNamara, O., J. Murray, and R. Phillips. 2017. *Policy and Research Evidence in the 'Reform' of Primary Initial Teacher Education in England*. Cambridge, UK: Cambridge Primary Review Trust.

Murray, J. 2002. "Between the Chalkface and the Ivory Towers? A Study of the Professionalism of Teacher Educators Working on Primary Initial Teacher Education Courses in the English Education System." *Collected Original Resources in Education* 26 (3): 1–469.

Murray, J., M. Lunenberg, and K. Smith. 2017. "Educating the Educators: Policies and Initiatives in European Teacher Education|." In *A Companion to Research in Teacher Education*, edited by M. Peters, B. Cowie, and I. Menter, 651–666. Singapore: Springer Singapore. https://doi.org/10.1007/978-981-10-4075-7_44.

Murray, J., and T. Mutton. 2016. "Teacher Education in England; Change in Abundance, Continuities in Question." In *Teacher Education in Times of Change*, edited by T. E. Group, 57–74 . Bristol, UK: Policy Press. https://doi.org/10.1332/policypress/9781447318538.003.0004.

Mutton, T., K. Burn, and I. Menter. 2017. "Deconstructing the Carter Review: Competing Conceptions of Quality in England's 'School-Led' System of Initial Teacher Education." *Journal of Education Policy* 32 (1): 14–33. https://doi.org/10.1080/02680939.2016.1214751.

Ng, S., and E. Chan. 2012. "School—University Partnership: Challenges and Visions in the New Decade." *Global Studies of Childhood* 2 (1): 47–58. https://doi.org/10.2304/gsch.2012.2.1.38.

Osborne, J. W. 2015. "What is Rotating in Exploratory Factor Analysis?" *Practical Assessment, Research & Evaluation* 20 (1): 2.

Parker, A. K., K. Zenkov, and H. Glaser. 2021. "Preparing School-Based Teacher Educators: Mentor teachers' Perceptions of Mentoring and Mentor Training." *Peabody Journal of Education* 96 (1): 65–75. https://doi.org/10.1080/0161956X.2021.1877027.

Ping, C., G. Schellings, and D. Beijaard. 2018. "Teacher Educators' Professional Learning: A Literature Review." *Teaching and Teacher Education* 75 (2): 93–104. Available at. https://doi.org/10.1016/j.tate.2018.06.003.

Powell, D. 2021. "Teacher Educator Collaboration and Pedagogy of Teacher Education." In *Being a Teacher Educator – Research-Informed Methods for Improving Practice*, edited by A. Swennen and E. White, 56–72. London: Routledge. https://doi.org/10.4324/9781003055457-5.

Rakes, L., R. L. Powell, B. Blevins, and V. Giordano. 2022. "Navigating the Roles of the School-Based Teacher Educator: Mentor Teachers' and Teacher Candidates' Perceptions." *The Educational Forum* 87 (1): 1–17. https://doi.org/10.1080/00131725.2022.2053019.

Resch, K., I. Schrittesser, and M. Knapp. 2022. "Overcoming the Theory-Practice Divide in Teacher Education with the 'Partner School Programme'. A Conceptual Mapping." *European Journal of Teacher Education* 1–17. https://doi.org/10.1080/02619768.2022.2058928.

Richter, E., R. Lazarides, and D. Richter. 2021. "Four Reasons for Becoming a Teacher Educator: A Large-Scale Study on Teacher Educators' Motives and Well-Being." *Teaching and Teacher Education* 102:103322. https://doi.org/10.1016/j.tate.2021.103322.

Rudduck, J. 1987. "Teacher Research, Action Research, Teacher Inquiry: What's in a Name?" In *Collaborative Inquiry and Information Skills*, edited by J. Rudduck, D. Hopkins, J. Sanger, and P. Lincoln, 15–47. London: British Library research paper 16.

Ryan, R. M., and E. L. Deci. 2000. "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions." *Contemporary Educational Psychology* 25 (1): 54–67. https://doi.org/10.1006/ceps.1999.1020.

Salo, A., K. Uibu, A. Ugaste, and H. Rasku-Puttonen. 2019. "The Challenge for School-Based Teacher Educators: Establishing Teaching and Supervision Goals." *Teacher Development* 23 (5): 609–626. https://doi.org/10.1080/13664530.2019.1680426.

Symeonidis, V. 2020. *Europeanisation in Teacher Education – a Comparative Case Study of Teacher Education Policies and Practices*. London: Routledge.

Symeonidis, V., and A. Gajewska-Dyszkiewicz. 2017. "Revealing the Hidden Profession? Recent Developments to Support Teacher Educators in Europe: The Cases of Hungary and Poland." In *European Perspectives in Transformative Education*, edited by L. Rasiński, T. Tóth, and J. Wagner, 144–167. Wroclaw, Poland: Wydawnictwo Naukowe Dolnoslaskiej Szkoly Wyzszej.

Tack, H., and R. Vanderlinde. 2016. "Measuring Teacher Educators' Researcherly Disposition: Item Development and Scale Construction." *Vocations and Learning* 9 (1): 43–62. https://doi.org/10.1007/s12186-016-9148-5.

Taylor, M., E. J. Klein, and L. Abrams. 2014. "Tensions of Reimagining Our Roles as Teacher Educators in a Third Space: Revisiting a Co/Autoethnography Through a Faculty Lens." *Studying Teacher Education* 10 (1): 3–19. https://doi.org/10.1080/17425964.2013.866549.

Trent, J. 2013. "Becoming a Teacher Educator. The Multiple Boundary-Crossing Experiences of Beginning Teacher Educators." *Journal of Teacher Education* 64 (3): 262–275. https://doi.org/10.1177/0022487112471998 .

Ulvik, M., and E. Sunde. 2013. "The Impact of Mentor Education: Does Mentor Education Matter?" *Professional Development in Education* 39 (5): 754–770. https://doi.org/10.1080/19415257.2012.754783.

Vanassche, E. 2022. "Teacher Education Policy and Professionalism: A Personal Review of Teacher Education Policy Research." In *International Encyclopedia of Education*, edited by R. Tierney, F. Rizzi, and K. Ercikan, 10–19. London: Elsevier. https://doi.org/10.1016/B978-0-12-818630-5.04092-6.

Vanassche, E., F. Rust, P. Conway, K. Smith, H. Tack, and R. Vanderlinde. 2015. "InFo-TED: Bringing Policy, Research, and Practice Together Around Teacher Educator Development." In *International Teacher Education: Promising Pedagogies*, edited by C. Craig and L. Orland-Barak, 341–364. Bingley, UK: Emerald. https://doi.org/10.1108/S1479-368720150000022015.

Van der Klink, M., Q. Kools, G. Avissar, S. White, and T. Sakata. 2017. "Professional Development of Teacher Educators: What Do They Do? Findings from an Explorative International Study." *Professional Development in Education* 43 (2): 163–178. https://doi.org/10.1080/19415257.2015.1114506.

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, E., C. Dickerson, and K. Weston. 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., and M. Timmermans. 2021. *The Teacher Educator's Handbook – a Narrative Approach to Professional Learning*. St Albans, London: Critical Publishing.

White, E., M. Timmermans, and C. Dickerson. 2021. "Learning from Stories About the Practice of Teacher Educators in Partnerships Between Schools and Higher Education Institutions." In *Being a Teacher Educator – Research-Informed Methods for Improving Practice*, edited by A. Swennen and E. White, 126–139. London: Routledge. https://doi.org/10.4324/9781003055457-10.

Wyse, D., C. Brown, S. Oliver, and X. Poblete. 2018. The BERA Close-To-Practice Research Project: Research Report. British Educational Research Association. https://www.bera.ac.uk/researchers-resources/publications/bera-statement-on-close-to-practice-research.

Zenkov, K., and H. Glaser. 2021. "Preparing School-Based Teacher Educators: Mentor Teachers' Perceptions of Mentoring and Mentor Training." *Peabody Journal of Education* 96 (1): 65–75. https://doi.org/10.1080/0161956X.2021.1877027.

practice takes, large and various groups of school-based teacher educators have joined the ranks of teacher education. However, there has been little research evidence of commensurate and dedicated professional learning opportunities for school-based teacher educators (SBTEs) (specifically related to their role as teacher educators), a point emphasised by White (2019, 206):

> Mentors and supervisory teachers are typically not prepared to understand a pedagogy of teacher education (Loughran 2013). Their role is viewed as one of master-apprentice, with pre-service teachers following what they do but with little understanding of the reasoning behind such actions.

This article addresses this lack of evidence by presenting findings from the largest international survey ($n = 1680$), to date, on SBTEs' professional learning needs. This article uniquely contributes to an understanding, internationally, of who these people are, how they are prepared to become SBTEs and what their professional learning needs are. The study, carried out by the *International Forum for Teacher Educator Development* (InFo-TED), builds on an earlier international study (Czerniawski, MacPhail, and Guberman 2017) that focused on the professional learning needs of higher education-based teacher educators. As SBTEs increasingly take on larger roles and responsibilities in the initial and ongoing education of *all* teachers across many countries – the timeliness and importance of this current study is of particular significance. Research on the disruptive experiences of classroom teachers transitioning into teacher education (a.o. Ben-Peretz et al. 2011; Trent 2013) suggests being an experienced teacher does not automatically imply both an understanding of and proficiency in the pedagogy of teacher education. Furthermore, the COVID-19 pandemic, technological transformation, culture wars, environmental change, changing migration flows and increasing pupil diversity are just some of the many factors driving an urgent need to critically (re)consider how best we professionally develop those teachers in schools held responsible for the education and training of both prospective and practicing teachers. This article starts by reviewing literature on the multiple roles SBTEs engage with and the implications of that engagement for their professional learning. After describing the methodology deployed in this study, the findings will then be presented and discussed around the following themes: SBTEs' professional learning experiences; their research-related attitudes and experience; variables influencing their engagement in professional learning activities; and the extent to which SBTEs are interested in further professional learning that is directed to their roles as teacher educators.

School-based teacher educators' multiple roles

While teachers in schools are increasingly being expected to take responsibility for the education and training of prospective as well as practicing teachers, little empirical research has been undertaken into the support that SBTEs require and receive to perform their duties effectively. One of the many reasons for this lack of evidence is the lack of recognition SBTEs have, as teacher educators, in addition to their role as school teachers (Feiman-Nemser 1998; Taylor, Klein, and Abrams 2014). We use 'teacher educator' as the overall and inclusive term to encompass all types of people who are professionally involved and engaged in the initial and ongoing education of teachers. That broad

definition follows one used by the European Commission (2013) who describe teacher educators as 'all those who actively facilitate the (formal) learning of student teachers and teachers' (p. 8). The Donaldson report, a review of teacher education in Scotland, states that 'all teachers should see themselves as teacher educators and be trained in mentoring' (Donaldson 2011, 94). And yet, despite this policy attention, many SBTEs are often not recognised as teacher educators by those who work with (e.g. other teachers; teaching assistants; senior leadership) and do not identify as teacher educators (Czerniawski, Kidd, and Murray 2019; Livingstone 2014). The latter observation is particularly consequential as it suggests an important shift in identity, practices, and pedagogical expertise that has not been made. Increasing attention from both academics and policy makers *is* being given to the complexity in this identity work and its implications for professional learning (Cochran-Smith et al. 2020; Izadinia 2014; Loughran 2014; White and Timmermans 2021). SBTEs are simultaneously both first and second-order practitioners (Murray 2002), i.e. both teachers and teacher educators. The schools in which they work are complex and often hectic institutions that have structurally developed over time to prioritise pupil learning above that of the professional learning of teachers and teacher educators. Furthermore, while teacher education models vary from school to school and from country to country, some SBTEs work independently and/or with private providers and/ or networks of schools, while others work with higher education-based teacher educators adding greater complexity to the task of understanding what their professional learning needs might be. In addition to their role as schoolteachers teaching pupils, SBTEs' work focuses, in the main, on the professional learning of two groups – student/trainee teachers and more experienced teachers who are engaged in their own continuing professional development (CPD) (Parker, Zenkov, and Glaser 2021; Salo et al. 2019). White et al. (2015, 443) divide SBTE roles into three areas, namely, those associated with a traditional mentoring role (e.g. daily supervision of a student-teacher), those associated with a supervisory role across a school or schools (e.g. the coordination of the professional learning of both student and qualified teachers) and those associated more commonly with institute-based teacher educators (e.g. engaging in research activity). For many, this work also includes being responsible for organising some or all aspects of Initial Teacher Education (ITE) including the recruitment of trainees; the design, implementation and evaluation of course components and their assessment (Czerniawski, MacPhail, and Guberman 2017; McNamara, Murray, and Phillips 2017). Despite these many roles, and SBTE's importance in the development of a future work force, they are still acknowledged to be a 'hidden profession' (Richter, Lazarides, and Richter 2021; Symeonidis and Gajewska-Dyszkiewicz 2017).

School-based teacher educators' professional learning

The professional learning of teacher educators has, over nearly two decades, emerged as a research area, with much of its earlier literature focussing on higher education-based teacher educators and drawing on work associated with teachers' CPD in schools (e.g. Bates, Swennen, and Jones 2011; Kennedy 2005). Since then, several notable studies within this growing body of work exist (e.g. Czerniawski, MacPhail, and Guberman 2017; Gong, MacPhail, and Guberman 2021; Lunenberg, Dengerink, and Korthagen 2014; Van der Klink et al. 2017; Vanassche et al. 2015) and

systematic reviews are starting to emerge into how best higher-education-based teacher educators learn (see, Ping, Schellings, and Beijaard 2018). Within the literature on mentor teachers, attempts have been made to distinguish mentors and SBTEs conceptually (White, Timmermans, and Dickerson 2021); understand mentor perceptions of their roles as SBTEs (Rakes et al. 2022); and understand the roles of cooperating teachers within school–university partnerships who in turn might position themselves as SBTEs (Parker, Zenkov, and Glaser 2021). However, these studies have not, specifically, focussed on the professional learning of SBTEs. Researchers are, nevertheless, beginning to address this gap (e.g. Zenkov and Glaser 2021). A study carried out in the Netherlands (Dengerink, Lunenberg, and Kools 2015) has indicated, for example, that the professional learning preferences of SBTEs vary over time and to the level of experience as a SBTE. Those with less experience were, in that study, interested in coaching skills, pedagogical content knowledge, their own role within wider communities of teacher educators and opportunities to contribute to the knowledge development of the profession as a whole. However, more experienced SBTEs were interested in learning about the policy context of school–university partnerships, curriculum issues at the progamme level and the pedagogy of teacher education.

The presumption that, if you can teach young people in schools you can therefore also teach adults how to teach and how to teach more effectively, is one that has permeated many teacher education systems and policies (Butler and Cuenca 2012; Feiman-Nemser 1998; Parker, Zenkov, and Glaser 2021). This assumption is, perhaps, one explanatory factor for why, until relatively recently, few formal professional learning opportunities have existed for SBTEs and, where such opportunities exist, they vary in quality and relevance (Childre and Van Rie 2015; Ulvik and Sunde 2013). But other factors can also account for variations in provision of, and accessibility to, professional learning opportunities. SBTEs can, for example, experience a lack of access to such opportunities depending on the extent to which schools and universities, working in partnership, cooperate in its provision (Ng and Chan 2012; Salo et al. 2019). White et al's (2015 study on SBTEs raises questions about not just access but the quality of provision and its impact. In their study, the authors consider the perspectives of SBTEs in England, where over 50% of student teachers are in school-led teacher education, exploring the impact that this role has on them, their student teachers and their schools. The authors argue that 'for initial teacher education to be postgraduate rather than training in teaching skills, there are implications for the professional learning of SBTEs' (p. 457). These implications include the ramifications of not being (or feeling) part of a professional learning community of teacher educators, the subsequent restrictive impact that might have on developing pedagogies for teacher education and a research-informed inquiry stance in student teachers.

This study

Drawing on earlier work exploring the professional learning needs of higher education-based teacher educators (Czerniawski, MacPhail, and Guberman 2017), the authors of this current study have, through an international survey with SBTEs, addressed two main research questions:

(1) What types of professional learning activities do SBTEs suggest would address their professional learning needs?
(2) How can those activities best be realised?

The research questions for this study are significant when considering that many SBTEs working in schools engage in activities supporting student teachers and more experienced colleagues as a secondary professional role in addition to their primary role as school teachers – a role that, understandably perhaps, is more likely to be prioritised in terms of their professional learning opportunities.

Method

Participants

The participants of this study were 1680 SBTEs (see Table 1) from mainly 12 countries (Australia; Austria; Belgium; England; France; Ireland; Israel; Norway; Portugal; Romania; Scotland; and The Netherlands) associated with InFo-TED. The participants included teachers who self-identified as SBTEs and included teachers who mentor student teachers, interns and early-career teachers, as well as teachers who lead and facilitate their colleagues' professional learning. Variables' frequencies are presented both in raw numbers and as valid percentages, excluding respondents with missing data. There were 1075 (75.9%) women and 341 men (24.1%). Their median age group was 45–54 years old, and that was the most frequent age category, including 36% of the sample. Half of the participants had a Master's degree, 39.4% had a Bachelor's degree, 8.4% had a doctorate and 2.1% did not have an academic degree at all. About half of the participants (48.9%) had high-school teaching qualifications; 22.9% - elementary school; 16.4% - post 16; 14.1% - special education; and 4.7% had preschool teaching qualifications. The median category of years of experience prior to being appointed as SBTEs was 6–10 years, and that was also the median category of experience as SBTEs. 46.4% worked with student teachers, 12.9% worked with in-service teachers, and 40.7% worked with both groups. Most of the participants (88.4%) worked full time.

Table 1. The participants' countries.

Country	Number of participants	Valid percentages
Australia	65	3.94
Austria	220	13.33
Belgium	67	4.06
England	159	9.63
France	55	3.33
Ireland	86	5.21
Israel	151	9.15
Norway	160	9.69
Portugal	143	8.66
Romania	265	16.05
Scotland	138	8.36
The Netherlands	123	7.45
Other countries	19	1.15
Missing	29	–
Total	1680	100

Table 2. Professional learning preferences.

Areas of interest in advanced training	Academic Interests	Pedagogical Interests	Learning with and from Colleagues	CFA Loadings
Writing and publishing for teachers	0.92	−0.10	−0.09	0.76
Writing and publishing for students	0.87	−0.11	0.03	0.73
Presenting at conferences	0.80	−0.01	0.01	0.80
International exchanges	0.56	0.04	0.03	0.59
Scholarly writing	0.55	0.28	−0.13	0.63
Attending conferences	0.53	0.20	0.09	0.77
Sabbatical	0.52	−0.09	0.10	0.43
Award bearing courses	0.52	0.11	0.01	0.59
Secondment	0.51	−0.04	0.10	0.49
Coaching and mentoring students	−0.24	0.85	0.05	0.54
Coaching and mentoring teachers	−0.07	0.77	−0.04	0.57
TE Pedagogy	0.12	0.67	0.00	0.76
Leadership skills	0.07	0.60	0.01	0.50
Current developments in TE	0.22	0.57	−0.08	0.76
Integrating ICT	−0.02	0.55	0.13	0.50
Subject knowledge	0.06	0.53	−0.01	0.55
Observation of colleagues	−0.02	0.00	0.88	0.49
Observation by colleagues	0.05	−0.07	0.80	0.56
Informal conversations	0.06	0.19	0.40	0.62
training within the institution	0.20	0.08	0.30	0.66
Eigenvalue	6.42	1.52	1.43	
Percentage of total variation	32.10	7.59	7.14	
Scale reliability (Cronbach's alpha)	.876	.837	.740	
Means	3.88	4.88	5.14	
Standard Deviation	1.25	1.25	1.16	
	N=1,158	N=1,047	N=1,158	

EFA results: KMO measure of adequacy: .868; Bartlett's Test of Sphericity: $\chi2(190)=4{,}134.34$, $p<.001$; Percent variance explained by three factors: 46.83%.
CFA results: CFI=.951, TLI=.938, RMSEA=.053, 95% CI[.047059], $\chi2=398.40$, df=150, $p<.001$, SRMR=.047.

However, 77.7% reported that their work with qualified teachers took 20% or less of their time, and 69.9% reported similar amount of time spent on instructing student teachers.

The questionnaire

The survey was based on a questionnaire used by Czerniawski and his colleagues (2017) to explore the professional development needs of higher education-based teacher educators. Participants were asked about their *professional learning preferences* (30 items); *attitudes towards research and research experience* (18 items); *variables considered before a professional learning activity is engaged in* (9 items); *role description* and *background information* (15 items). Most of the items (58) were multiple-choice questions with a 7-point scale, ranging from 1 (= not at all) to 7 (= very much). Twelve items had other multiple-choice options, and four items were open questions, for example, *what term they use to describe their role*; and *the most important professional learning opportunities they had experienced as SBTEs*? The survey was translated into each country's local language (adjusting for country nuances, e.g. types of schools) and distributed online to SBTEs by the higher education institutions with which they worked, and through professional networks. A mixture of exploratory and confirmatory factor analyses models (EFA and CFA respectively) were used throughout. For the EFA, a random half of the data were used as a training sub-sample and for the CFA the other sample half was used as a test sub-

sample (Hefetz and Liberman 2017; Osborne 2015). Tables 2, 3, 4, 5 below present the set of items in each factor, the factor loadings, the internal consistency (Cronbach's Alpha), and indices of fit. Overall, seven items were dropped due to multiple loadings (less than 0.2 difference between items' factor loadings).

Results

SBTEs' opportunities for professional learning

Just under half of SBTEs completing the survey reported they received preparation and support for their role as SBTEs: 831 (49.5%) participated in a teacher education pro- gramme and 779 (46.4%) received on-the-job guidance in relation to the work they do either with student teachers or with experienced teachers. Only 210 participants (12.5%) reported they received no formal or informal support. The mean value of satisfaction with past opportunities for professional learning was moderately positive: 4.94 (SD = 1.45), with 39.5% expressing high levels of satisfaction.

SBTEs' professional learning preferences

Three distinct factors became evident (see Table 2) when participants were asked about their learning preferences: *Academic Interests* that comprises research-related activities such as attending and presenting at conferences and scholarly writing; *Pedagogical Interests* that consists of acquiring knowledge and skills related to teaching and mentoring; *Learning with and from colleagues* includes observations of and by colleagues and informal conversations with them. While the first two factors cast light on *what* SBTEs want to focus on in their professional learning, the third factor reveals *how* they want to learn and develop.

SBTEs' research related attitudes and experience

One of the many motivations for the practice-turn mentioned at the start of this paper was a desire to close the theory-practice gap (Resch, Schrittesser, and Knapp 2022) by providing student teachers with ample experience and reflection on practice. However, this solution (one would hope) relies on the assumption that SBTEs are well acquainted with educational research and its ability to inform critical analysis of their practices. Three significant factors emerged when participants were asked about their attitudes towards research and their research experience (see Table 3): *Personal Attitudes towards research* describe the importance that participants attribute to research in improving their knowl- edge and practices as teacher educators; *actual involvement in research*, for example, any experience in conducting and publishing research; and *school attitudes towards research* a factor that explored school leadership and staff interest in relation to research.

SBTEs' attitudes towards research involvement are moderate-high (*M* = 4.51, SD = 1.55). However, they view their school's attitudes towards research and their colleagues' research expertise as moderate (*M* = 3.54, SD = 1.78). The actual involvement of SBTEs in research is low (*M* = 2.70, SD = 1.52). The differences between these factors are significant (repeated measures ANOVA, repeated contrasts: $F_{(1, 1294)} = 414.48$, *p* < .001, $\eta^2 = 0.24$; $F_{(1, 1294)} = 211.61$, *p* < .001, $\eta^2 = 0.14$, respectively).

Table 3. Research-related attitudes and experience.

Research involvement	Attitudes	Actual Involvement	School attitudes	CFA Loadings
SBTEs should conduct research to extend TE knowledge	0.98	−0.10	−0.02	0.75
SBTEs should conduct research to improve their practice	0.96	−0.12	0.00	0.72
I read TE papers	0.69	0.14	0.03	0.74
I attend conferences and seminars	0.69	0.09	0.05	0.73
My SBTE role is informed by research	0.67	0.12	−0.03	0.77
SBTEs need training in research skills to conduct research	0.61	−0.07	−0.06	0.49
I have written textbooks	−0.13	0.79	−0.06	0.52
I have edited journals/books	−0.10	0.76	−0.05	0.58
I have written book reviews	−0.06	0.65	−0.02	0.50
I was actively involved in research and presented at conferences	0.21	0.55	0.05	0.75
I have mentored colleagues in research	0.11	0.48	0.16	0.69
I have written support materials for colleagues	0.08	0.47	−0.02	0.44
I was actively involved in research and published my findings	0.27	0.46	−0.01	0.69
Colleagues in my school welcome research opportunities	0.01	−0.06	0.89	0.89
School leadership encourages me to conduct research	−0.11	0.06	0.81	0.79
School staff has research expertise	0.05	−0.05	0.73	0.76
Eigenvalue	5.68	1.62	1.24	
Percentage of total variation	35.47	10.14	7.75	
Scale reliability (Cronbach's alpha)	.884	.815	.841	
Means	4.44	2.67	3.34	
Standard Deviation	1.52	1.47	1.68	
	N=897	N=1014	N=1018	

EFA results: KMO measure of adequacy: .866; Bartlett's Test of Sphericity: χ2(120)=3571.99, p<.001; Percent variance explained by three factors: 53.35%.
CFA results: CFI=.975, TLI=.967, RMSEA=.045, 90%CI=[.036054], χ2=193.29, df=93, p<.001, SRMR=.045.

Table 4. Variables influencing engagement in professional learning activities.

Factors influencing the choice of advanced training	Internal factors	External factors	CFA Loadings
Networking	0.75	−0.12	0.53
Addressing pedagogy	0.67	0.07	0.81
Addressing research and writing	0.67	−0.12	0.50
The providers	0.52	0.25	0.67
Addressing SBTE	0.47	0.14	0.62
The location	−0.09	0.84	0.83
The cost	−0.01	0.60	0.73
Cover availability	0.09	0.50	0.60
Eigenvalue	2.46	0.97	
Percentage of total variation	30.80	12.06	
Scale reliability (Cronbach's alpha)	.769	.714	
Means	4.83	4.55	
Standard Deviation	1.18	1.56	
	N=1093	N=1092	

EFA results: KMO measure of adequacy: .780; Bartlett's Test of Sphericity: χ2(28)=1000.33, p<.001; Percent variance explained by three factors: 42.86%.
CFA results: CFI=.947, TLI=.908, RMSEA=.087, 95% CI [.069106], χ2=82.90, df=16, p<.001, SRMR=.049.

Variables that influence SBTEs' choice to engage in professional learning activities

Two factors represent variables that could influence participants' choice to engage in professional learning (see Table 4): *Internal Variables*, such as who the providers are and the contents of the activities; and *External Variables*, such as their location and cost.

Both internal and external variables affect SBTEs' decisions on whether to participate in a professional learning activity or not. The effect of internal variables, such as the subject

Table 5. SBTESs' level of interest in specific professional learning activities.

	N	Mean	Std. Deviation
Informal conversations with colleagues	1566	5.38	1.506
Observation of colleagues	1573	5.30	1.620
Visits to other schools/colleges/teacher education institutions	1571	5.18	1.559
Teacher Education Pedagogy	1459	5.14	1.671
Reading	1576	5.13	1.514
Coaching and mentoring students	1458	5.09	1.768
Subject knowledge	1456	5.05	1.764
Observation by colleagues	1571	4.95	1.753
Current developments in Teacher Education	1453	4.93	1.719
Integrating ICT	1456	4.91	1.786
Action/practitioner research	1565	4.91	1.670
Coaching and mentoring teachers	1451	4.89	1.874
Attending conferences	1565	4.60	1.673
training outside the institution	1560	4.56	1.687
training within the institution	1569	4.52	1.697
Participation in professional organizations	1556	4.50	1.715
Award bearing courses	1567	4.50	1.846
International exchanges	1554	4.43	1.930
Leadership skills	1452	4.43	1.966
Online learning	1547	4.34	1.703
Researching my own practice	1455	4.33	1.938
Other forms of data gathering	1535	4.26	1.640
Participation at conferences	1457	4.25	1.934
Research skills in general	1443	4.12	1.931
Presenting at conferences	1541	4.02	1.863
Writing and publishing for students	1541	3.95	1.801
Writing and publishing for teachers	1551	3.93	1.848
Scholarly writing	1458	3.74	1.968
Secondment	1501	3.06	1.794
Sabbatical	1506	2.81	1.839

of the activity and the providers, is moderate-high ($M = 4.88$, SD = 1.27), whereas the effect of external variables such as the cost of the activity and its location is moderate ($M = 4.47$, SD = 1.61). The difference between them is, however, significant ($t_{(1511)} = 10.02$, $p < .001$).

SBTEs' interest in further professional learning

The mean value of interest in specific professional learning activities is presented in Table 5. The most highly valued activities are as follows: informal conversations with colleagues, observation of colleagues and visits to other schools/colleges/ teacher education institutions. All activities involve learning from and with each other.

The level of interest in further professional learning activities in all three factors is moderate-high. Nonetheless, it is significantly higher with respect to pedagogical interests ($M = 4.93$, SD = 1.34) and working with colleagues ($M = 4.94$, SD = 1.26) than with respect to academic activities ($M = 4.18$, SD = 1.30) related to research and publications (repeated measures ANOVA, simple contrasts: $F_{(1, 1461)} = 488.68$, $p < .001$, $\eta^2 = 0.25$; $F_{(1, 1461)} = 561.99$, $p < .001$, $\eta^2 = 0.28$, respectively).

Discussion

The knowledge, skills, creativity and emotional endeavour required to teach others how to teach varies considerably in content, form, process and pedagogy to that required when teaching children. The dual identity that SBTEs possess (as both teachers and teacher educators) therefore adds additional complexity in understanding what sorts of professional learning activities are of most value to them. While scant evidence is said to exist in relation to dedicated professional learning opportunities and qualifications for SBTEs to train and educate other teachers (Andreasen 2023; Salo et al. 2019), one of the immediate surprises from our data, in general, was the degree of preparation that many (but not all) SBTEs have for their role as teacher educators. This level of preparation was in sharp contrast to our survey findings on the same theme with higher education-based teacher educators back in 2016 in a survey that highlighted the paucity of opportunities afforded to them (Czerniawski, MacPhail, and Guberman 2017). In other words, you are more likely to receive some form of professional development activity to become a teacher educator in schools than in universities. However, the nature of that preparation varies significantly from country to country and is situated, within varying degrees, on a spectrum ranging from informal to more formal forms of professional development activity. In Austria, for example, educational teaching reforms were introduced in 2013 (*PädagogInnenbildung NEU)* aimed at developing accredited training programmes and certification for SBTEs (Symeonidis 2020). In England, one of the outcomes of governmental policy in ITE since 2010 has been the expanding provision of *professional development* for some teacher educators in some schools albeit in fragmented and particularised forms (Murray, Lunenberg, and Smith 2017). In other countries like Belgium and Ireland, no such standardised training exists at the time of writing this paper although developments are afoot.

Acknowledging the potential dangers of generalisation, the factor analyses deployed in this study and the three areas of interest for professional learning it revealed (i.e. *academic interests*, *pedagogical interests* and *learning with and from colleagues*) highlighted the importance placed on informal learning opportunities (see Table 4). These preferred modes of learning were, in many cases, similar to those of higher education-based teacher educators described by MacPhail et al. (2018), e.g. informal learning conversations, personal reading and observations by/of other colleagues (providing those observations were not connected to some form of performative assessment). Academic and pedagogical interests received medium to medium high rankings, with higher rankings being aligned with writing and publishing for teachers and students (academic) and coaching and mentoring students and teachers (pedagogical). There was a greater level of variability from low to high rankings for learning with others with observations of and by colleagues ranked higher. The same three factors were identified from a survey of Chinese higher-based teacher educators (Gong, MacPhail, and Guberman 2021).

When SBTEs deliberate on whether to take part in a professional learning activity, they may consider several factors including the topics the activity addresses, its potential contribution to their professional development trajectory, time and cost constraints. Our factor analyses resulted in two types of considerations: internal versus external factors. Internal factors are those that inherently contribute to SBTEs'

The limitations of an article of this nature are acknowledged by the authors, not least, the extent to which one article can address the in-depth specificities of SBTEs' professional learning on a country-by-country basis. For example, as stated in the literature review, one such specificity is that SBTE's professional learning preferences can vary over time and to the level of their experience (Dengerink, Lunenberg, and Kools 2015). The results in this study are treated globally and, as such, this treatment is a limitation of the study. Nevertheless, the first part of this ongoing study ('Phase One'), reported here, addresses the lack of research into the professional development of SBTEs and, moreover, can begin to determine what is effective in supporting them in their professional growth (Lunenberg, Dengerink, and Korthagen 2014). Follow-up interviews ('Phase Two') underway at the time of writing, with a volunteering sample of SBTEs from this study, will in future publications, provide deeper insight into the relationship between professional learning opportunities and the learning processes and outcomes gained from these.

Concluding thoughts

Our study celebrates the integrity, commitment and passion that SBTEs bring to their work with teachers in all phases of their professional development. But it does more than this. This study affirms existing literature that professional learning for SBTEs is, currently, deemed more valuable when they are available through informal workplace learning (Boyd, Harris, and Murray 2011; Murray, Lunenberg, and Smith 2017). Different globalised, internationalised and localised understandings exist about how to train and educate teachers and what it means to be a professional teacher educator (Darling-Hammond and Lieberman 2012; Gewirtz et al. 2009). Even within national borders, differences within the constellations and patterns of professional relationships ensure the experience of being a SBTE varies considerably for different individuals even within broadly similar contexts and settings (Czerniawski, Kidd, and Murray 2019). Nevertheless, this study provides empirical evidence of the need for much wider recognition and professional learning support for SBTEs in their different jurisdictions at a time when many countries are increasingly developing their own school-based models of teacher education as part of a wider international practice or practicum-turn.

Acknowledgments

Disclosure statement

Notes on contributors

Gerry Czerniawski runs the doctoral programmes in education at the School of Education and Communities, University of East London (UEL). He is a National Teaching Fellow of the Higher Education Academy, chair of the British Curriculum Forum, council member of the International

Forum for Teacher Educator Development (InFo-TED) and a member of the leadership committee of the British Educational research Association (BERA).

Ainat Guberman, PhD, is the head of the research Authority at The MOFET Institute for teacher educators' professional development in Tel-Aviv. She is a lecturer at the David Yellin College of Education, as well as the Hebrew University. Guberman received her BA, MA and PhD (all cum laude) from the Department of Psychology at the Hebrew University, Jerusalem, Israel.

Ann MacPhail is Assistant Dean Research in the Faculty of Education and Health Sciences at the University of Limerick, Ireland. Her main research and teaching interests revolve around (physical education) teacher education, curriculum development, instructional alignment, methodological issues in working with young people and ethnography.

Eline Vanassche (PhD in Education) is a tenure track professor at the University of Leuven, Campus Kulak. She is a former Marie Skłodowska-Curie fellow at the University of East London and assistant professor at Maastricht University. Her research interest includes the nature of teacher educators' professionalism and its development throughout their careers. She has a particular interest in the interaction between teacher educators and the social and structural contexts of their work.

Data availability statement

The data that support the findings of this study are available from Gerry Czerniawski upon reasonable request.

Ethics of approval

This research was given via University of East London ethics approval – number 1920–0004

References

Andreasen, J. K. 2023. "School-Based Mentor Teachers as Boundary-Crossers in an Initial Teacher Education Partnership." *Teaching & Teacher Education* 122 (2023): 103960. https://doi.org/10.1016/j.tate.2022.103960.

Bates, T., A. Swennen, and K. Jones. 2011. *The Professional Development of Teacher Educators*. London: Routledge.

Ben-Peretz, M., S. Kleeman, R. Reichenberg, and S. Shimoni. 2011. "Educators of Educators: Their Goals, Perceptions and Practices." In *The Professional Development of Teacher Educators*, edited by T. Bales, A. Swennen, and K. Jones, 119–137. NY, USA: Springer.

Boyd, P., K. Harris, and J. Murray. 2011. *Becoming a Teacher Educator: Guidelines for Induction*. Bristol, UK: Higher Education Academy, Subject Centre for Education (ESCalate), University of Bristol Graduate School of Education.

Boyd, P., and J. Tibke. 2012. "Being a School-Based Teacher Educator: Developing Pedagogy and Identity in Facilitating Work-Based Higher Education in a Professional Field." *Practitioner Research in Higher Education* 6 (2): 41–57.

Butler, B. M., and A. Cuenca. 2012. "Conceptualising the Roles of Mentor Teachers During Student Teaching." *Action in Teacher Education* 34 (4): 296–308. https://doi.org/10.1080/01626620.2012.717012.

Childre, A. L., and G. L. Van Rie. 2015. "Mentor Teacher Training: A Hybrid Model to Promote Partnering in Candidate Development." *Rural Special Education Quarterly* 34 (1): 10–16. https://doi.org/10.1177/875687051503400104.

Cochran-Smith, M., L. Grudnoff, L. Orland-Barak, and K. Smith. 2020. "Educating Teacher Educators: International Perspectives." *The New Educator* 16 (1): 5–24. https://doi.org/10.1080/1547688X.2019.1670309.