Project: RESEARCH CAPACITY BUILDING IN TEACHER EDUCATION IN KAZAKHSTAN

Maqsut Narikbayev University

PROJECT DESCRIPTION

Project purpose: to build an understanding of the research capacity development in teacher education in Kazakhstan. In particular, the project focuses on the role of research methods courses at the Bachelor's and Master's levels in building future teachers' research capacity in the methodology of educational research.

Project objectives
1. To conduct a thorough literature review to understand key findings, issues, and debates in research capacity development in general and in teacher education in particular, teaching and learning research methods courses, as well as the teaching and research nexus.
2. To analyze the goals, content, and structure of research methods courses in Bachelor's and Master's teacher education programs at selected Kazakhstani universities.
3. To identify challenges faculty have to face and coping strategies they adopt in designing and running research methods courses for undergraduate and graduate students of teacher training education programs in Kazakhstan.
4. To examine undergraduate and graduate students' experiences of studying research methods courses as part of their teacher training and perceived benefits of developing research capacity for their future professional and academic careers.
5. To develop a comprehensive list of policy and practice recommendations based on project research findings.
6. To publish a monograph providing a detailed account of this study on research capacity development in teacher education in Kazakhstan.

Research questions:
1. How is the curriculum for research methods courses of the teacher training Bachelor's and Master's programs developed? (Project Objective 2)
2. What challenges do faculty have to face in designing and running research methods courses, and how do they cope with these challenges? (Project Objective 3)
3. How do undergraduate and graduate student teachers assess the value of research methods courses for their future academic and professional careers? (Project Objective 4)

Methodology

Research design: mixed methods multiple-case research approach

- Document analysis (Research Question 1)
- Qualitative semi-structured interviews (Research Question 2)
- Quantitative survey (Research Question 3)

Research sites: 4 teacher training universities from different regions in Kazakhstan

Research participants:
- University administration
- Faculty teaching research methods courses for Bachelor and Master students (n=40)
  - STEM
  - Social Sciences
  - Humanities
- Undergraduate and graduate student teachers in training (n=400)

PROJECT OBJECTIVE 1
Literature review

Curriculum for research methods courses

The development of research capacity in teacher education (TE) is perceived as a theory and practice connection. It is a part of the learning strategy and important for developing innovations in education (Van Katwijk et al. (2019). The development of research skills for future teachers is implemented in various ways. Afdal and Spernes (2018) claim that an understanding of research is formed through traditional lectures, plenary discussions, group discussions, student presentations, assignments, academic reading, feedback sessions, thesis writing, etc. Within the courses, students focus on the use of research methods, transcription, data analysis, observation, and interviews. Along with practical research skills, students learn critical thinking and evaluation and understand the importance of knowledge production. However, Clark and Hordosy (2019) conclude that research-based teaching does not need to be explicit through curriculum and teaching practice; it can be "contingent upon the developing individual interests and experiences of students, emergent career goals, and the wider context of HE policy and practice within which participation in learning and teaching takes place."

Benefits of building research capacity in TE

Building research capacity in TE has some benefits for both students (Van Katwijk et al., 2019) and teachers (Van Katwijk et al., 2019, Puustinen et al., 2018). The former acquire critical thinking and reflection skills, become more open-minded and start looking at things from different perspectives (Van Katwijk et al., 2019), extend their academic vocabulary, learn to assess scientific works, write proposals and theses (Afdal & Spernes, 2018). The latter develop professional skills through collaborative work (Willegems et al., 2017). Tattoo (2021) states that the teacher's role is important in producing educational research; they need to know different research methods to make contributions to policy and practice. Stakeholders' overall perception of developing research capacity is positive - they find it useful and valuable, however, collaboration work with researchers and consultants is found to be less effective (Oancea et al., 2021)

Challenges and barriers that impede building research capacity in TE

There are a number of challenges and barriers that impede building research capacity in TE. First, the conceptualisation of research and research capacity seems to be problematic. Puustinen et al. (2018) argue that students' confusion about the concepts of research and inquiry has a linguistic explanation, while Oancea et al. (2021) state that types of research are preferred depending on the field. So, social sciences opt for quantitative research, and teacher-practitioners class-based research. Second, Oancea et al. (2021) systematise barriers to capacity building: individual, organizational, and systemic. Individual barriers include time pressures, workload that restricts research engagement, lack of support from management, lack of funding, and limited access to training. Organisational barriers are caused by fast policy change, tight accountability regimes, and reluctance in HEIs to invest in research. As for systemic barriers, they are imbalances in the geographical and institutional distribution of research qualifications and advanced methodological skills; fragmentation

of research activity across different subfields, types of institutions, groups of staff, and modes of research; uneven recognition of research diversity in national reward and incentives systems; or insufficient infrastructure. Hammad & al-Ani (2021) add the lack of research culture at universities to organizational barriers. Not developing a research culture badly affects communication between the units of the organization and even results in a poor teamwork culture.

Students' perception of research methods courses

Despite a number of activities called to build research skills, some students found research stressful and frustrating (Van Katwijk et al., 2019). Not seeing teachers conducting research, they are skeptical about the relevance of research to the teaching profession since research skills are seen as not central to teachers' daily work (Brooks, 2021; Puustinen et al., 2018; Willegems et al., 2017).

Table 1: Meta-analysis

Title, author, year, purpose, research questions	Analytical framework, Methodology	Findings and Key Debates
"When you get out there, you don't have a toolbox". A comparative study of student teachers' identity development in Swedish and Danish teacher education / Rinne, I. Lundqvist, U., Johannsen, B.F. & Yildirim, A. (2023) **Countries:** Sweden, Denmark **Research questions:** 1. How do student teachers interpret their professional teacher identity through their experiences? 2. How do student teachers' professional teacher identity trajectories compare between two teacher education programmes in Sweden and Denmark?	The Concept of Identity Trajectories (Hassemer, 2020): retrospective trajectories and imagined trajectories Case studies, semi-structured interviews with final year student teachers (n=10)	**Motivation factors for choosing a teaching career:** Both positive (supportive school environment, parental influence) and negative (previous disrespectful experiences, authority perception) experiences influence individuals to pursue a teaching career. **Students' perception of teacher education (TE):** Students consider that present TE does not prepare them for the profession ("the reality in the classroom" (p. 7). So, participants feel there is a need for longer internships because "profession can only be learnt in practice" (p. 7). The universities are expected to provide students with a toolbox to cope with professional challenges. Because of current linguistic, cultural and social diversity in schools, teacher education should develop cross-cultural and intercultural competencies.

		Attractiveness and higher social status of the teacher profession (TP) (e.g. Sweden) make students choose it first, while not prioritising the profession when applying (e.g. Denmark) may represent not a serious attitude to the teaching profession. However, the TP is demanding as a lot of competencies and skills are required to work with students.
Academics' perceptions of the challenges and barriers to implementing research-based experiences for undergraduates/ Brew, A. & Mantai, L. (2017) **Country:** Australia **Research purpose:** to explore the constraints academics face in integrating teaching and research at the undergraduate level	Comprehensive lit. review Qualitative methodology, interviews with academics (n=20) engaged in implementing research at the undergraduate level	**Identified constraints:** (1) institutional structures including large classes, bureaucratic ethics, curriculum; (2) academics' skills; (3) academics' views of students and their capabilities to engage in research; (4) lack of funding, time, and resources; (5) academic's definition of undergraduate research; (6) forms of engaging in undergraduate research *Academics' definitions of undergraduate research lead to different forms of undergraduate research. Some definitions open up opportunities to develop undergraduate research while others limit it*
"It's important, but I'm not going to keep doing it!": Perceived purposes, learning outcomes, and value of pre-service teacher research among educators and pre-service teachers, van Katwijk, L., Berry, A., Jansen, E., van Veen, K. (2019) **Countries**: the Netherlands, Australia **Research purpose:** to investigate the contributions of preservice teacher research to the professional learning and development of pre-service teachers.	Aspects of pre-service teacher research (research knowledge, inquiry habit of mind, applying research in practice, research skills, such as lit. review, research methods, data analysis, etc) Multiple case study: 4 cases in the Netherlands, 4 cases in Australia Mixed method Focus group interview: Pre-service teachers and teachers educators	**Purposes of research in TE:** (1) to connect theory and practice; (2) to enhance an inquiry habit of mind by learning critical thinking; (3) to develop a learning strategy; (4) to build innovations in education; (5) professional development of students and teachers **Learning outcomes:(1)** writing a proposal; (2) development of critical thinking; (3) development of reflection skills and open-mindedness. *Despite positive attitudes to research in teacher education, some students did expect to do research in their future jobs and found research stressful and frustrating. It may be related to poor research skills, but overcoming difficulties helps to enhance the inquiry habit of mind. The final note is that students noted that the chance to choose the topics they liked explained their positive attitude toward research*

Research questions: How do pre-service teachers and educators from Australia and the Netherlands perceive: 1. The purposes of pre-service teacher research? 2. The learning outcomes of pre-service teacher research? 3. The value of pre-service teacher research in TE programmes?	Questionnaire: Pre-service teachers and teachers educators	
Student perspectives on learning research methods in the social sciences./ Nind, M., Holmes, M., Insenga, M., Lewthwaite, S. & Sutton, C. (2020) **Country:** the UK **Research purpose**: to understand methods learning journeys and the implications of this for teaching social research methods in higher education	Comprehensive lit review Diary circle method Narrative and thematic analysis Focus group interviews with students (n=10)	Methods teachers should dedicate careful thought to whether the data they use in their teaching is authentic, how engaging it is, and how much ownership students feel over it. This research has also underlined the important emotional aspect of learning social research methods Methods teachers need to recognise that engagement with methods learning is different at different stages in the journey and therefore need to create spaces to reflect on the unique ways in which each learner is negotiating the process to help to make it feel less haphazard and overwhelming
"Teaching: A practical or research-based profession? Teacher candidates' approaches to research-based teacher education", Puustinen, M., Säntti, J., Koski, A. & Tammi, T. (2018) **Country**: Finland **Research question**: How do student teachers experience their TE programme from the perspectives of TAR and PPT?	The goals of teacher education programmes in Finland: TAR (The Teacher as a Researcher) and PPT (The Personal Practical Theory) Quantitative research Data analysis: ANOVA University of Helsinki (class teachers and subject teachers).	**Challenges:** (1) students are sceptical about the relevance of training teachers-researchers to the teaching profession since research skills are seen as not central to teachers' daily work. Also, it is not possible to be both a good teacher and a good researcher since there is banally no time for both. (2) Students criticise training since the university does not provide enough PPT training and does not prepare them to be teacher-researchers; inquiry-based learning is talked about but how it is applied in practice is not shown.

		(3) Despite institutional goals about TAR and PPT, not all courses focus on them much *The authors came to the conclusion that the key concepts of teacher education (TAR and PPT) in Finland are unclear. "The contents, meanings and repercussions of these ideas are either vague or non-existent, which might contribute to disorientation among the students".*
Developing student research capacity for a post-truth world: three challenges for integrating research across taught programs./ Hughes, G. (2019) **Country:** the UK **Research questions:** (1) What are the challenges for integrating research development over a taught degree programme? (2) How far can different research throughline designs help in overcoming these challenges?	Threshold concepts, which represent a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress. Five programs review, interviews with program leaders and key staff, thematic analysis	Challenges: (1) Conceptualising the disciplinary and generic research skills that will develop over the programme and identifying threshold concepts; (2) Student and staff recording and assessment of the accumulation and enrichment of research skills; (3) Supporting the research development and self-regulation of all students in preparation for a post-truth world and not only of those who may continue as researchers *Student research development can be undermined by unclear expectations and threshold concepts that are inadequately worked through. Addressing the three challenges outlined in this paper is fundamental; otherwise, research activities may end up encouraging students to mimic research practice or disregard it altogether, rather than to participate in knowledge evaluation and knowledge production, leaving them vulnerable to persuasion by popular and unregulated discourse.*
Designing and redesigning research-based teacher education/ Afdal, H.W. & Spernes, K. (2018) **Country:** Norway **Research questions:**	The model to engage TE students with research and inquiry in higher education: research-led engagement, research-oriented engagement, research-tutored engagement, and research-based engagement.	**Benefits:** (1) Ss developed critical reading skills, extended their academic vocabulary, learned assessing scientific works; (2) thesis writing demonstrated ss' ability to gain knowledge through research, understand research, and participate in research **Curriculum:** (1) focus on the content of the knowledge/ how to use methods, transcribe, analyse data, etc.; (2) the classes are in the form of

1) What characterizes the learning processes and outcomes visible among the students in the activities that are initiated through the TE program design? 2) How do the students evaluate and assess the research-based design of the course?	Focus group interviews A qualitative survey Recordings from article seminars Student texts	traditional lectures, plenary discussions, group discussions, student presentations, assignments. (3) ss' understanding of research was gradual through exploration of ideas, information collection and critical evaluation; (4) focus on knowledge production; (5) observation, individual interviews, and focus group interviews during the internships; (6) discussions took place at academic reading and feedback sessions. *Designing a research-based course in TE appeared to be a complex process with many components, many parallel processes, and longitudinal perspectives. This course took place over 3 years and students benefitted a lot. The course showed the importance of students' socialisation in researching and careful planning of programmes*
Students' reflective essays as insights into student centred-pedagogies within the undergraduate research methods curriculum. / Hosein, A. & Rao, N. (2016) **Country:** the UK **Research purpose:** (1) to investigate students' awareness of their research skills competency as an ongoing process within an enquiry-based pedagogical approach; (2) to investigate students' awareness of themselves developing as a researcher within an enquiry-based pedagogical approach.	Reflective student-centred pedagogical approach Reflective essay assessment, 16 undergraduate students engaged in empirical research, NVivo analysis, open coding	The approach increased ss' self-awareness of the research process; they viewed themselves as researchers not just as students completing discrete research skills; can empower ss to find their researcher's voice and enable them to have that journey to self-authorship in their development as a student researcher. *The research methods courses should be taught in a combination of student-centred and teacher-directed approaches. The latter enables students to have equitable and essential information on research methods whilst the former provides the space for students to apply and reflect on this information within the research process and becoming a researcher.*
Epistemic agency in student teachers' engagement with research skills./ Heikkila,	Epistemic agency - adopting an active and productive stance towards knowledge	Epistemic agency is visible in four dimensions: (1) research skills serve as a tool for questioning oneself; (2) research skills are used in systematic observation and analysis of what happens in the classroom; (3) research

M., Hermansen, H., Iiskala, T., Mikkilä-Erdmann, M. & Warinowski, A. (2023) **Country:** Finland **Research purpose**: to explore how exposure to research skills can support the development of student teachers' epistemic agency	Teaching practice reports of student teachers (n=73) Narrative analysis	skills are used for interpreting educational knowledge and assessing its validity; (4) research skills are used to support knowledge transmission and making connections between school learning and life outside of schools *Research-based teacher education supports student teachers in their professional development.*
Research-based teacher education\ Munthe, E. & Rogne, M., (2015) **Country:** Norway **Research questions**: 1 What characterizes research-based TE? 2 How can we characterize the contextual framework for providing research-based TE? Subquestions: 1.1 What percentage of the teaching faculty hold a PhD, and what goals do the TE institutions have for their faculty's research competence? 2. How is "research-based teacher education" understood by faculty and students and how is it provided by faculty? 2.1 Subquestion: Is there an emphasis on research or inquiry (using the distinction made by Reid (2004)?	The model (Healey & Jenkins, 2009) to engage TE students with research and inquiry in higher education: research-led engagement, research-oriented engagement, research-tutored engagement, and research-based engagement. Quantitative survey, 19 universities, students Interview, students (N=36) and faculty (N=36)	**Research-engagement factors**: (1) teachers' position (academic, teaching); (2) time for research activities. 6/19 HEIs have less than 20% of faculty holding PhD degrees within one or both programs. Five HEIs have 40% or more in one or both programs. Also, one institute has 8% faculty at this level for ITE 1-7 and another has 5% at this level for ITE 5-10. Grades 5-10 have more teacher educators with a PhD degree than grades 1-7. Five institutes, referring to the national guidelines, are going to meet these demands (e.g. not less than 20% faculty at the first level for a BA program), whereas other HEIs plan that there will be 60% or 70% of their teaching faculty at the first level within a few years. Five HEIs do not have any specific goals but are doing some work on qualifying teacher educators within research. *Despite the fact that the number of PhD holders is increasing, there is no equal distribution among the universities. Also, considering that all aspects of research-based TE are present at universities, the research*

		shows that 'research' and 'inquiry' are used interchangeably with no distinction between them.
Teachers and pre-service teachers as partners in collaborative teacher research: A systematic literature review/Willegems, V., Consuegra, E., Struyven, K. & Engels, N. (2017) **Research questions:** 1 Which outcomes (teacher knowledge and attitudes, teacher practice (theory of change), and pupil outcomes (theory of instruction) of collaborative teacher research in pre-service TE have been investigated? 2 How are outcomes for pre-service teachers related to types of collaboration?	A systematic literature review The ERIC Web of Knowledge 14 studies in 7 journals and one conference paper between 1996 and 2012 the USA 10 studies Australia (1), Canada (2), Turkey (1)	Collaboration teacher research (CTR) is vital to diminish the gap between school and institution. Mentoring teachers, according to the literature, perform various roles such "as models of teaching practice", "nurturing and supportive guides", "school-based teacher educators," and "collaborative colleagues and cocreators of knowledge for teaching." But the role of teacher educators is not well-researched. CTR allows transfer research into daily teaching practices for ITs (in-service teachers). However, what should be avoided is that mentees could be wrongly modelled, which makes the ITs' engagement a complex issue. Teacher research is expected to prepare teachers for teaching in a "complex social context", but there are not enough empirical studies regarding this topic. Overall, the studies identified a positive attitude to inquiry. The negative attitude of some students could be explained as they feel it does not contribute to teacher practice and ITs have a negative perception of it.
Developing teachers' research capacity: the essential role of teacher education/ Tatto, M. (2021) Non-empirical paper; reflection on US policy and TE **Research questions:** 1. Who should produce the knowledge that can be used to guide the teaching profession?		**Recommendations:** - Teachers themselves need to be primary actors in producing educational research and knowledge based on it; - Teachers and Teacher Educators need access to a variety of research methodologies to be engaged with educational research that can contribute to policy & practice; - Teachers and teacher educators should be able to use research methods that enable them to answer the complex questions and problems they confront. - Re-imagined curriculum, i.e. future teachers need to learn research methods and their application to inform policy and practice;

2. What conditions enable and constrain teachers in engaging in teaching and learning research? 3. What do teachers need to know to engage in research on teaching and learning?		- Development of a rich culture of research on teaching and teacher education: - A framework for teacher education based on two empirical studies conducted earlier. This framework offers a design for teacher education program evaluation (p. 13).
Research capacity-building in teacher education/Oancea, A., Fancourt, A., Robson, J., Thompson, I., Childs, A. & Nuseibeh, N. (2021) **Countries:** UK, Wales **Research purpose:** to explore recent policy understandings of research capacity in teacher education; based on Wales' case study **Research question:** In the views of different actors in the system, how well are targeted research capacity- building interventions able to stimulate successful and sustainable development at individual, organisational and systemic levels?	The research capacity-building process consists of 3 levels: individual (skills, expertise, attitudes, capabilities), organizational (resources, culture, processes and infrastructure necessary to undergird professional activity) and structural/system level (frameworks, policies, resources, and infrastructure that are required in order to sustain such professional activity nationally and internationally) A case study The data consist of field notes and transcripts from a site visit; in-depth interviews with staff, management, policymakers, and other key stakeholders (n = 25); responses to a survey of educational researchers in Wales (n = 81); and documentary and digital engagement analytics	**Participants' perceptions of different activities undertaken to develop research capacity**: useful and valuable - mainly at the individual level or at single institutions; less successful activities - aimed at structural or systemic change **Challenges**: contextual and institutional challenges (e.g. the fast pace of systemic and policy change, conflicting pressures, the tensions between perceptions of research and teaching as functions of higher education institutions, financial uncertainties etc.); barriers in the field level (such as the size of the research community, fragmentation, insufficient infrastructure, uneven spread of advanced research skills); different stakeholders understand research and research capacity differently. **Barriers: at an individual level** (time pressures, workload models that restrict research engagement, lack of support from management, etc,); **at the organizational leve**l (research & teaching distinction, fast policy change, tight accountability regimes, reluctance in HEIs to invest in research); **at the systemic level (**imbalances in the geographical and institutional distribution of research qualifications and advanced methodological skills; fragmentation of research activity across different subfields, types of institutions, groups of staff, etc). *A rounded understanding of research-rich TE practice and policy also includes teacher educators based in schools, colleges or other settings, students, school management, governors, local authorities, policymakers, research funders, and publishers*.

Building teachers' research literacy: integrating practice and research by Evans, C., Waring, M. & Christodoulou, A. (2017) **Country**: the UK **Research purpose:** to discuss two programs for early career teachers designed to build their research literacy **Research question**: How can early career teachers develop research literacy through collaboration with universities?	Factors affecting the integration of research into teaching: 1. policy changes, 2. collaboration (schools+uni; Rers+Ters+early career Ters), 3. professional development (ongoing learning, Ters need to see the value of research for their practices; therefore, research should be accessible, context-specific).	Early career teachers found that exploration of their practice in collaboration with peers, with HEI expert support and access to key research, significantly enhanced their sense of agency in schools by enabling them to be able to justify their approaches with the backing of high-quality research Pedagogical research needs to be more accessible to teachers, with a clear demonstration of how concepts can be applied in the teacher context (p. 416); Sustainability of in-school research cultures is crucial for promoting research-informed teaching; Early career teachers must have ongoing support in connecting their own practitioner-oriented research with the broader body of research knowledge; crucially universities can be powerful brokers in this respect
Building Educational Research Capacity: Challenges and Opportunities From the Perspectives of Faculty Members at a National University in Oman/Hammad, W. & al-Ani, W. (2021) **Country**: Oman **Research purpose**: to identify the challenges and opportunities associated with the development of research capacities as perceived by a sample of faculty members in the College of Education	A national university; focus group interviews with faculty members;	**Perceived Educational Research Challenges:** there were concerns about the value of the research produced and its ability to influence educational policy-making (lack of depth, mainly descriptive, quantitative & based on small samples; lack of theoretical studies). All these resulted from a number of challenges that affect faculty members' research practices: the lack of time (promotion policies focus on teaching, research, & service), the absence of a research culture (lack of interdepartmental communication; poor teamwork culture), the lack of research-focused training, and the absence of a clear research agenda (suggest that Ministry and research committees can share their views on what research topics are needed to be investigated/prioritized). **Capacity Building Opportunities**: a research-supportive environment, research funding (the availability of financial support and incentives such as research grants, conference attendance grants, and publication rewards), and the establishment of research groups (Nevertheless, some participants believed that the effectiveness of these groups remains conditional upon good leadership and harmony among group members).

		Producing contextually relevant, high-quality research is crucially needed not only to guide the ongoing reform programs but also to assess their impact on educational outcomes
Undergraduate experiences of the research/teaching nexus across the whole student lifecycle/ Clark, T. & Hordosy, R. (2019) **Country:** England **Research purpose:** to explore how undergraduate students experience research-led teaching throughout their degree programs	Research/teaching nexus Qualitative methodology, (n=118) semi-structured interviews, Nvivo analysis	**Three perceptions of research-led teaching**: (1) research as a mediated experience that is done by others and filtered through lecturers. Knowledge of research needs to be reproduced and demonstrated alongside the development of basic skills. (2) research ownership when, through engaging in research, students could develop their own interests and needs, including thesis topics; (3) internalization of research as a practice, students engage into pursue their own academic and everyday purposes. Constraints of research-led teaching: diminishing interest in the nature of research, the lack of sufficient scaffolding, and the perceived distance between students and researchers. *Research-led teaching is not necessarily a direct product of pedagogical practice or curriculum design. Instead, it is contingent upon the developing individual interests and experiences of students, emergent career goals, and the wider context of HE policy and practice within which participation in learning and teaching takes place*.
Research capacity in initial teacher education: trends in joining the 'village'/ Brooks, C. (2021) **Countries:** Australia, Canada, New Zealand, UK, USA **Research question:** What are the features of high-quality, large-scale initial teacher education?	Literature review Analysis of five university-based TE programmes in five international contexts; Data were collected through interviews with teacher educators and, where possible, school partners and student teachers (or teacher candidates): around 50 in total.	**1. Diminishing role of uni in TE:** the rise of non-university-based routes into teaching, some of which were school- or employment-based with little or no research content (US & UK contexts); **2. The value of research within TE:** teaching itself is often viewed as a practice-orientated profession rather than a research-orientated one; initial teacher education programs are short in duration (10 months in the UK) that is not enough to develop deep understanding of research and diff. methodologies; the majority of teacher education was undertaken by staff who were not research-active or actively engaged in research projects. Within research-intensive institutions it is often the

	Observation of taught sessions Participation in other related activities (such as meetings, seminars and related conferences). Relevant documentation (programme handbooks, media announcements and review documents).	case that active researchers are not fully engaged in teacher education programmes. **3. Pre-service teachers and their expectations of teaching as a research-based profession**: If teaching is not perceived as a research-based profession, then the requirement to have a Master's degree, or exposure to research during the qualification period, will not be seen as a valuable or essential component of initial teacher education. 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. **4. TE accountability structures and the significance of research:** TE programs are accounted to different - level standards - national & organizational requirements. University accountability structures emphasise research, whilst the accountability regimes in relation to the teacher certification or qualification downplay the importance of research (this is especially evident in the UK). 5. **Career trajectories and contractual arrangements of teacher educators:** current trends in the recruitment and contractual arrangements for university-based teacher educators poses a real threat to their ability to be research focussed. The issue with 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 capacity for teachers to play a more active role in research is diminishing because of how research is situated in initial teacher education (ITE). 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 reduce the overall research capacity of the field.