Research capacity in initial teacher education: trends in joining the "village"

Clare Brooks[a]*

[a]*UCL Institute of Education, London, UK*

*c.brooks@ucl.ac.uk

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Stenhouse's image of the teaching profession as a "village" could be interpreted as a parochial and insular view of teachers and their readiness to be involved in research. In this paper, I argue that the capacity for teachers to play a more active role in research is diminishing because of how research is situated in initial teacher education (ITE). Drawing on a study of five large-scale university-providers of ITE in different national contexts, I outline four trends. The first is that the role of universities within teacher education is precarious, along with the perceived value of research in teacher education. The second argues that prospective teachers do not perceive teaching as a research-based profession and therefore expect teacher education to be practice-orientated. Teacher education accountability structures downplay the significance of research as part of a teacher's knowledge base and practical repertoire. And finally, the career trajectories and contractual arrangements of teacher educators reduces the overall research capacity of the field. Taken together, these four trends affect how (new) teachers are introduced to education research and diminish their capacity to be actively involved in education research throughout their careers.~~Together this presents a diminishing capacity for (new) teachers to be inducted into the how they can play a role in the larger picture of educational research~~.

Keywords: initial teacher education, research as pedagogy, university, teacher educators

Introduction

In 1981, when Stenhouse claimed that too much research has been conducted for the world and not enough for the village, he was highlighting that the focus of educational research was not always aligned with the needs of practitioners, particularly when research was orientated towards generalisable findings, or universal truths, rather than towards what mattered to the "village". Stenhouse's call to recognise the needs of practitioners can be seen as part of his ongoing advocacy for the teacher as an active participant in research (Kemmis, 1989; Stenhouse, 1975). However, such a provocation requires further analysis from the perspective of those that inhabit the village: are teachers ready and prepared to be research-engaged in this way? To what extent does initial teacher education prepare teachers to be active participants in research, to step outside of the village and face the world?

Today the notion of teachers as inhabiting "a village" seems somewhat antiquated, and potentially divisive. For many, the village is an uncomfortable metaphor. Villages are sometimes seen as exclusionary communities, disconnected from the world and yet still influenced and affected by it. The notion of the village reflects a white, middle-class idealised rural idyll: a privileged environment, and self-contained community. Many people do not fit the village stereotype, particularly people of colour, people of different faiths, and people who are different. Villages can seek to protect "insiders" and exclude "outsiders". Therefore, to maintain what I assume to be, the meaning of Stenhouse's original provocation, our understanding of "research for the village" needs to be broadened. We need to question not only who the village consists of and what values they hold, but also how members of the village are open to messages from the world: or to put it another way, to what extent teachers are prepared to be

involved with and act upon educational research. It is by taking on a more outward looking perspective that the village can turn away from being insular and start to see the world anew, through a more inclusive lens. In this way, the relationship between research and practitioners can become a genuine dialogue, rather than a one-way transaction. This is not to suggest that teachers today are indeed as insular as the village metaphor would suggest, or that research is alienating to teachers, but the relationship that Stenhouse visualises between research and teachers (the world and the village) is, in reality, complex, and needs to be revaluated within the current context. In this paper, I argue that the capacity for teachers to play a more active role in research is, in fact, diminishing precisely because the role of research in initial teacher education (ITE) is precarious, and as such the relationship between the world and the village is likely to widen rather than contract.

Research and teacher education

The essence of Stenhouse's argument is that research from the social sciences, sociology and psychology are too disconnected from the classroom. He raises methodological issues about the feasibility of using and translating research into practice without teachers' understanding of the complexity of that context. He also notes that teachers can consider their practice with a degree of objectivity which enables them to ask critical questions which can be lost to the dedicated theorist. We have to take Stenhouse's argument as being of its time, along with his reference to the village, Stenhouse also talks of "academic battles", where now we might now talk of political or ideological ones. His world is one relatively free of accountability, governance and

oversight. However, his argument about the applicability of education research to practice is one that the community is still having today. Take for example, the recent debate in the British Education Research Journal about research which is "close to practice" (Wyse, 2020; Wyse, Brown, Oliver, & Poblete, 2020). Drawing on a research project with the same name, Wyse argues that being "close to practice" is a defining feature of education research and can be viewed as a strength so long as it conducted with rigour. However, Horden (2020) argues that practice in this context is defined too loosely: as any form of "action", which omits consideration of whether the practice itself is indeed *educational*. Horden's notion of educational is related to the idea moral purpose. "Practice" can be used reductively to refer to what is needed to fulfil policy or managerial objectives, and as such becomes normative. Horden argues that for "practice" to be educational it needs to be oriented beyond a technical notion of being "practical". This debate, extending the theme of Stenhouse's thesis, is hinged on the purpose of educational research: who and what it is for. It therefore raises questions about the nature and type of involvement we can expect teachers to have with research: or in other words, what is the value of teachers' involvement in research. Stenhouse saw research as having the potential of serving the needs of teachers, and that it was important for teachers to be active contributors. Such a relationship is only possible if the potential or "promise" of research is formed in teachers' initial induction into teaching.

To continue extending the village metaphor: not all members of the village want things to change, and similarly not all teachers are willing to be engaged in educational research. In other words, a key dimension of considering research "for the village" is to consider the ways in which teachers are situated in relation to research, and in particular

how this gets developed through their initial teacher education. Fortunately, research within initial teacher education has been the focus of much research and scholarship (Cochran-Smith & Maria Villegas, 2015; Menter, 2017; Menter et al., 2010; Pring, 2017): however, through this scholarship a number of tensions arise: to what extent should initial teacher education be orientated to understanding research, or focussing on practice? What sorts of research should ITE prioritise, and how should teachers be positioned in relation to that research? In England, the Carter Review (2015) advocated for teachers to be research informed but suggested that research should be curated for teachers: positioning them in as passive consumers of a curated research canon. Alternatively, the clinical approach to teacher education sees the novice teacher as a producer of research, and regards research as a form of pedagogy and professional induction which will enable teachers to adopt a position of "inquiry as stance" (Cochran Smith and Lytle, 1999). As Menter et al. (2010) have argued, there are various ways in which research can play a role in initial teacher education. However, incorporating research into ITE requires teacher educators who are confident in various research traditions, and able to draw upon the body of research in the field. Based on evidence from research that looked at five university-based teacher education programmes in five international contexts, this paper argues that there has been a systematic erosion of the research community in (initial) teacher education: such that the capacity to engage in meaningful research today, and to build capacity for meaningful research in the future is vastly diminished.

In making this case, this paper discusses four trends. The first is that the role of universities within teacher education is diminishing, along with the perceived value of research in teacher education. The second argues that prospective teachers do not

perceive teaching as a research-based profession and therefore expect teacher education to be practice-orientated rather than research-led. The third is that the accountability structures set up around teacher education downplay the significance of research as part of a teacher's knowledge base and practical repertoire. And finally, the career trajectories of teacher educators and the changing nature of their contractual arrangements emphasise the rift between teaching as a practical activity and one that is research informed and reduces the overall research capacity of the field.

The research project

This paper draws upon a review of relevant literature and data analysis from a two-year research project exploring the research question: *What are the features of high-quality, large-scale initial teacher education?* The research involved a detailed study of the practice of five large scale ITE providers: Queensland University of Technology (QUT) in Australia; Ontario Institute for the Study of Education (OISE), University of Toronto, in Canada; University of Auckland, in New Zealand; UCL Institute of Education (IOE) in London, UK and Mary Lou Fulton Teachers College, Arizona State University (MLFTC), USA. Each university was chosen as a (relatively) large teacher education provider in their jurisdiction (in terms of teachers graduated and in comparison to other local providers), with their provision ranging from 200 to over 2000 student teachers, and because they offered a teacher education programme within an institution renowned for its quality (according to local or international league tables). The incidence of the global pandemic coronavirus in 2020 meant that the data collection for OISE was conducted remotely.

Teacher education is widely influenced by local practice traditions, regulations and accountability regimes for universities, and schools, as well as the certification of teachers. Therefore, the selection of participating universities was influenced by protocols in comparative education (Adamson, 2012), and so was limited to predominantly English-speaking nations. In this way, the selected sites share a linguistic tradition, whilst allowing for local nuance and variation particularly in how educational terms are used. This selection does however, skew the research to a relatively narrow, anglicised and post-colonial hub of countries. Nevertheless, these countries do tend to dominate much of the international literature and so trends identified here are likely to have wider applicability.

The research focussed specifically on teacher education programmes with relatively high numbers of students, as determined by the numbers of enrolled students relative to other providers in the region (as reported in publicly available data sets). For some areas, such as England and New Zealand, the region was identified as nationally. In USA, Canada and Australia, the region was defined as the States, or Provinces in which oversight for teacher education was devolved. Universities were also selected that had a reputation for being high quality. There are no international comparison tables for quality in teacher education, and many ranking schemes focus on criteria orientated around research or reputation. Research quality is not a proxy for quality in teacher education. But, the significance of the university standing does speak to important features of that institution: universities with a reputation for high quality will be concerned with maintaining status and ensuring their reputation for quality continues, which may influence how a university interprets the role of teacher

education, its view of the importance of research, and the expectations on teacher educators.

Data were collected through interviews with teacher educators, and where possible school partners and student teachers (or teacher candidates), around fifty in total. Where feasible taught sessions were observed, and I participated in other related activities (such as meetings, seminars and related conferences). Relevant documentation was also included, such as programme handbooks, media announcements and review documents. Both the data collection and the analysis were checked and verified by a local representative acting as gate-keeper who also supported access as necessary and acted as a critical friend to ensure my reading of the data was not influenced by my own ethnocentric gaze. Ethical approval was granted by my home institution, and where necessary local ethical approval was sought by the host institution.

The data collected was analysed to reveal the pertinent discourses around quality in each case, as well as the difference between "universal" understandings of quality in teacher education at scale, and those which are localised. In each location, research in teacher education emerged as a dominant and important theme. Interviews were transcribed and analysed using systematic category-based qualitative content analysis in the form of deductive (top-down, theory-driven) and inductive (bottom-up, data-driven) coding (Kuckartz, 2014). The deductive categories were created in a coding scheme based on the three strands of the analytical framework, and the inductive categories were arranged thematically. The categories were then combined using N-Vivo software, and the findings were checked with a key contact at each institution to ensure internal validity and rigour. The data presented here has been selected specifically with the

question of research in initial teacher education in mind and is not meant to be representative of the teacher education practices observed in each of the universities that took part in the research. The arguments have been augmented and situated within a synthesis of relevant and pertinent literature. The four trends outlined above are discussed in turn.

The diminishing role of universities in initial teacher education

In many countries around the world, universities are still the main provider of initial teacher education. This has not always been the case, and more recently the prominence of universities in ITE, and the emphasis on research upon which that prominence sits, is on the wane.

Whilst Labaree (2008) notes that moving ITE into universities has not always been a satisfactory arrangement, particularly because education is considered a weak discipline with a poor track-record of research, universities are widely considered to be an important context for the professionalisation of teacher education. The shift of teacher education into universities was seen as a way of raising the status of teachers and to enhance their perceived professionalism, particularly because university involvement was seen to place greater emphasis on the development and sharing of a specialist, expert and often research-based body of knowledge. Initially, this stemmed from the so-called foundational disciplines of philosophy, psychology, history and sociology, but has since diversified into academic, practical and integrated knowledge traditions (Furlong & Whitty, 2017).

A profession requires a specialist body of knowledge which in turn is reliant upon knowledge generation either through theory-building or empirical research. Universities provide the context for the development of such research. Although, not always part of a universities' remit (Collini, 2012; Connell, 2019; Watson, Hollister, Stroud, & Babcock, 2011), the capacity to undertake and verify research sets universities apart from other organisations. Even today across a variety of international contexts, when multiple organisations including schools engage in research, universities offer a special role and function as the home of disciplinary communities, and a key authority in the validation and verification of knowledge (Furlong & Whitty, 2017). Young and Muller have argued that such a perspective is necessary to counter the anti-intellectualism of professional development, often found in fields which emphasis expertise over knowledge (2014).

However, the relationship between universities and education research is becoming increasingly precarious. For example, the English government's main education research funding body, the Education Endowment Foundation (EEF), funds a narrow range of research, which has been described as overly instrumentalised, and reliant on a narrow range of research methodologies such as Randomised Control Trials (Ellis, Steadman, & Trippestad, 2018; Godfrey, 2017; Hulme, Wood, & Shi, 2020; Turvey, 2018; Turvey & Pachler, 2020). The types of research funded and produced by the EEF has been described by Turvey (2018) as dehumanising because of its over-emphasis on data, and lack of recognition of the human dimension of education. Importantly, research of this nature does not necessarily have to be conducted by universities. In England, there is a trend towards schools increasing their engagement with funded and unfunded research both through ensuring aspects of their work are

research-informed but also that they themselves become research-engaged, and drive their own research agendas (Godfrey, 2017; Greany & Brown, 2015; Greany et al., 2014; McAleavy, 2016; Wisby & Whitty, 2019) . Whilst this trend may seem to be evidence of the "village" taking ownership of research, there is a knock on effect on the quality of that research, it's impact on the canon of knowledge and the capacity for universities to remain engaged in (teacher) education (Furlong & Whitty, 2017).

At the same time there is a downplaying of the significance of research that comes from universities. Research that features in teacher education is rarely attributed to university departments of teacher education. Pring (2017) notes how the most significant theories affecting education are more likely to come from faculties outside of teacher education such as from sociology or psychology (he uses the examples of the impact of social disadvantage, quantitative analysis and the uses of IQ tests). Indeed research stemming from educational faculties has been widely criticised, with education academics described as being uninterested in the concerns of policy makers (Ball & Exley, 2010). Whilst education's performance in research-assessment exercises have been defended (Furlong, 2013), these trends are exacerbated by the perception of teacher education research as being of low quality, and lacking in robust theory or reliant on weak methodologies.

The capacity to undertake research is important for universities as organisations but is not central to their ability to undertake ITE. However, university involvement in ITE is an important signal towards the professional status of teachers. Freidson (2001) argues that universities play a key role as gatekeepers for entry to a profession (thus maintaining its exclusionary status) and offer a context for professional socialisation,

through induction into the professional culture, or accepted ways of behaving ethically within the profession. However, the dominance of the 'practice turn' in teacher education (Furlong, 2013), and the global rise of employment based initiatives such as Teach First and Teach for America, the global Teach For All movement (Thomas, Rauschenberger, & Crawford-Garrett, 2020), all call into question whether university involvement in teacher education is indeed necessary. The presence of local Teach for All initiatives featured in all the discussions with the universities in this study (both MLFTC and IOE worked in partnership with their local Teach for All organisation), and all providers expressed some concern about the way that research featured on the local variation of the Teach for All programmes.

The role of universities in initial teacher education therefore is changing and as the example from England highlights, appears to be diminishing in prominence. Each context had been, or was about to be, affected by the rise of non-university based routes into teaching, some of which were school- or employment based with little or no research content. Previously held assumptions about the importance of research, universities and prestige in relation to teacher education need to be considered in the light of this changing dynamic, and in particular the role that research itself plays within the pedagogy and content of teacher education programmes.

The value of research within teacher education

Whilst research is commonly agreed to be an important feature of initial teacher education, teaching itself is often viewed as a practice-orientated profession rather than

a research-orientated one. This is evident in how teacher education is constructed in policy contexts but also in the expectations new teachers have of their ITE programmes.

Darling Hammond and colleagues have argued that a research-orientation appears to be a strong feature of teacher education in so-called high performing systems (Darling-Hammond, 2006; Darling-Hammond & Lieberman, 2013; Darling-Hammond et al., 2000), and that it is increasingly important as teaching becomes more complex. However, research does not feature in the same way across teacher education programmes, and is commonly included either as "content": making up the knowledge base for teacher education through research-informed or evidence-based findings about ways to teach; or as a form of teacher education pedagogy**:** using research as a way of learning about teaching both in the initial stages but providing a pedagogy of professional development and improvement throughout a teacher's career.

It has become increasingly commonplace to suggest that teachers should be research-informed, and that this should start with their initial induction to the profession. For example, the Carter Review of initial teacher training in England argued that there are limitations on trainees' abilities to engage fully in research, and positions them as "intelligent consumers of research who take an evidence-based approach to their own practice" (Carter, 2015, p.21). The review recommends the creation of "synthesised executive summaries providing practical advice on research findings about effective teaching in different subjects and phases" (ibid p.8). The combination of both assertions places the teacher as a passive consumer of research who is also unable to make selections about the sorts of research they wish to engage with as this has been curated by the authors of these executive summaries. This argument is perhaps

unsurprising when you consider the short nature of ITE programmes (less than 10 months duration in England), and the complex understanding of research and its associated methodologies needed in order to make informed judgements about the validity of research findings, and the situational judgement needed for their adaptation to practice.

However, curating research, and presenting it as content is of limited benefit for new teachers. On the one hand, the curation of research can target and select the most appropriate research for teachers, removing the need for detailed understanding about research methodologies and can present the findings and ideas therein in 'digestible' form to which teachers can focus on the practical implications. On the other, such a selection will necessarily have omissions, limiting the range of ideas available to new teachers, and leaving out important contextual or methodological information. Some of this selection already takes place; the Carter Review noted that within research-intensive institutions, it is often the case that active researchers are not fully engaged in teacher education programmes. In other words, teacher education programmes are already full of curated research content and exposure: whilst those that did the research may do "guest lectures", the majority of teacher education was undertaken by staff who were not research active or actively engaged in research projects. Research takes more of a role of content on those programmes than as the focus of an active research community.

This position taps into a long-held concern about university-based teacher education: that it is divorced from practice and does not devote sufficient time or attention to the training necessary to develop practical experience and teaching

expertise. The Carter Review positions the university or school providing teacher education as a curator of knowledge: selecting, synthesising and presenting research findings into consumable portions for novice teachers. Implicit within this positioning is an expectation that teacher education should emphasise practical teaching experience, which replicates a technical perception of teaching, underplaying its complexity and situated nature. Such a position relies on a throughflow of research from other areas of education, and the availability of teacher educators who are capable of synthesising research well and who can support new teachers to understand the contextual nature of the translation of such research findings.

The idea of research as pedagogy places research somewhat differently within initial teacher education, as a form of learning. There is not widespread agreement as to what research as pedagogy looks like. For example, Menter and colleagues' (2010) categorise four forms of teacher professionalism showing how research can be positioned differently within them: for example:

- The effective teacher: with an emphasis on meeting standards and competences, positions research as content to be digested and understood;
- The reflective teacher: with an emphasis on individual professional development achieved through practice positions research as being a tool with which to challenge assumptions based on experience;
- The enquiring teacher: adopts an enquiry approach, which in some cases has veered towards a research orientation
- The transformative teacher: which adopts an activist stance in relation to enquiries in order to contribute to social change and sees research as emancipatory.

Research can therefore be seen as a way of challenging assumptions about teaching, as a way of investigating and inquiring into (personal) practice, but also as a way of challenging issues of equity, and justice that exist within education, and providing a range of ideas possible for transformation. The BERA-RSA inquiry into research-informed clinical practice reveals the range of different approaches to embedding research across ITE, and the impact research can have on teacher's professional learning (Burn & Mutton, 2013). So whilst research is viewed positively for ITE by many teacher educators (Afdal & Spernes, 2018), there are still widespread debates about the role it plays within a teacher education programme. Such debates are informed by research that illustrates variations in how candidates respond to research based ITE (Puustinen, Säntti, Koski, & Tammi, 2018), the kinds of evidence which can affect teachers practice (Nutley, Walter, & Davies, 2003) and how practitioners situate themselves in relation to research findings (Biesta, 2007).

The lack of agreement about how research should feature in teacher education is a contributory factor in the perception that teaching is not a research-engaged profession. Research-orientation in the form of pedagogy is more likely to be found in university-based programmes, whilst employment-based routes, such as the Teach For All movements, are more likely to position research as content, promoting a view of teaching that is practice-orientated rather than research-orientated (Brooks, 2021). Such a view is echoed by new teachers as they enter the profession.

Pre-service teachers and their expectations of teaching as a research-based profession

New teachers enter the profession with an image of what being a teacher will feel like

and an expectation of what sort of preparation they will need to become a teacher. These expectations will vary by individual but are influenced by public images of teachers (Henry, 2020; Moore, 2004) and also their own experience of having been taught (Lortie, 1975). Their expectations will also be influenced by the type of ITE programmes available to them.

Across the five sites I visited the profile of the "typical" student who applies for a teacher education programme varied. Undergraduate programmes with a strong connection to local networks of schools (eg, the four-year undergraduate programme, at MLFTC in Arizona), will be shaped quite differently to graduate or post-graduate awards. For example, at QUT considerable efforts had been made to ensure that teacher education programme were accessible to career changers through a flexible delivery style and shortened practicum placements which could be fitted in around a current job or family commitments, reflecting the changing nature of students enrolling on such programmes. This is significant because such recruitment trends affect the type of programmes available, and programmes set at Masters level are more likely to feature a research component. If it is possible within an education system to become a teacher at undergraduate level, the opportunity to be exposed to research will be limited by the requirements of that qualification. In situations where prospective teachers are able to become qualified without a significant degree of research, then so their exposure to the potential of research will be limited. In addition, this can affect the perception of teaching as a research-based profession. If teaching is not perceived as a research-based profession, then so the requirement to have a Masters degree, or exposure to research during the qualification period, will not be seen as a valuable or essential component of initial teacher education.

For example, the University of Auckland, Masters of Teaching programme, a research orientated programme with a focus on teaching for equity, was having to close pending the end of government funding, and a lack of suitable applicants. Teacher educators at the university explained that there was not the perceived need for a demanding Masters programme, when the one year graduate programme was sufficient for qualification and certification and also to gain suitable employment. Recent graduates were able to gain employment in a context where demand for teachers is high – therefore the extra cost (both in terms of time and money) in order to study for the full Masters programme was deemed unnecessary.

This is not to suggest that prospective teachers are overly concerned with the cost of studying or are lacking ambition. The data analysis suggests that what underpins this notion is a dominant perception of teaching as a practical activity and not a research orientated one. Prospective teachers did not consider teaching as a profession that requires an understanding of academic research, and even less one where qualified teachers are actively engaged in research. Student teachers reported that research-based assignments were often "irrelevant" to their teaching and perceived that some research assessments were "inauthentic" indicators of their ability to teach, which they perceived as the primary goal of the programme.

This can also be seen in the Masters programme, the MT (Masters of Teaching) programme at OISE. Here one of the teacher educators recounted to me the typical "research journey" of their student teachers over the five term (or two year) programme:

> In a cohort of 30, maybe three or four are committed to research and think: "I came here for this. OK. What else have you got?". For many of the others they start off knowing this is part of the programme, but it is only later they get into it. I love the transformation and seeing their relationship to research change over time. In my experience, they come in and they know they're going to be doing this research study now, and they start off really just wanting the ingredients and the instructions. But as they go … especially when we do their data analysis, that's when it starts to tip, when something clicks for them … I really find that that's a moment where for many, not all but for many, the shift can happen into liking the process of research and feeling a sense of joy and efficacy. And then there's the conference: they are reporting their research with confidence and they know their data and they know the literature in a different way. (OISE, interview, 2020)

The "journey" described above demonstrates that as (some) new teachers enter their programmes they do not see the research component of the programme as central to their development *as a teacher*, but as a programme requirement. This is even in the light of having accepted a place on a strongly research-orientated programme (the only one at Masters level available in Ontario, and one of two across Canada). This expectation reflects a strong public discourse about teaching as a practical activity requiring technical skills or behaviours rather than a propensity to undertake or be engaged with research. This discourse is, I would argue, so strong that new teachers, keen to be the best they can be, do not expect to see research as part of either their initial training or as a part of their role as a qualified teacher. In other words, as much as the teacher educator research community might extol the values of research for the "village", it would appear that those moving into the village have yet to be convinced.

Teacher education accountability structures and the significance of research

In addition to the trends outlined presented above, research is being positively squeezed out of initial teacher education programmes due to the extent it features within relevant accountability infrastructures. Teacher education is beset with a variety of measures around accountability, accreditation and validation. The extent of these is such that Ling, in relation to the Australian context, described it as a situation of "supercomplexity" (2017). Teacher educators have to navigate these various requirements, which may stem from different sources. For example, in Australia, there are national standards, and state-based interpretations which operate alongside the university system of award assessment. In England, the Department for Education has mandated content for teacher education (the Core Content Framework), as well as a list of statutory requirements around recruitment and programme parameters. The Teacher Standards, which have to be met in order for the award of Qualified Teacher Status, sit alongside a rigid and prescriptive inspection regime (though a government inspection agency, Ofsted). However, for university programmes, the programme award (eg, the Post Graduate Certification of Education) belongs to the university and has to sit within their additional accountability structures. This dual accountability presents significant challenges, in particular around the ability of universities to control and oversee the assessment of their academic awards. This puts the university in tension with other (ITE-specific) accountability frameworks. As Moon comments: teacher education is unrivalled in political interference arguing that :"Ideas about academic freedom and university autonomy seem to stop at the door of the education faculty." (2016, p.253).

University accountability structures emphasise research, whilst the accountability regimes in relation to the teacher certification or qualification downplay

the importance of research. For example, the English Teacher Standards make no explicit reference to research, and only the following oblique ones:

[Insert Table 1 near here]

This contrasts with the university awarding oversight agency, the QAA's requirements for a Level 7 (postgraduate) award of which many university-based teacher education programmes (the Post Graduate Certificate of Education) are required to adhere to, which places a much stronger emphasis on research:

[Insert Table 2 near here]

In other words, for a teacher education programme to be at level 7, it must feature research in both content, understanding and as a methodology for further study, whereas the requirements for research as part of the teacher qualification are minimal.

Additionally, in England, teacher education is also influenced by the Ofsted inspection framework which sets out the criteria for inspection for initial teacher education providers. Here, research is positioned differently again. According to the Ofsted framework for inspection for Initial Teacher Education, for a provider to be graded as Good, they must demonstrate the following features:

[Insert Table 3 near here]

The positioning of the new teacher (or trainee) in relation to research is key here: the new teacher is not required to understand research, or to be able to discern quality in research reports, but is positioned as recipients of research that has been curated by others and presented to them by their teacher education provider. This lies in contrast with the more "researcher" orientation outlined in the qualifications criteria. One reason for this difference may be that it is not compulsory to undertake a Level 7 course in order to qualify as a teacher (a graduate or Level 6 qualification is sufficient).

However, a provider of a Level 6 course still needs to ensure that they meet the research criteria laid down by Ofsted, which again promotes a "research as content" approach to teacher education pedagogy.

Although this differential is the most stark in the highly regulated English system of teacher education, similar anomalies can be seen in other definitions of teacher standards as can be seen in the table below:

[Insert Table 4 near here]

The verb constructions of these accounts situate the relationship between the teacher and the research as a passive one; where the teacher "draws on", is "informed by" and can "demonstrate" their knowledge of research. The idea of a teacher as researcher or as a critical consumer of research are absent. I would argue this is a significant observation. Accountability structures shape activities, even when situated as minimal requirements. In the examples offered above, the role of research is significantly downplayed and when it does feature, it does so by situating the (new) teacher as a passive consumer of research: as a source of what Biesta (2007) might consider to be a discourse of where research findings are valuable only for informing teachers about "what works". Biesta has argued that is profoundly uneducational, and that it lacks the nuance required for situational judgements. Many of the teacher educators I spoke to were passionate about the role of research on their programmes not just as content but as a form of professionalisation, as argued by one of the teacher educators at OISE when explaining why an inquiry as stance (Cochran-Smith & Lytle, 1999) position and emphasis on research was so important to their programme:

> It is a commitment to the integrity of developing teachers as intellectuals … I think that's got to be a defining feature of teacher education. It's got to be something about the professional status of teacher educators, whether they actually see that that's important, and regardless of what the market is doing. (OISE, Interview, 2020)

However, accountability systems relating to teacher education, make such an orientation optional and at the discretion of the provider.

Career trajectories and contractual arrangements of teacher educators

The role of teacher educators is key in navigating different accountability and governance structures and in ensuring that important components of teacher education, such as research, are included in programmes. Therefore the research-orientation of teacher educators is a significant part of the issue of research capacity. Unfortunately, the current trends in the recruitment and contractual arrangements for university-based teacher educators poses a real threat to their ability to be research-focussed.

Teacher educators are not an homogenous group and can variously include those that work in universities, schools, communities and other third-sector organisations, in a variety of capacities (Kleinsasser, 2017; Murray, 2017; White, 2018). Even within universities, the role has increasingly been compartmentalised and diversified with typically divisions along the lines of supervision and teaching (Cochran-Smith, Grudnoff, Orland-Barak, & Smith, 2019). White (2018) also notes that teacher educators are increasingly diverse. In her categorisation she includes the important, but often under-recognised group of community-based teacher educators (alongside those

she categorises as university-based or school-based), who are required to play a significant role in teacher education programme planning in both New Zealand and Australia, where consultation and authentic partnerships with community organisations were strongly encouraged through accreditation processes, particularly for cultural and social diversity. University-based teacher educators tend to come from two backgrounds: either having had previous experience as an academic researcher, or as enrolled on a doctoral programme (Cochran-Smith et al., 2019), or as a former teacher who has to cross undergo an identity shift in order to transition into their new role (Trent, 2013; Williams, 2014). For some, teacher education is an accidental career (Mayer, Mitchell, Santoro, & White, 2011), commonly referred to as *second-order* (Murray & Male, 2005). Reviews suggests that teacher educators are indeed "second-order": teacher educators are under-inducted; lack professional development; and there is little consensus as to their specialist knowledge base (Holme, Robb, & Berry, 2016).

In contrast to teacher educators who are based in school contexts, university-based teacher educators are part of the university faculty, and so also need to address the expectations of being an academic and the precarious nature of academic contracts. These concerns are typified by what Grundnoff (Cochran-Smith et al., 2019) has called the bifurcation of their roles: as they juggle being both academics and teacher educators. Ellis and McNicholl (2015) have noted the heavy workload involved in university-based teacher education (particularly when they include time-consuming school visits), and the tensions that the teacher educators face in handling research expectations as a faculty member. The dual expectations of teacher educators do not sit easily together. Cochran-Smith et al. (2019) highlights the challenges this presents for the teacher educators, including :

- Their ability to be recognised within their institution as researchers and academics;
- The induction and professional development they need in order to become high-quality teacher educators;
- The dissonance between the dual expectations of them as teachers of teachers and as academics and researchers.

This is further complicated by the lack of status and respect offered to education faculty and the work they undertake in the academy (Labaree, 2006). Research conducted in teacher education by teacher educators is often hard to come by (Tack & Vanderlinde, 2019), under-valued, and considered to be of low quality (as is often the criticism of self-study) (Vanassche & Kelchtermans, 2015a, 2015b).

As universities are increasingly under financial pressure, so teacher educators like other academic staff are facing changing working conditions (Ellis & McNicholl, 2015; Furlong, 2013), increasingly reliant on temporary and casualised employment contracts, and reducing the opportunity for professional development and career advancement.

Ultimately teacher educators have to be (regarded as) productive members of the academic community, as well as having credibility in the professional (ie, school-based) community. In nearly all the sites visited, teacher educator roles were differentiated into those that were considered full faculty members (with expectations of research engagement) and those that mainly had supervisory roles. These arrangements were often hierarchical, reflecting Yuan and Yang (2020)'s observation that teacher educators need to cross both horizontal and hierarchical boundaries. Horizontal boundaries were

those with relatively equal power, enabling an exchange between equal partners (university and school-based teacher educators for instance). Hierarchical boundaries were more structured, such as within the university itself with different affordances given to research and teaching. Teacher educators with less status tended to focus on student or school-facing work undertaking the horizontal boundary crossing. For example, at both the IOE and OISE, most of the faculty teacher educators were expected to undertake the full range of duties (teaching, site visits etc) alongside undertaking research. In both cases however, this was not always possible. At OISE faculty members who have taken up leadership positions had a lower teaching load, leaving course teaching and site visits to casualised or sessional staff. At IOE, some teacher educators were offered teaching only contracts, removing the research expectation to their roles. At QUT, university partners were introduced to support partnership work, and in both QUT and University of Auckland, there were examples of teacher educators letting their teacher certification slide making them ineligible to undertake school visits.

Central to all of this is an erosion of the status proffered to teacher educators. Status is tied up with expectations around research, but also reflects the role of teacher educators in relation to development and reform initiatives. For example, at ASU programme developments were oriented around “clinical faculty” who had one-year renewable contracts. Teacher educators highlighted how tenured faculty were less easily incorporated into reform initiatives. The contractual status of teacher educators is important for their continuity, development and status both within and without the university, affecting their capacity to act, adapt, and change their practice. Moreover, it affects their capacity to be research-active as academics and as teacher educators.

The division between academic and supervisory work on teacher education programmes exacerbates the theory/practice divide across ITE. It divides the accountability responsibility for the assessment of practical teaching to staff with lower status, allowing more-experienced tenured academic staff to focus on research and administrative duties. However, many university-based teacher educators question the value of undertaking school visits for their own career trajectory. Undertaking school visits and cultivating school partnerships are time-consuming. The benefits of these activities are for the student teachers but not necessarily for the university or the teacher educators unless this is recognised through accountability, governance, and promotion criteria – which is rarely the case.

Concluding comments

Internationally, then there has been a systematic erosion of the research capacity within teacher education. The value of an international comparison is that it shows that whilst the trend is happening across a range of countries, the individual ways in which it plays out will differ in each location, as each will have a different set of accountability structures, governance requirements and local market conditions. Rather than emphasising the individual context, this paper has sought to show that these trends are far-reaching and make up a worrying picture for the long-term sustainability of research in initial teacher education.

Trends suggest that the role of universities in education research is diminishing. New teachers are likely to enter the profession without a conception of teaching as a research engaged profession, an expectation which is then borne out by the Teacher

Standards that act as the gateway to becoming a teacher and which also play an important role in articulating a society's expectations of teachers and what their work entails. This downplaying of research is further exacerbated by the contractual arrangements which are in place around the recruitment of teacher educators, which are increasingly on temporary or casual contracts, and who can find themselves working in a university but with no expectation of active engagement in research or publication.

In other words, despite Stenhouse's encouragement for teaching to be a more research orientated profession, and for research to consider the needs, perspectives and participation of teachers (or the village), what we can see is that the capacity for new teachers to be inducted into research as part of their professional repertoire is diminishing to the point where the context could be described as being "anti-research".

However, this realisation belies the efforts of many teacher educators to ensure that their programmes have a strong research orientation and teachers are inducted into research as a form of pedagogy, as a form of challenge and as a useful guide to their practice. In fact in every site visit, the teacher educators emphasised to me how they sought to ensure that their programmes not only featured the latest research perspectives, but also that the teachers were encouraged to see research as a way of supporting their further professional development. An approach encapsulated by Cochran Smith and Lytle's idea of "inquiry as stance". This was a key part of a programme identity, for example, teacher educators at the IOE, talked about the importance of developing specialist and situated understanding, and of developing a position of critique to counter the dogmatic approaches teachers can sometimes experience in some partner schools. Similarly at OISE, an orientation around research

was also seen as important to help teachers understand the politics of knowledge construction, to enable them to be more aware and questioning of new ideas, where they have come from and the implications they may have on the educational experience. In other words, the teacher educators, despite the adverse trends described above were keen to ensure that the "village" was active in both demanding, interrogating and evaluating research, and not just implementing it. This approach is particularly important if we want to move away from a perception of the village as being exclusionary, restrictive and closed to the outside world. For an outward facing profession, that strives for constant improvement, and critically embraces new ideas and challenges, we need to emphasise an initial teacher education which seeks to place research as pedagogy at its heart.

However, such an approach is only possible if we address the erosion of the research community around teacher education. Without a more active orientation to research in the various national and regional Teacher Standards, and a shift in public opinion that sees teaching as a research-led (and not just practical) activity, then the expectations of new teachers will be that research is more of a "nice to have", rather than an essential component of their teacher education. The teacher education communities' support of clinical practice and other research orientated approaches may be convincing to those already inside the communities, but without this message reaching beyond the already initiated the world will still hear more about the research than the village.

However, the demise of research within teacher education is not a foregone conclusion, nor is it irredeemable. The majority of the data for this research was collected prior to the coronavirus pandemic of 2020. For many nations, the experience

of the pandemic represented a seismic shift in how research and robustly validated forms of knowledge are recognised and valued in society, along with a renewed acknowledgement of the role and place of "experts" within and across professional and academic domains. Such a shift has been recognised in teacher education, in accounts of how teacher educators had to respond quickly to the challenges of the pandemic, drawing upon their expertise to do so (Mutton, 2020). In the light of this societal shift, now would seem to be an appropriate time for the village to speak back to the world: to articulate ways in which teachers and teacher educators can advocate for and represent the importance of research to their professional practice. This requires a new confidence on behalf of teacher educators to acknowledge the expertise they have, and the research that underpins it, and a renewed effort to mobilise the teaching profession to articulate the ways in which teaching is research-informed, and to emphasise the importance of research within professional practice. Such a position would conceivably make robust arguments for rethinking and redesigning teacher education away from a transmission model of learning, to one that is more robustly supported by evidence and research, and to advocate for the necessary changes within accountability systems and university award systems in order to make such a change possible. Such an approach would no doubt enhance the status of teaching as an educated, competent and reflective profession as well as laying the groundwork for the ways in which such a profession should be educated and informed.

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References

Adamson, B. (2012). International comparative studies in teaching and teacher education. *Teaching and Teacher Education, 28*(5), 641-648. doi:10.1016/j.tate.2012.02.003

Afdal, H. W., & Spernes, K. (2018). Designing and redesigning research-based teacher education. *Teaching and Teacher Education, 74*, 215-228. doi:10.1016/j.tate.2018.05.011

Ball, S. J., & Exley, S. (2010). Making policy with 'good ideas': policy networks and the 'intellectuals' of New Labour. *Journal of Education Policy, 25*(2), 151-169. doi:10.1080/02680930903486125

Biesta, G. (2007). Why "what works" won't work: evidence-based practice and the democratic deficit in educational research. *Educational Theory, 57*(1), 1-22. doi:doi.org/10.1111/j.1741-5446.2006.00241.x

Brooks, C. (2021). *Initial Teacher Education at Scale: Quality Conundrums*. London: Routledge.

Burn, K., & Mutton, T. (2013). Review of research-informed clinical practice in teacher education, paper submitted to the BERA-RSA Inquiry. *London: BERA/RSA*.

Carter, A. (2015). *Carter Review of Initial Teacher Training (ITT)*. Retrieved from London:

Cochran-Smith, M., Grudnoff, L., Orland-Barak, L., & Smith, K. (2019). Educating Teacher Educators: International Perspectives. *The New Educator*, 1-20. doi:10.1080/1547688x.2019.1670309

Cochran-Smith, M., & Lytle, S. L. (1999). The Teacher Research Movement: A Decade Later. *Educational Researcher, 28*(7), 15-25.

Cochran-Smith, M., & Maria Villegas, A. (2015). Studying teacher preparation: The questions that drive research. *European Educational Research Journal, 14*(5), 379-394. doi:10.1177/1474904115590211

Collini, S. (2012). *What are universities for?* London: Penguin UK.

Connell, R. (2019). *The good university: What universities actually do and why its time for radical change*. London: Zed Books Ltd.

Darling-Hammond, L. (2006). *Powerful Teacher Education.: Lessons from Exemplary Programs*. San Francisco: John Wiley & Sons.

Darling-Hammond, L., & Lieberman, A. (2013). *Teacher education around the world: Changing policies and practices*. Abingdon: Routledge.

Darling-Hammond, L., Macdonald, M. B., Snyder, J., Whitford, B. L., Ruscoe, G., & Fickel, L. (2000). *Studies of Excellence in Teacher Education: Preparation at the Graduate Level*. Washington D.C.: ATCEE.

Ellis, V., & McNicholl, J. (2015). *Transforming teacher education: Reconfiguring the academic work*. London: Bloomsbury Publishing.

Ellis, V., Steadman, S., & Trippestad, T. A. (2018). Teacher education and the GERM: policy entrepreneurship, disruptive innovation and the rhetorics of reform. *Educational Review, 71*(1), 101-121. doi:10.1080/00131911.2019.1522040

Freidson, E. (2001). *Professionalism, the third logic: On the practice of knowledge*. Chicago: University of Chicago press.

Furlong, J. (2013). *Education - An Anatomy of the Discipline : Rescuing the University Project*. Abingdon: Routledge.

Furlong, J., & Whitty, G. (2017). Knowledge traditions in the study of education. In G. Whitty & J. Furlong (Eds.), *Knowledge and the study of education: An international exploration* (pp. 13-57). Oxford: Symposium.

Godfrey, D. (2017). What is the proposed role of research evidence in England's 'self-improving' school system? *Oxford Review of Education, 43*(4), 433-446. doi:10.1080/03054985.2017.1329718

Greany, T., & Brown, C. (2015). *Partnerships between teaching schools and universities: research report* (U. I. o. Education Ed.). London: UCL Institute of Education.

Greany, T., Gu, Q., Handscomb, G., Varley, M., Manners, P., & Duncan, S. (2014). *School-University Partnerships: Fulfilling the Potential. Summary Report*. UK: National Co-ordinating Centre for Public Engagement.

Henry, J. (2020). The cinematic pedagogies of underprepared teachers. *Teaching and Teacher Education, 89*, 102990. doi:10.1016/j.tate.2019.102990

Holme, R., Robb, A., & Berry, W. (2016). Becoming a teacher educator – the motivational factors. *European Journal of Teacher Education, 39*(3), 340-354. doi:10.1080/02619768.2016.1194391

Hordern, J. (2020). Why close to practice is not enough: Neglecting practice in educational research. *British Educational Research Journal*. doi:10.1002/berj.3622

Hulme, M., Wood, J., & Shi, X. (2020). Measuring up? Metrics and research assessment in UK teacher education. *Journal of Education for Teaching, 46*(2), 220-239. doi:10.1080/02607476.2020.1724658

Kemmis, S. (1989). *Some ambiguities of Stenhouse's notion of "the teacher as researcher" : towards a new resolution*. Norwich: University of East Anglia.

Kleinsasser, R. (2017). A Quest for Teacher Educator Work. In D. J. Clandinin & J. Husu (Eds.), *The Sage Handbook of Research on Teacher Education* (Vol. 2, pp. 1033-1048). London: Sage Publishing.

Kuckartz, U. (2014). *Qualitative text analysis: A guide to methods, practice and using software*: Sage.

Labaree, D. F. (2006). *The trouble with ed schools*. New Haven: Yale University Press.

Labaree, D. F. (2008). An uneasy relationship: the history of teacher education in the university. In M. Cochran-Smith, S. Feiman-Nemser, J. McIntyre, & K. with Demers (Eds.), *Handbook of research on teacher education* (3rd ed., pp. 290-306).

Ling, L. M. (2017). Australian teacher education: inside-out, outside-in, backwards and forwards? *European Journal of Teacher Education, 40*(5), 561-571. doi:10.1080/02619768.2017.1385599

Lortie, D. C. (1975). *Schoolteacher*. Chicago: Univ of Chicago Press.

Mayer, D., Mitchell, J., Santoro, N., & White, S. (2011). Teacher educators and 'accidental' careers in academe: an Australian perspective. *Journal of Education for Teaching, 37*(3), 247-260. doi:10.1080/02607476.2011.588011

McAleavy, T. (2016). *Teaching as a research-engaged profession: problems and possibilities*. Reading: Education Development Trust.

Menter, I. (2017). Teacher education research. In *Oxford Research Encyclopedia of Education*.

Menter, I., Hulme, M., Elliot, D., Lewin, J., Baumfield, V., Britton, A., . . . McQueen, I. (2010). *Literature review on teacher education in the 21st century* (S. G. S. Reserach Ed.): University of Glasgow.

Moon, B. (2016). Building and Agenda for Reform of Teacher Education and Training within the University. In B. Moon (Ed.), *Do Universities Have a Role in the Education and Training Teachers? An International Analysis of Policy and Practice* (pp. 251-262). Cambridge: Cambridge University Press.

Moore, A. (2004). *The Good Teacher: Dominant discourses in teaching and teacher education*. London: RoutledgeFalmer.

Murray, J. (2017). Defining teacher educators: international perspectives and contexts. In D. J. Clandinin & J. Husu (Eds.), *The Sage Handbook of Research on Teacher Education Volume 2* (Vol. 2, pp. 1017-1032). London: SAGE Publishers

Murray, J., & Male, T. (2005). Becoming a teacher educator: evidence from the field. *Teaching and Teacher Education, 21*(2), 125-142. doi:10.1016/j.tate.2004.12.006

Mutton, T. (2020). Teacher education and Covid-19: responses and opportunities for new pedagogical initiatives. *Journal of Education for Teaching*, 1-3. doi:10.1080/02607476.2020.1805189

Nutley, S., Walter, I., & Davies, H. T. (2003). From Knowing to Doing: A Framework for Understanding the Evidence-into-Practice Agenda. *Evaluation, 9*(2), 125-143.

Pring, R. (2017). Research and the Undermining of Teacher Education. In *A companion to Research in Teacher Education* (pp. 609-620). Dordrecht: Springer.

Puustinen, M., Säntti, J., Koski, A., & Tammi, T. (2018). Teaching: A practical or research-based profession? Teacher candidates' approaches to research-based teacher education. *Teaching and Teacher Education, 74*, 170-179. doi:10.1016/j.tate.2018.05.004

Stenhouse, L. (1975). The teacher as researcher. In L. Stenhouse (Ed.), *An Introduction to Curriculum Research and Development* (pp. 142-165). London: Heinemann.

Stenhouse, L. (2010). What counts as research? *British Journal of Educational Studies, 29*(2), 103-114. doi:10.1080/00071005.1981.9973589

Tack, H., & Vanderlinde, R. (2019). Capturing the relations between teacher educators' opportunities for professional growth, work pressure, work related basic needs satisfaction, and teacher educators' researcherly disposition. *European Journal of Teacher Education*, 1-19. doi:10.1080/02619768.2019.1628212

Thomas, M. A., Rauschenberger, E., & Crawford-Garrett, K. (2020). *Examining Teach For All: International Perspectives on a Growing Global Network*. Abingdon: Routledge.

Trent, J. (2013). Becoming a Teacher Educator. *Journal of Teacher Education, 64*(3), 262-275. doi:10.1177/0022487112471998

Turvey, K. (2018). Humanising as innovation in a cold climate of [so-called-evidence-based] teacher education. *Journal of Education for Teaching, 45*(1), 15-30. doi:10.1080/02607476.2019.1550603

Turvey, K., & Pachler, N. (2020). Design principles for fostering pedagogical provenance through research in technology supported learning. *Computers & Education, 146*. doi:10.1016/j.compedu.2019.103736

Vanassche, E., & Kelchtermans, G. (2015a). Facilitating self-study of teacher education practices: toward a pedagogy of teacher educator professional development. *Professional Development in Education, 42*(1), 100-122. doi:10.1080/19415257.2014.986813

Vanassche, E., & Kelchtermans, G. (2015b). The state of the art in Self-Study of Teacher Education Practices: a systematic literature review. *Journal of Curriculum Studies, 47*(4), 508-528. doi:10.1080/00220272.2014.995712

Watson, D., Hollister, R., Stroud, S. E., & Babcock, E. (2011). *The engaged university: International perspectives on civic engagement*. London: Taylor & Francis.

White, S. (2018). Teacher educators for new times? Redefining an important occupational group. *Journal of Education for Teaching, 45*(2), 200-213. doi:10.1080/02607476.2018.1548174

Williams, J. (2014). Teacher Educator Professional Learning in the Third Space. *Journal of Teacher Education, 65*(4), 315-326. doi:10.1177/0022487114533128

Wisby, E., & Whitty, G. (2019). Maintaining (ecosystems for) a broad view of educational research and its relationship to practice. In D. Godfrey & C. Brown (Eds.), *An Ecosystem for Research-Engaged Schools: Reforming Education Through Research* (pp. 187). London: Routledge.

Wyse, D. (2020). Presidential Address: The academic discipline of education. Reciprocal relationships between practical knowledge and academic knowledge. *British Educational Research Journal, 46*(1), 6-25. doi:10.1002/berj.3597

Wyse, D., Brown, C., Oliver, S., & Poblete, X. (2020). Education research and educational practice: The qualities of a close relationship. *British Educational Research Journal*. doi:10.1002/berj.3626

Young, M., & Muller, J. (2014). From the sociology of professions to the sociology of professional knowledge. *Knowledge, expertise and the professions*, 3-17.

Yuan, R., & Yang, M. (2020). Understanding university-based teacher educators' boundary crossing experiences: voices from Hong Kong. *Teachers and Teaching*, 1-21. doi:10.1080/13540602.2020.1777961

Table 1 Extracts from the English Teacher Standards

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/665520/Teachers__Standards.pdf *(my emphasis))*

3. Demonstrate good subject and curriculum knowledge • have a secure knowledge of the relevant subject(s) and curriculum areas, foster and maintain pupils' interest in the subject, and address misunderstandings • demonstrate a critical understanding of developments in the subject and curriculum areas, and promote the value of scholarship 5. Adapt teaching to respond to the strengths and needs of all pupils • have a secure understanding of how a range of factors can inhibit pupils' ability to learn, and how best to overcome these 8. Fulfil wider professional responsibilities • develop effective professional relationships with colleagues, knowing how and when to draw on advice and specialist support

Table 2 Extract from QAA Level 7 Qualifications

(**https://www.qaa.ac.uk/docs/qaa/quality-code/qualifications-frameworks.pdf** p. 31)

Master's degrees are awarded to students who have demonstrated:

- *a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice*
- *a comprehensive understanding of techniques applicable to their own research or advanced scholarship*
- *originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline*
- *conceptual understanding that enables the student: - to evaluate critically current research and advanced scholarship in the discipline - to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.*

Typically, holders of the qualification will be able to:

- *deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences*
- *demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level*
- *continue to advance their knowledge and understanding, and to develop new skills to a high level.*

And holders will have:

- *the qualities and transferable skills necessary for employment requiring: - the exercise of initiative and personal responsibility - decision-making in complex and unpredictable situations - the independent learning ability required for continuing professional development.*

4.17.1 Much of the study undertaken for master's degrees is at, or informed by, the forefront of an academic or professional discipline. Successful students show originality in the application of knowledge, and they understand how the boundaries of knowledge are advanced through research. They are able to deal with complex issues both systematically and creatively, and they show originality in tackling and solving problems. They have the qualities needed for employment in circumstances requiring sound judgement, personal responsibility and initiative in complex and unpredictable professional environments

Table 3 Extract from the Ofsted ITT Inspection Framework (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/895321/Initial_teacher_education_framework_and_handbook.pdf p 39)

Informed by up-to-date or pertinent research

- The ITE curriculum is designed to ensure that trainees engage with up-to-date or pertinent research findings, for example the research informing the ITT core content framework (for primary and secondary phase trainees).
- The curriculum ensures that trainees are taught how to apply principles from scholarship relevant to their subject and phase when making professional decisions. Trainees learn how to assess the appropriateness and value of new approaches that they might encounter in future by: considering the validity and reliability of any research on which the approach depends; considering its context in existing community debates (for example, subject, phase, SEND, psychology); and relating it to their professional experience.
- Trainees know about up-to-date research for promoting inclusion and teaching pupils with SEND, and those who speak EAL. They are able to apply this knowledge in their subject and phase.

Classroom practice

- The ITE curriculum introduces trainees to up-to-date research on effective classroom practice. This includes research on how to present subject matter clearly and explicitly, promoting appropriate discussion, reflection and questioning, and on how to use relevant pedagogy to enable effective teaching of the subject/specialist area. Trainees are taught how to plan and resource lesson sequences within their specialist subject(s) in their phase, and to understand how sequences fit into and serve wider goals for that subject.

Table 4 Research in the Teacher Standards:

Teacher Standards	**Research or Scholarship (underlined for emphasis)**
Our Code Our Standards *Code of Professional Responsibility and* *Standards for the Teaching Profession* *From Education Council, New Zealand*	Under Professional Learning: Be informed by research and innovations related to: content disciplines; pedagogy; teaching for diverse learners, including learners with disabilities and learning support needs; and wider education matters.
The Standards of Practice for the Teaching Profession Ontario College of Teachers https://www.oct.ca/public/professional-standards/standards-of-practice	Ongoing Professional Learning Members recognize that a commitment to ongoing professional learning is integral to effective practice and to student learning. Professional practice and self-directed learning are informed by experience, research, collaboration and knowledge. Professional Knowledge Members strive to be current in their professional knowledge and recognize its relationship to practice. They understand and reflect on student development, learning theory, pedagogy, curriculum, ethics, educational research and related policies and legislation to inform professional judgment in practice.
Australian Professional Standards for Teachers **From AITSL** The Australian Institute for Teaching and School Leadership	Professional knowledge: Teachers draw on a body of professional knowledge and research to respond to the needs of their students within their educational contexts. Focus area 1.2 Understand how students learn Graduate: Demonstrate knowledge and understanding of research into how students learn and the implications for teaching. Proficient: Structure teaching programs using research and collegial advice about how students learn. Highly Accomplished: Expand understanding of how students learn using research and workplace knowledge. Lead : Lead processes to evaluate the effectiveness of teaching programs using research and

	workplace knowledge about how students Research also appears in the Standards around Engage in Professional Learning at the Highly Accomplished an Lead levels