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Research article

Learning to think, perform and act with integrity: does teacher education have a signature pedagogy, and why does this matter?

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Abstract

Unprecedented reform to teacher education in England, through the Initial Teacher Training Market Review, led to the threat of removal of the right for established providers to offer programmes of initial teacher education beyond 2024 without reaccreditation. Such policy reform has been constructed in relation to a perceived gap in research about knowledge of the *best* way to educate or train new teachers. Using Lee S. Shulman's concept of signature pedagogies we consider the varying ways in which theoretical ideas are underpinned by common models of, and approaches to, teacher education pedagogy.

We mobilise Shulman to analyse five models, which we categorise as ‘knowledge-first’ or ‘people-first’, to see the extent to which, if at all, there is a theoretically informed signature pedagogy for initial teacher education. Our analysis shows that there is no one discernible knowledge base or theory that underpins a signature pedagogy for teacher education, but a suite of possibilities about how a signature pedagogy of teacher education could be understood. Moreover, it is our contention that policy reform of initial teacher education based on econometric analysis fails to recognise the most important dimension of a signature pedagogy, learning how to act with integrity as a professional teacher.

Keywords initial teacher education; policy reform; signature pedagogy; models of teacher education

Background

Calls for reform to initial teacher education are now a common feature of education policy landscapes across the world (Ellis et al., 2019). For example, in England, Wales and Australia recent reviews of initial teacher education have all been initiated as part of a political drive to improve education as a whole and to address a perception that teacher education is not working. In England and Wales these calls have led to wholesale reaccreditation of providers in each context, with contrasting approaches to university involvement in initial teacher education (Furlong, 2019). In the Australian context, recommendations by an expert panel on a state government commissioned review of teacher education make direct reference to recent changes and proposed changes outlined in the Initial Teacher Training Market Review Recommendations in England (although erroneously accredited to the UK; Paul et al., 2021). While such similarities can be seen as part of the global education reform movement, where policy trends and policy borrowing happen at an international scale (Sahlberg, 2011), the influences driving those trends are shifting. Nevertheless, a common feature across these trends is a reliance on economic metrics used as an evidence base to underpin policy shifts and to move initial teacher education programmes away from what policymakers perceive as ineffective approaches to teacher education.

Tatto (2021) argues that econometric-based analyses are becoming ubiquitous in influencing education policy. Drawing on the example of the USA, and specifically with reference to value-added methods (VAMs), she outlines how education policy agendas have become reliant on these tools, and are displacing educational research insights as the source of authoritative data to inform and evidence policy and practice changes. Tatto specifically highlights that educational research has not been able to respond and challenge prevailing policy agendas. She argues that this is a problem because of the ways in which econometric-based approaches conceptualise teaching:

A major concern is that these VAMs analysts are not immersed in the day-to-day task of teaching and learning or in preparing future teachers, and therefore lack the needed expertise and legitimacy to contribute in meaningful ways to the knowledge production that is needed to inform policy and practice by and for the teaching profession. (Tatto, 2021: 28)

While recognising that some econometric analyses in education are conducted in partnership with teachers, Tatto’s argument highlights how most analyses are undertaken away from educational settings, constrained by a conception of education success solely oriented to achievement and a reliance on secondary data sets, and as such are severely limited.

Tatto (2021) questions how this influences the legitimacy and authority of the profession to determine its own knowledge base and to recognise internal (professional) voices and expertise, and the profession’s ability to develop and draw on a vibrant research culture with a range of research methods, and approaches. She also recognises that this stems from a focus on market-oriented education policy, which privileges the apparent objectivity of such econometric analysis and assumes it has explanatory power. Tatto goes further and states that such analysis is neither objective nor explanatory.

The recent policy reforms in England have been constructed in relation to a perceived gap in research from the teaching profession itself to add useful knowledge to what are the best ways to educate

or train new teachers. Research from the education community is portrayed as abstract, partial, overly theoretical, lacking in validity and unable to offer clear answers to 'what works' questions, as reflected in the contested relationship between research and practice illustrated in a special section of the *British Educational Research Journal* (Biesta and Aldridge, 2021). This leads to a fundamental question about the sorts of research that teachers need to inform their work, and where this should come from. To address this question, we have to consider the sort of knowledge that teachers need, where it should come from and how they are inducted and introduced to that knowledge through teacher education.

Paradoxically, initial teacher education has been described as being simultaneously too theoretical, to the point of being ideological and unpractical, while also being critiqued for not having enough of the right theory underpinning its contents. The aim of this article is to explore to what extent the array of theories and approaches widely discussed in initial teacher education literature constitute what Shulman (2005a, 2005b) has described as a signature pedagogy for teacher education, and to argue that, if there is an absence of a signature pedagogy, it is this which fuels the current trends we are witnessing in policymaking for teacher education. Our aim is not to review how these approaches are brought to life in particular programmes or courses, but to examine the approaches from their theoretical basis, and the messages they convey about teacher professionalisation.

After outlining Shulman's (2005a, 2005b) tri-dimensional analysis of signature pedagogies for learning how to be a professional, we examine the varying ways in which theoretical ideas are underpinned by common models of, and approaches to, teacher education pedagogy. We mobilise Shulman's three dimensions to analyse models and approaches to see the extent to which, if at all, we can claim there is a theoretically informed signature pedagogy for teacher education.

Signature pedagogies

Many of the arguments around certain types of reform speak to the professionalisation of teachers as a common goal. However, it is also common to see policy that shifts accountability from government to governance as a key aspect of de-professionalisation (Whitty, 2014), particularly when such policy prevents professionals from deciding on their own knowledge base. For Shulman (2005a: 52, *emphases in original*), professional preparation is underpinned by what he identifies as signature pedagogies in which 'novices are instructed in critical aspects of the three fundamental dimensions of professional work – to *think*, to *perform*, and to *act with integrity*'. Shulman illustrates his point through analysis of what he identifies as the characteristic forms of teaching and learning in different professions. He argues that preparation for each profession is distinctive, driven by different emphases on ways of thinking, performing and acting with integrity in the manner of others in that profession. Further, Shulman (2005a: 53) emphasises that education for a profession needs to encompass particular theories and bodies of knowledge based in a commitment to 'good work': 'they must come to understand in order to act, and they must act in order to serve'. Importantly, the signature pedagogies of a profession shape future practice and convey the 'values and hopes' (Shulman, 2005a: 53) of that profession. In these ways, signature pedagogies are epistemologically, ontologically and axiologically representative of the profession (Thomson et al., 2012).

Shulman (2005a) identifies three dimensions of a signature pedagogy made up of:

- a *surface structure*: the recognisable acts of teaching and learning how to perform as a professional
- a *deep structure*: a shared understanding how best to convey the knowledge and thinking of that profession
- an *implicit structure*: a shared sense of attitudes, values and dispositions characterising the morals underpinning the profession.

In addition:

each signature pedagogy can also be characterized by what it is *not* ... A signature pedagogy invariably involves a choice, a selection among alternative approaches to training aspiring professionals. That choice necessarily highlights and supports certain outcomes while, usually unintentionally, failing to address other important characteristics of professional performance. (Shulman, 2005a: 55, *emphasis in original*)

Finally, Shulman (2005a) outlines what signature pedagogies have in common: they are ubiquitous in all training environments across the profession and based on routines which are intended to become habitual; they require student performance; they are participatory; and because they include an element of risk and uncertainty for the novice, they require emotional investment.

Shulman's work has been applied to studies of novices entering various professions, most notably by Shulman himself in his work at the Carnegie Foundation, which conducted a 10-year study of the signature pedagogies of the clergy, lawyers, engineers, nurses and physicians. The approach has also been applied to doctoral education (for example, Golde, 2007), as well as a range of other professions, including teaching and teacher education (for example, Loughran and Hamilton, 2016). However, the extent to which there is a discernible signature pedagogy, or 'suite of signature pedagogies', for teacher education is contested even by Shulman (2005b: 15) himself.

Given that we are writing at a time of complexity in terms of opinions, policy interventions and alternative routes in our field (see Sorensen's (2019) taxonomy of routes within the English context), we consider it timely to return to signature pedagogies as a lens through which to explore the ideas which drive the current reforms within teacher education in England and elsewhere in order to explore if policy itself can espouse the promotion of teacher professionalisation.

In what follows, we apply Shulman's (2005a) three dimensions to examples of commonly recognised models or approaches cited in initial teacher education literature internationally, outlined in Table 1. The list was derived through a process of distillation, drawing on the literature focusing on the most commonly used and referenced models of teacher education (see, for example, Philpott, 2014). We do not claim that these are the most influential on the practice of teacher educators, but they are the ones that are most debated within the teacher education literature.

Table 1. Models of teacher education (Source: Authors, 2023)

Models of teacher education	Key features	Indicative research
Stage theory	Pre-service teachers go through a series of stages related to their concerns about teaching.	Berliner (1988) Fuller and Bown (1975) Maynard and Furlong (1995) Conway and Clark (2003)
Theory into practice	The university provides the theory that, it has been decided, beginning teachers require. The school provides opportunities to apply this theory to practice.	Described and critiqued by many, including: McIntyre (1993, 1995) Hagger and McIntyre (2006) Korthagen (2010)
Apprenticeship	Teaching is best learnt through practice, under the supervision of an experienced practitioner.	Lortie (1975) Lave and Wenger (1991) Dreyfus and Dreyfus (1996) Described and critiqued by many, including: McIntyre (1993, 1995) Hagger and McIntyre (2006) Winch et al. (2015)
Clinical practice	Development of the processes by which beginning teachers develop their abilities to teach effectively through their experience of, and engagement with, practice.	Darling-Hammond (2006) Alter and Coggshall (2009) Grossman et al. (2009) Kriewaldt and Turnidge (2013) Burn and Mutton (2015)
Core practices or practice-based teacher education	Appropriation of, and rehearsal of, practices.	Grossman et al. (2009) Grossman (2018) Ball and Forzani (2009) McDonald et al. (2013) Grossman et al. (2018)

Surface structure

Shulman (2005a, 2005b) describes the surface structure of a signature pedagogy as the recognisable acts of teaching and learning how to perform as a professional. Each of the models of teacher education outlined in Table 1 takes up an implicit position in relation to both the recognisable acts of teaching (that is, what one expects the teacher educator to do) and the actions that are then necessary to learn how to perform as a professional. For example, implicit within stage theory is an assumption that the new teacher will move through a series of stages as they progress in their competence. For the teacher educator, it is then assumed that they will adapt their teaching to reflect the different stage of development and, one would anticipate, elicit different behaviours from the new teacher as they learn how to perform like a teacher. There is then an assumed, and perhaps presumed, sequence to learning to teach that would be reflected in the teacher education programme.

There are two distinct approaches to the surface structure of the models in Table 1, each drawing up a different privileging of teacher education pedagogy; what we are referring to here as knowledge first, or person first. We use these terms as a way of categorising how the various approaches to initial teacher education represent learning to teach in different ways.

In the category of knowledge first, the knowledge that teachers need is foregrounded, but situated externally to them. There are different ways of conceptualising that knowledge, perhaps the most famous being Shulman's (1986, 1987) own taxonomy of the knowledge bases for teaching. Other more recent accounts offer similar but nuanced categorisations or conceptualisations of teacher knowledge (see, for example, Grossman, 1990; Bransford et al., 2005; Rowland et al., 2005; and Ball et al., 2008). While these accounts do not necessarily outline the sequential stages of knowledge that teachers need, they do recount the depth and breadth of knowledge areas that teacher education programmes need to cover. Teacher education programmes based on, for example, the stage-theory model or the theory-into-practice model might organise these knowledges to ensure their coverage during the programme. Within the apprenticeship model, one might expect the apprentice to demonstrate deepening knowledge in these areas.

Pedagogical content knowledge is often treated a little differently, since, particularly in the elementary or primary school phase, it is seen as an organising principle through which other knowledges are situated (see Turner-Bisset, 2001). In Shulman's (1986: 9) own definition, pedagogical content knowledge is described as 'the most useful forms of representation ... the most powerful analogies, illustrations, examples, explanations, and demonstrations – in a word, the ways of representing and formulating the subject that make it comprehensible to others'.

Here, knowledge is placed first. The description reflects the presentation or laying out of subject matter; the teacher then has the task of adapting that knowledge in a manner which makes it accessible for students – what Dewey may have called psychologising subject matter. This is an approach that can be seen in stage theory, theory into practice, core practice or indeed the apprenticeship model, as each implies that the knowledge needed to be a teacher somehow sits outside of the teacher themselves and needs to be absorbed or accumulated by them in order for them to progress. However, where the knowledge sits varies in each of these models. In the theory-into-practice model, the knowledge sits inside the academic canon, articulated as 'theory' to be understood and then applied by the new teacher. The teacher educator selects and curates this knowledge, and prepares it for the new teacher to learn and then apply to their practice. For the apprenticeship model, the knowledge sits within the expert teacher, who acts as the 'master' from whom the apprentice learns. This is also the case with approaches based on core practices, where the teacher educator rehearses, appropriates or represents certain practices for the new teacher to copy and develop: the knowledge sits with the teacher educator to be imparted and demonstrated. In each of these approaches, however, the knowledge is seen as sitting external to the new teacher, and as being something that needs to be acquired by them. The pedagogy of the teacher education programme in such cases is designed to make knowledge accessible to them. Ellis (2010: 106, 107) argues that general approaches to course design, particularly in light of policy reform in England and the focus on school-based initial teacher education, have 'relied on an acquisition view of learning and a view of knowledge as a thing that is transferred', leading to 'tensions and contradictions' which 'arise out of contradictory conceptualisations of knowledge and learning in relation to experience in schools'. These approaches contrast to what we have described as *person-first* approaches. In these approaches, the new teacher is positioned as a competent but as yet uninitiated member of the teaching community. The approach assumes that the knowledge and skills required to

be a teacher are developmentally within reach of the new teacher, and the pedagogy is designed to enable it to come to the fore. Two good examples here are reflective practice and situated learning, or communities of practice, which are often referred to as approaches to professional learning evident in any of the overarching models outlined above. Donald Schön (1983, 1987) is most widely regarded for explaining how and why reflective practice is effective, although the idea stems as far back as Dewey. Distinguishing between reflection on action, and in action, Schön (1983, 1987) notes how it is through considering what happens in the 'white heat' of a professional's repertoire, and how they consider novel problems that their expertise grows. This may be supported by critique which occurs through peer or mentor feedback, alternative viewpoints or theories, or the use of appropriate critical questions, but in each case, it is the practitioner at the centre of the community who is responsible for this development through their active engagement in reflecting on their practice.

While critiques of reflective practice have noted its individualised nature, Lave and Wenger (1991) introduce further social elements through their description of situated learning and communities of practice. Here, again, the learning takes place through social and reflective encounters, and such an approach is well suited to apprenticeship models of learning, as professional skills are acquired through involvement within the community of practice. This is described as 'legitimate peripheral participation' (Lave and Wenger, 1991: 29), within an apprenticeship model, which can lead to professional learning (for both beginning and experienced teachers).

In these person-first approaches, learning how to perform as a professional requires the new teacher to question and challenge themselves and their actions, as well as to build on the work of the community. The 'answer' lies within the teachers and their social network, rather than being external to them, and this is why such an approach operates within models of teacher learning where the teacher works with a supportive community. This is also the case with clinical practice, where the teacher has to question and review their own practice and experience in order to develop their expertise. In clinical practice, this may be more systematised, through a research-aligned pedagogical process, with due attention to data and evidence to substantiate learning, but the presumption is still that the answer is obtainable to the knower through their engagement with the learning process.

Deep structure

Shulman (2005a: 55) refers to a signature pedagogy's deep structure as being 'a set of assumptions about how best to impart a certain body of knowledge and know-how'. As with the above discussion of surface structure, notions of knowledge first or person first are similarly pertinent, reflecting assumptions, at the most fundamental level, as to whether the teacher education curriculum is best delivered through direct instruction or through a process that places the beginning teacher at the heart of the learning process.

Returning to the example of stage theory which is informed predominantly by an analysis of beginning teacher concerns (Fuller and Bown, 1975), the deep structure does not focus on these concerns at the individual level, but rather on the way in which they can be seen to reflect stages of development for the majority. Stage theory identifies the way in which beginning teachers move from an early stage, at which their concerns are about self and survival in the classroom, to a stage where these concerns focus on tasks and situations, to a final stage where concerns are about the impact of their teaching on students and individual student learning. Conway and Clark (2003: 467) argue that the model has endured because 'the normative expectation that teachers' ultimate concern ought to be about students and student learning rather than self or situations seems to blend description of what development is like with a prescriptive template for teacher development'. The model therefore becomes one that leads to programmes being structured around these anticipated stages of development and, crucially, places an emphasis on supporting beginning teachers through these stages, each of which presents its own challenges. Development only occurs as the concerns are worked through in the context of teaching itself, so the role of school-based mentoring becomes paramount, with mentors being guided as to how to respond to beginning teachers' developing concerns at different stages of the programme (Maynard and Furlong, 1995).

At the heart of the models described above is an inherent stance in relation to the roles of both theory and practice within teacher education programmes. While traditional theory-into-practice models, such as those prevalent in England and elsewhere around the 1970s, where the focus was on teaching the foundation disciplines of education within teacher preparation programmes, are no longer in evidence, some aspects of a theory-first approach can still be seen, where evidence of what works is

used to direct beginning teachers as to what needs to be applied to their own practice. Elsewhere, the increasingly significant influence of the core practices movement can be seen in policy reforms internationally, where emphasis is placed on the practice of teaching, and the way in which beginning teachers are taught how to enact specific, carefully defined practices (Ball and Forzani, 2009; Grossman et al., 2009). Here, the deep structure is premised on a notion that professional competence comes primarily from the teacher's ability to replicate a series of prescribed practices, acquired through what could be seen as a reductive, technicist approach to teaching (Ellis et al., 2019), which also includes 'the risk of peripheralizing equity and justice' (Philip et al., 2019: 251).

The idea that practice should precede theory, or that practice is of itself sufficient, can also be seen to underpin 'craft' approaches to teaching, and a broader range of apprenticeship models. Such models reflect the conception of the teacher as 'craft worker', or 'executive technician' (Winch et al., 2015: 202). In these models, the underpinning structure is one in which theory and practice are in constant tension, held between the drive for efficiency in 'acquiring and using well-learned schemas and routines' (Hammerness et al., 2005: 374) and effectiveness in the ability to 'rethink key ideas, practices and even values in order to respond to novel situations' (Hammerness et al., 2005: 358–9). The deep structure of the approaches that attempt to achieve the latter have, at their heart, the belief that the only model of teacher learning that will develop effective professional judgement by teachers is one that offers sufficient opportunity for 'critical reflection' (Winch et al., 2015: 204).

Kriewaldt and Turnidge (2013: 106), in discussing clinical practice models of teacher education, refer to the need for teachers to exercise such critical reflection through a process of 'clinical reasoning', which they define as 'the analytical and intuitive cognitive processes that professionals use to arrive at a best judged ethical response in a specific practice-based context'. While the concept of clinical reasoning can be seen as being applicable to a range of professional learning contexts, the specific context of teacher education differs in that beginning teachers are often required to practise (and demonstrate competence) at an early stage in their professional preparation. The evidence on which any 'clinical reasoning' is based may therefore be inevitably limited, and clinical practice models must provide opportunities for practice and theory to be fully integrated in a coherent way. Underpinning this is the need for beginning teachers, working with more experienced teachers within a community of practice, to engage in a process of *enquiry*. Such a process requires beginning teachers to draw on multiple sources of knowledge, and to subject all ideas for practice to critical examination (Hagger and McIntyre, 2006) by engaging in what McIntyre (1993) refers to as practical theorising. McIntyre (1993) sees this as a dialectic process, through which beginning teachers are equipped to interrogate different kinds of knowledge, both theoretical and practical, in order to use the results of such reflection to inform their own developing practice (Burn and Mutton, 2015). The above approaches inevitably emphasise the centrality of the beginning teacher in the process of learning to teach, and acknowledge the complex role that individual teacher beliefs play in the process of professional learning (Pajares, 1992; Tatto, 1999, 2019; Fives and Buehl, 2008, 2016), as well as the extent to which individual dispositions to learning influence the way in which teachers engage with the process of learning to teach (Oosterheert and Vermunt, 2001; Hagger et al., 2008; Pedder and Opfer, 2013).

Implicit structure

For Shulman (2005a: 55), the third fundamental dimension within a signature pedagogy comprises the moral dimension: the 'implicit structure' which signals the set of beliefs about 'professional attitudes, values and dispositions'. This is the dimension that showcases how future professionals within the field, in this case beginning teachers, learn how to 'act with integrity' (Shulman, 2005a: 52). Our contention is that foregrounding different theoretical underpinnings showcases how different models of teacher education shape future practice, and convey the values and hopes of that profession: the implicit structure.

Approaches to teacher education which are predicated on evidence from empirical observations of what works in teaching, such as the core practice model above, convey that teaching techniques that foreground surface acts of teaching have value because they lead to immediately visible results in terms of control of student behaviours or test scores. This and other practice-based knowledge-first models foreground that the role of the novice professional teacher is to focus on acts of schooling which will enable learners to function appropriately within a specific school environment, and to learn the appropriate knowledge as prescribed in a specific curriculum. To act with integrity within the framing of the apprenticeship models and the core practice models is, for the beginning teacher, to learn the

practices which deliver results and outcomes. To do this, the beginning teacher needs to absorb 'ready to use integrated knowledge that has been learned implicitly in the same context' (Philpott, 2014: 29). By practising techniques within that context, the beginning teacher performs the acts of teaching which align with what that context values, thereby reproducing recognisable surface acts of what it is to be a teacher in that specific context. What is valued in these models is that teachers produce learning outputs from their students which can be measured and compared. In addition, the practices that are promoted are framed as of benefit to all children, regardless of their individual circumstances. This shifts the moral dimension of how to act with integrity as a teacher from that of teaching the whole child, through an individualised holistic approach, to delivering a generalised set of standardised practices, activities and normative outcomes. The focus is on the 'collective craft knowledge of teachers' as to what works best for most students (Alexander, 2000: 275); the beginning teacher's personal experiences and beliefs about what might be best for individual learners are rendered less important. In this way, the implicit structure highlights that the professional values of teaching are grounded in an economic framing which measures student and teacher performance, and rewards those who achieve the highest measurable outcomes. In knowledge-first models of teacher education, to act with integrity as a professional teacher is to deliver outcomes within a highly regulated and meritocratic system of education.

We can contrast this to people-first models of teacher education which foreground the social and relational aspects of learning to act as a teacher. In these models, attention is paid to the ways in which the novice learns within a professional community of practice. Through reflective dialogue with peers, with more expert colleagues within the field, and with scaffolded interactions with the knowledge base of teacher education and teaching (reading and debating what has been written about within the field), novice professionals learn how to value relationships with individual children, with groups of learners and with colleagues. Through understanding how these pedagogic relationships are influenced by specific contexts, beginning teachers learn how to make judgements about pedagogical acts which are ethically grounded. To act with integrity as a professional teacher in this framing is to understand that teaching is a social act, that relationships and context matter, and that the profession requires teachers to be prepared to make the best decisions for the learners in any given situation. And, as such, these decisions are based on 'value-laden choices, which can and will be questioned by others' (Kelchtermans, 2021: 1506). In person-first models of teacher education, 'acting with integrity' is not without risk, but it is predicated on moral and ethical 'wise judgement' (Kelchtermans, 2021: 1507).

Conclusion

In the context in which we are writing, as teacher educators in England, there is an acknowledgement that there are a number of routes into the profession and a range of models of teacher education. By exploring the implicit structure dimensions of these, we are not necessarily seeking to claim that one is more value-driven than another. Each different model is predicated on a set of values about what it means to be part of the teaching profession. While our own personal values and beliefs might align more with one model or another, our aim is not to argue that one model is definitively more right than the others. Indeed, we are not suggesting that knowledge-first or people-first approaches are better, or more effective, than each other, but to highlight that they emphasise different aspects of learning to teach, different conceptions of the role of a teacher, and, as signature pedagogies, they reflect different conceptions of teaching as a profession.

Shulman (2005a: 55, emphasis in original) reminds us that 'each signature pedagogy can also be characterized by what it is *not*...' This leads us to contend, therefore, that approaches to teacher education which focus solely on knowledge-first or people-first approaches are likely to be lacking in a rounded conception of teacher professionalism. While novice teachers clearly need to be exposed to new knowledge to inform their developing professional understanding, it is also important to pay due attention to the process of professional learning (sometimes over-emphasised in people-first approaches), if teachers are to move beyond behavioural and technical aspects of classroom practice.

There is no doubt some merit in looking for a pragmatic understanding. Over-reliance on any one model of teacher education, however, is unlikely to fulfil all three fundamental elements of the signature pedagogy of professional work, 'to *think*, to *perform*, and to *act with integrity*' (Shulman, 2005a: 52, emphases in original), although, as Philpott (2014) argues, this does not necessarily need to be the case. Philpott (2014: 69) challenges the idea that apprenticeship and craft models of teacher education

need necessarily to be reductive, and argues further that when craft knowledge moves beyond simply learning a set of practices and repeating codified knowledge, and moves towards a conception of craft knowledge which is adaptive to changing circumstances (and which demands a strong sense of reflection and contextual refinement), then ‘values and relationships are integrated in what is learned’. Within this framing, Philpott (2014) effectively aligns craft models more closely with what we have described as people-first models, by recognising that new teachers need knowledge, practice and the understanding of the ethical dimensions of teachers’ work. If we follow Philpott’s (2014) alignment of models of teacher education, the novice teacher learns to act with integrity in accordance with specific contextual demands and to individual learners’ needs. What is valued is more complex than simply reproducing what works.

It is our contention that policies based on econometric analysis fail to recognise this third and important dimension of a signature pedagogy. We also contend that approaches to teacher education where the novice professional is compelled to draw on a range of bodies, and sources, of knowledge, and is offered a variety of ways of practising, adapting and understanding these approaches with the support of others, will not only bridge the theory–practice divide, but will also provide an opportunity to consider how to act with integrity. In other words, models of teacher education which are explicit about their implicit structure allow for the development of the professional teacher who acts with agency. Biesta and Tedder (2007: 146) conceptualise such a teacher as ‘not simply concerned with the ways in which we engage with our contexts-for-action but rather has to do with the capacity to shape our responsiveness to the situations we encounter in our lives’.

Our analysis suggests that there is not one discernible knowledge base or theory that underpins a signature pedagogy for teacher education. Rather, our distinction between knowledge-first and people-first models suggests that there is a suite of possibilities which could be used as forms of signature pedagogies. In the current epoch of policy formation in teacher education, as outlined by Tatto (2021), econometric analyses are unlikely to consider anything beyond the surface structure of approaches with standardised curricula for teacher education, and will be silent on the role of deep and implicit structures. Adopting such an approach to policy formation then reflects Falk’s (2006: 77–8) prophecy:

I know how much wise practice we already have from which to develop a coherent set of ideas that ought to be translated into a body of signature pedagogy. If we don’t do this, I think that’s what’s going to kill us. What’s going to happen is that reasonable policy makers will look around, see that practice in the field varies enormously from place to place – as a function of taste, ideology, tradition and style – and they will say that we are a field that either can’t get its act together, or, even to be very generous, a field that is so welcoming of such an incredible diversity of approaches to preparation for practice, that how could there possibly be any opposition to the notion of what is now called an alternate route in a field that has no main route?

The neglect of signature pedagogy, we contend, has led to a lack of a coherent set of ideas that underpin initial teacher education, and almost two decades later this is still the position in England. This has enabled policymakers to focus on, and be influenced by, econometric analysis which, in England particularly, has led to a turn away from people-first models of teacher education. Our concern is that this trend could happen elsewhere, as outlined by Tatto (2021). This risks losing the reservoirs of wise practice where a range of approaches are brought together as a signature pedagogy, which the teacher education sector has previously had to draw on. As such, there is a need for a call to action, for all across the sector to meet in dialogue, and to engage in professional debate about how we might translate our shared models of teacher education into a body of signature pedagogy that will serve novice teachers as they develop as professionals in their field. If we do not do so, then the influence on education policy will likely be dominated by the narrowly conceived econometric approaches, and a reduction in teacher professionalism and efficacy.

Declarations and conflicts of interest

Research ethics statement

Not applicable to this article.

Consent for publication statement

Not applicable to this article.

Conflicts of interest statement

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