WOTE Phase 2

‘THE WORK OF TEACHER EDUCATION’ FINAL RESEARCH REPORT

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CONTENTS

1. Headline summary

Partnership teacher education – in which schools work with universities and colleges to train teachers – works and there is abundant existing evidence in support of this fact. But our small-scale study across England and Scotland shows that it is the higher education tutor who seems to make it work, often at the cost of research-informed teaching and research. The most time-intensive activity for the higher education tutors in our sample was maintaining relationships with schools and between schools and individual trainee teachers. The need to maintain relationships to such a degree is caused in part by the creation of a marketplace of 'providers' of teacher education who compete for funding on the basis of inspection and quality assurance data and also by the very early school placements that characterise the English model of initial teacher education in comparison to other European models such as that of Finland.

In our research we sought to investigate the practical activities and material conditions of higher education-based teacher educators' work in England and Scotland. We worked with a small sample of 13 teacher educators from a variety of institutions in England (8 participants) and Scotland (5 participants). The participants had a range of experience, subject specialism, level of academic qualification and phase (although most were, nominally at least, secondary subject specialists). We interviewed and observed participants at work and asked them to complete work diaries at two different points in our year-long study. We made both quantitative and qualitative analyses of our data.

The research revealed that *relationship maintenance* was an almost defining characteristic of their work. Relationship maintenance involved activities directed at partnerships with schools but also a great deal of work on individual student teacher wellbeing. The activities underlying this category included email and telephone correspondence and informal conversations in school or the university or college. Relationship maintenance – a category that specifically excludes other job dimensions such as teaching groups or tutoring an individual – accounted for both the highest maximum allocation of hours as well as the highest minimum across the sample.

In talking about their work, teacher educators characterised it as socially important and highly pressurised. More experienced teacher educators tended to regret policy-determined changes in their role towards quality assurance and away from higher-level teaching. More recent appointees, while eager to become research active (and often uncertain of their precise contractual status) tended to say they lacked guidance and inclusion in institutional research cultures. When observing teacher educators' interactions with student teachers, researchers noted the dominance of material artefacts from the professional setting (classroom resources as well as texts). The research identified a tension in how these artefacts were perceived by student teachers, a tension centred on their affordances for teacher learning versus being perceived simply as something you 'do' in a classroom

2. Project overview

2.1 Background
The project aimed to provide original insights into the practical activities of teacher educators as a category of higher education worker. The project had three specific aims:

1. To build on existing research into the discursive construction of teacher education as work in England (Ellis *et al*) by extending to the Scottish context and developing a methodology that integrates the analysis of participants' spoken and written discourse with the study of their practical activities, and the material artefacts that mediate these activities;

2. To gain an understanding of the material conditions and activities of teachers' educators' work by conducting an in-depth, qualitative investigation of a small sample of university-based teacher educators in England and Scotland;

3. On the basis of this data, to make some cross-cultural comparisons that might reveal the historical evolution of the different teacher education systems and their potentials for development, particularly in terms of student teachers' learning.

In general, the project sought to open up for discussion the nature of teacher education as work in the higher education sector; where possible, to note similarities and differences in both practical activities and institutional conceptualisations; and to generate data that would be useful in setting a 21st century agenda for the development of teacher education. The research was undertaken by a team consisting of Dr Viv Ellis (University of Oxford, Principal Investigator), Dr Jane McNicholl (Co-investigator, University of Oxford), Prof Jim McNally (Co-investigator, University of Strathclyde) and Mr Allan Blake (University of Strathclyde, Research Officer), with additional research assistance from Dr Anna Pendry and Ms Hannah Grainger Clemson (both, University of Oxford).

2.2 The existing research in brief
There is a small but growing literature on the induction and identity-transformation of new teacher educators, some of it funded by ESCalate (eg. Murray 2006, Murray 2008, Koster et al 2008). Policy-oriented work is also relevant in addressing the 'contribution' of higher education to teacher learning (e.g. Ellis 2010, Furlong 2000). There is also some interesting American research concerning the history of the 'education professoriate' (eg. Labaree 2004, Ducharme 1993) and the growing shortage of suitably qualified and experienced university-based teacher educators in the US (eg. Twombly et al 2006). But there is a lack of research into what teacher educators actually do - their practical activities and their institutional situation within higher education more generally. Our study is therefore distinctive in several respects: first, in its focus on teacher educators' practical activities and discourse; second, its creative blend of data generation strategies and qualitative and quantitative analytic approaches; third, its attention to teacher education as a form of higher education; fourth, its materialist/cultural-historical (CHAT) theoretical perspective. We believe that the study is unique in the field in trying to answer the questions *what do HE-based teacher educators do? what are they working on - and why?*

3. Research design and methodology

3.1 Data generation

3.1.1 Job advertisement documentation

A weekly scan of jobs.ac.uk (the main HE recruitment site in the UK) was made from February 2010 to January 2011, slightly longer than anticipated. In addition, the *Times Higher Education* periodical was scanned weekly. We were looking for job advertisements for posts that met all of our collection criteria, which were: i. teacher educator positions at Scottish universities, either full-time or part-time, temporary or permanent; ii. positions that involved direct work with student teachers and schools; iii. positions that did not purely involve management or research functions at senior levels. These criteria were the same as those for previous research by Ellis, McNicholl and Pendry and the aim was comparison on the basis of a discourse analysis of the textual data. [1]

3.1.2 Ethical approval

Application was made to the Central University Ethics Committee of the University of Oxford for approval of the project as per our initial proposal to ESCalate. Approval was given on 13 April, 2010. Our proposal specified the data generation strategies and included the use of photography (of consenting participants only plus inanimate objects/artefacts).

3.1.3 Identifying a sample of university-based teacher educators

In mid-April 2010, we began the process of identifying a number of research participants. A call for participation was made through the ESCalate email newsletter, the UCET email list of heads of department and on the University of Oxford Department of Education department website. In our call for participation, we made it clear that we were looking for university-based teacher educators in England and Scotland who had direct responsibility for working with student teachers and schools and that there would be a participatory dimension to the research that would include participants in analysis workshops and dissemination activities. We noted that we were not seeking senior managers or colleagues who did not work on pre-service/initial programmes.

Our intention was to construct a convenience sample of up to 12 teacher educators, the majority of which would be based at English HEIs. We did not expect a large response to the call and we were open as to the exact numbers and balance between primary/secondary and length of service. Although we did not specify, we were not initially interested in more than one participant from the same institution. Our hope was that we would have a sufficient response from which to select a range of participants.

We received 20 expressions of interest by our deadline and a further 2 after the deadline. Two of the 20 were from heads of Education departments at English HEIs who had misread the call and were interested in us including all their staff in a researcher-development project. Another 2 were from senior managers volunteering themselves. We received six expressions of interest from the same 3 HEIs and, against initial expectations, we decided to pursue 4 of the 6 as the two institutional contexts were interesting. In the case of the other 2 from the same HEI, we selected 1 on the basis of range of length of service within the final sample. We invited 16

[1] Note: no jobs were advertised that met our criteria during the period of this research. See Section 2.4, RQ1 for further information.

respondents to an initial meeting to explain the project, the methodology and the commitment. Respondents could either attend a meeting in Glasgow or in Oxford and all respondents' travel and subsistence would be paid. Of the 16 invitations, one was subsequently declined and another respondent didn't reply to numerous follow-up emails. The meetings were held at the University of Strathclyde on 7th May, 2010 and at the University of Oxford on 10th May, 2010 with 14 participants attending.

Following an initial telephone interview, a further participant withdrew when she was promoted to a senior management position in her own institution. The final sample of participants is shown in Table 1 below.

No.	Pseudonym	Gender	Institution	Main Phase/Subject	Years in HE	Highest qualification	Research active
1	Gould	F	England - OLD	Sec - English	2	M s	√
2	Duff	M	England – NEW	Prim - History	6	M	
3	Drummond	F	England - OLD	Sec - Science	<1	M	
4	Davis	F	England – FE	Sec - Science	18	M	
5	Coodle	F	England – NEW	Sec - Geogr	19	D	
6	Brooks	F	England - OLD	Sec - Science	4	M s	√
7	Brock	F	England – FE	Prim - History	17	B	
8	Alloway	F	England – NEW	Prim - Maths	1	D	
9	Monk	F	Scotland	Sec - Maths	7	B	
10	Lenton	F	Scotland	Prim - General	4	M	
11	Hale	F	Scotland	Sec - Geogr	3	M s	√
12	Hacker	F	Scotland	Sec - Geogr	5	M s	√
13	Gresham	M	Scotland	Sec - Music	17	B	√

Table 1: The Work of Teacher Education sample of research participants

The institution column shows whether, in England, the participant was employed by a post-1992 ('new') university or HEI, a pre-1992 ('old') university or in the higher education section of one of the new type of large further education colleges (FE). The highest qualification column indicates whether the participant's highest academic qualification is doctoral (D), a master's (M) or the bachelor's degree (B). 'M s' in this column indicates someone who is currently enrolled as a doctoral student. A tick in the research active column indicates a participant who is currently working towards submission in the 2013 Research Excellence Framework or was entered in the 2008 Research Assessment Exercise.

Although the sample cannot claim to be representative of the population of HEI-based teacher educators in England and Scotland, according to figures from the Higher Education Statistics Agency (HESA 2009), the gender balance is typical of Education departments in the UK and according to the ESRC Demographic Review (Mills *et al* 2006) and the RAE 2008 report (HEFCE 2009a, 2009b) the levels of academic qualification and research activity also seem typical. The sample also reflects a broad range of experience (with roughly equal proportions of participants with more than 10 years' experience, more than 4 years' experience and less than 4

years' experience). A range of subject emphases is also reflected although the sample is biased mainly towards secondary-phase teacher educators.[2]

3.1.4 Telephone interviews
In May 2010, all participants were interviewed by telephone by a member of the research team. Each interview lasted for approximately 30 minutes and was intended to elicit the participant's perspective on their teacher education work, their educational biography and employment history, their dispositions towards education and teacher education, in particular, and their sense of the future. A copy of the interview schedule is included in the appendices.

3.1.5 'Blogging' – the Work of Teacher Education work-space
A set of private blogs (accessible only to the individual participant and research team) was set up at www.workofteachereducation.org. Training in the use of the blog software was provided at the initial meetings in May 2010. Participants were encouraged to use the blogs to represent (in words and pictures) the material conditions of their work. Some further information on the blogs is provided in the appendices.

3.1.6 Work diaries
All participants were asked to complete the Work Diary instrument (see appendices for instrument). Data was collected at two points in the year: in May 2010 and October 2010. These time-points were selected by the research team as it was felt they reflected the different types of teacher education work undertaken over the academic year, with May being more school-based and October more university-based. Participants were asked to keep a record of their activities in increments of one hour for the duration of what was for them a 'typical' working week (up to 7 days) and to note whether the activities were personally or professionally fulfilling. All participants completed the May 2010 round of data collection. One participant, Gresham, did not complete the second, October round.

3.1.7 Observation – 'work shadowing'
All participants were observed for a period of one working day by a member of the research team. Participants were asked to choose a 'typical' day for this activity – typical in terms of the range of work planned at that time of year – during the period October 2010 to January 2011. A member of the research team met the participant at the start of their working day and stayed with them – as far as possible – until they left work for home. The researchers made pen and paper notes in the field – including some near verbatim reconstructions of spoken interaction - and also took photographs in situations that complied with the project's level of ethical approval. Due to the severe weather conditions in Scotland in December 2010 – January 2011 and the participant's personal difficulties following this period, Lenton was not observed at work. All other participants were observed, although the winter weather disrupted the research team's travel plans and the participants' diaries on several occasions and our time-line was seriously delayed.

3.1.8 Participatory data analysis workshop
All participants were invited to a data analysis workshop in Oxford on 25th March, 2011. Prior to the workshop, all participants were emailed a transcript of their interview, a statistical summary of their work diaries and a copy of our field notes from observing them. Seven participants attended along with three members of the research team. The purpose of the workshop was to introduce selections of the data

[2] As it turned out, 5 of the 9 secondary teacher educators also worked on primary programmes, including, in Hacker's case, school visits and lesson observations.

gathered to the participants and to work with them to understand the data using the tools of cultural historical activity theory (CHAT) (e.g. Engeström *et al* 1999). A statistical summary of the job dimensions (work diary) data was presented first, followed by a brief introduction to CHAT and then an analytic discussion of three segments of observation data (field notes and photographs) with the consent of three participants with whom the data had been generated (they were also present). Although not intended to be in the tradition of Developmental Work Research, the research team's intention was to do more than seek respondent validation of their interpretations but to extend the analysis further by attempting to use the data and the joint analysis to bring participants' insights into their practice to a more conscious, articulated level.

The workshop was audio-recorded and a member of the research team also took handwritten notes of the meeting.

3.2 Data analysis

3.2.1 Telephone interviews

Audio recordings of the telephone interviews were transcribed. Two analytic passes were made. The first, by three members of the research team, made a life history analysis of the interviews using concepts from life history research derived from Mandelbaum (1973). This analysis revealed the participant's perceptions on their trajectories of social practice – the turning-points and adaptations made and how these related to the material conditions of work and their personal dispositions towards their work. These analyses were shared, amended and agreed by all members of the research team at a meeting at the University of Strathclyde on 28th October, 2010.

The second pass involved Membership Categorisation Analysis (MCA) (Freebody 2003) which looks at the attributions made to particular categories in the discourse of research interviews (e.g. the verbs and adjectives), the ways these attributions are substantiated (e.g. through personal narrative or invocation of policy texts) and what lines of reasoning these attributions and substantiations afford. MCA was conducted by a sole member of the research team and his analyses forwarded by email for checking and subsequent agreement by two others in March 2011.

3.2.2 'Blogging' – the Work of Teacher Education work-space

Up-take of the blogging tool was poor, even though training had been provided at the initial meetings for participants, and even though we subsequently adapted the blog site to include video presentations of how to blog (see workofteachereducation.org) and sent further email encouragement. Only six participants posted anything beyond the initial trial post and only one of the 13 posted more than twice. During our observation visits we asked why blogging had proved so unsuccessful and the general response was that it was unfamiliar and time-consuming, especially our suggestion to include pictures as well as text. One participant (a first-time blogger) told us that she had found blogging very interesting and rewarding, however.

We agreed that any material from the blogging tool would be incorporated in discussions during the observation visit, although this was only realistic in the case of the participant who had posted more than twice.

3.2.3 Work diaries

The first set of work diaries was analysed by two members of the research team. The diaries were divided alphabetically according to participants' pseudonyms into two sets. Working individually, each researcher made a list of the activities of the teacher

educators as they had recorded them. This process resulted in a total of 70 items, which contained numerous duplications. The two lists were then reviewed, and the items grouped into a reduced number of 32 categories, from which a final combined list of ten job dimensions was agreed.

The second set of work diaries was analysed using this framework; no supplementary definitional precision was called for during this second round of analysis, nor were further job dimensions required to be created. In this way, for each of the weeks recorded, the number of hours allocated by the teacher educators to each of the job dimensions could be calculated. The statistical outcomes from this process were then examined in relation to the field work data from the observation/work-shadowing. Questions about the initial job dimensions were generated by the research team and these questions taken to the participatory data analysis workshop. As a result of discussion between the research team prior to this meeting and the participants' own analysis, some of the job dimensions were renamed to more accurately reflect the nature and purpose of the work being categorised. The final list of job dimensions was:

i. Course management
ii. Personnel activities
iii. External examination at another institution
iv. External examination at own institution
v. Marking
vi. Professional development
vii. Research
viii. Relationship maintenance
ix. Working with a group of students (teaching)
x. Tutoring an individual student (academic supervision, lesson observation/de-briefing)

A comparison of the data collected during the two points in time reveals a number of similarities. In terms of the number of hours logged within each dimension, only one statistically significant difference in fact arises. This result suggests that despite being six months apart in time, the two weeks may be broadly comparable in terms of work categories completed and effort expended.

3.2.4 Observation – 'work shadowing'
Field notes and photographs from each observation were written into narrative form by each researcher, the narratives organised temporally. Some field notes included reconstructed spoken interaction but not all. These verbal/visual narratives were then forwarded to a research assistant who collated the entire set and did an initial, inductive coding, using nVivo qualitative data analysis software. Two further codings of the data set were made by the PI. The first used categories derived from CHAT, specifically the *tools* or artefacts that were the focus of our observations in the field; the way in which these tools were being picked up and used (what they were *mediating*); and for what ends (the potential *object* of the activity). Attention was also given to the social organisation of the practical activities in which the teacher educators were engaged – how the work was organised and between whom (the *division of labour* and the social *rules* or conventions). The second coding used the ten job dimension categories produced in the analysis of work diaries. These coding processes were then repeated by the research assistant and the outcomes compared with the PI's.

On the basis of jointly-agreed initial codings, the PI then prepared an analytic memo of interpretations. The PIs interpretations were then shared by email with the

research team and then discussed, amended and agreed at a meeting in Oxford on 22nd February, 2011. Segments of data that were deemed particularly significant were also taken into the participatory data analysis workshop and interpretations tested, amended and developed further.

3.2.5 Participatory data analysis workshop

The audio recordings of the workshop were sent for transcription. At the time of writing, they have yet to be transcribed but we hope to analyse the transcription using a form of sociocultural discourse analysis that focuses on the way speakers make distinctions and decisions to permit particular lines of thinking. Researcher notes from the workshop were used in establishing and testing the findings of the research reported in the next section.

4. Findings

4.1 Overview

The findings are presented in summary form below with reference to each of the project's research questions. Our most significant findings relate to Research Questions (RQs) 3 and 4.

4.1.2 *RQ1: What do advertisements, job descriptions and person specifications for university-based teacher education positions in Scotland reveal about how teacher education work is conceptualised at the institutional level?*

During our data collection period, no jobs were advertised in Scotland that met our sample criteria. Indeed, this period coincided with an overall reduction in the number of HE-based teacher educators in Scotland.

Advertising for jobs in HE-based teacher education in Scotland reflects the variations in how it is viewed by the seven universities involved. In one university, there were two Professorships of Education advertised; in another, we know that two secondary subjects were left without a specialist tutor when the posts were not advertised following the incumbents' departures. A background of reduced HE funding and a reduction in the number of student teacher places in Scotland has led to early retirement / voluntary severance schemes which have facilitated the departure of HE-based teacher educators in very large numbers (one-third of teacher education staff in one university – some 80 people, for example). Some universities are advertising only short-term secondments through letters to headteachers; others are moving teacher educators on to 'teaching only' contracts if they are not research active at a high enough level. There is thus a question of whether the HE system or individual HEIs in Scotland will continue to recruit practising teachers for teacher education work, individuals with the required professional qualifications and experience but who also need support in becoming active researchers.[3]

4.1.3 *RQ2: Do institutional conceptualisations of teacher education work vary between Scotland and England and, if so, how?*

As no job advertisement data was available to be collected in Scotland, we were unable to make direct comparisons with the data previously collected in England by Ellis, McNicholl and Pendry. Subsequent to this ESCalate project, Ellis and Grainger-Clemson have interviewed four of the seven heads of Education departments in Scottish universities and it is hoped that job advertisement data may be collected in Scotland in the future.

4.1.4 *RQ3: What are the daily practical activities of a small sample of teacher educators and how do these teacher educators talk about their work?*

a. Practical activities: the teacher education job dimensions

The average number of hours worked each week by our sample was 49 (ranging from 32 hours to 71, with seven participants completing in excess of 45 hours work). Primary phase teacher educators worked on average for 51 hours during the week; secondary teacher educators worked 48 hours. Overall, across the job dimensions and in relation to the sample as a whole, no relationship could be inferred between the number of hours worked and the geographical locations of participants, the type of employing institution (in England) or their length of service completed.

[3] The Donaldson Review of teacher education in Scotland and the decision of the Scottish Executive not to levy fees on HE students keeps the door open to continued HE involvement in teacher education but at the time of writing the direction of policy is still uncertain.

Table 2 below provides the means and standard deviations for the hours attributed to the job dimensions that were in evidence during the week recorded in May 2010.

Work of teacher education: job dimensions	N	Minimum	Maximum	**Mean**	Std. Deviation
relationship maintenance	13	3.0	31.0	**13.192**	6.9986
marking	13	0.0	28.5	**7.115**	8.5736
tutoring an individual student	13	0.0	30.0	**6.500**	7.9373
working with a group of students	13	0.0	16.5	**6.385**	6.6525
research	13	0.0	23.5	**5.923**	8.6671
course management	13	0.5	15.0	**5.192**	4.1660
external examination at another institution	13	0.0	19.5	**1.500**	5.4083
external examination at own institution	13	0.0	18.0	**1.423**	4.9827
professional development	13	0.0	11.5	**1.077**	3.1678
employment activities	13	0.0	5.0	**.615**	1.4456

Table 2: Job dimensions (in hours) May 2010: Descending means, and standard deviations

The job dimension on which the greatest number of hours was expended is *relationship maintenance*. The standard deviation reveals the variation in the number of hours spent on a particular item: the lower the standard deviation is in relation to the mean, the more representative of the original data the mean can be taken to be. In the case of *relationship maintenance* (mean, 13.192; SD, 6.9986), there is less variation in the number of hours worked than those spent on *research*, for example, where the standard deviation (8.6671) is higher then the accompanying mean (5.923). To exemplify this in the terms of the data collected, seven participants (or 54 per cent of the sample) carried out zero hours of research, whereas everyone undertook a measure of relationship maintenance. For one person this amounted to only three hours; for everyone else, however, eight and a half hours (equivalent to more hours than might be prescribed as constituting an average working day) was the minimum time allocated. Of the 12 participants remaining, 11 spent between eight and a half and 19 hours on relationship maintenance during the week, with one further individual expending an outlying 31 hours on this activity.

In spite of general expectations across higher education, only six participants undertook any *research* activity. According to the results set out in the table above, it may be possible to consider as 'customary', or as 'defining', those dimensions of the teacher educator's job which accounted, on average, for five or more hours of effort during the week (*relationship maintenance*; *marking*; *tutoring an individual student*; *working with a group of students*; *research*; *course management*). Of these dimensions, *research* was most often omitted within individuals' profiles in the data collected. To reiterate, seven participants (or 54 per cent of the sample) carried out zero hours of *research* activity. By comparison, four participants (that is, 30 per cent of the sample) took no part in *working with a group of students*, or in *marking*; only one participant was exempt from *tutoring an individual student*; and no-one was immune from the necessity of undertaking a degree of *course management* activity (although for one individual this amounted to only a single half hour of time).

For one individual, the number of hours expended on *course management* rose to as high as 15. In the case of another participant, the time spent working with individual students accounted for 30 hours of effort, though the more representative range of activity was confined to between the zero and 12 and a half hour band. Similarly,

although two participants spent 20 and even 28 and a half hours of the week *marking*, a range of between zero and ten and a half hours was more indicative of the typical time allocated. Little in the way of a pattern emerged in the relationship between hours spent on *research*, *marking*, *tutoring an individual student*, or *working with a group of students*. While the latter varied in participants' experience between the zero and 16 and a half hour marks, there was no distribution of hours that might have suggested that an individual occupied a teaching-only role, or had been afforded protection from teaching to concentrate on research. For example, a participant who worked with a group of students for 13 hours during the week also undertook the highest recorded volume of research. By the same token, it appeared that those who undertook little or no research were as likely to concentrate their efforts on *relationship maintenance* as on working with students. Indeed, were it not for two participants who undertook twenty and a half and twenty-three and a half hours of *research*, the latter could hardly be categorised as being a defining dimension of the teacher educator's work, as it might be classified according to the mean values in the table above.

Table 3 below provides the means and standard deviations for the hours attributed to the job dimensions that were in evidence during the week recorded in October 2010. When compared to the results in week one, a number of similarities and differences become apparent. The most obvious difference is that a much greater number of hours was expended in October on *working with a group of students*. The most apparent similarity is the number of hours spent on *relationship maintenance*.

Work of teacher education: job dimensions	N	Minimum	Maximum	Mean	Std. Deviation
working with a group of students	12	1.5	36.5	18.458	12.0632
relationship maintenance	12	3.0	42.5	16.500	11.1049
tutoring an individual student	12	.0	17.5	4.625	5.0728
course management	12	.0	14.0	2.958	4.4694
research	12	.0	14.0	2.917	5.1027
marking	12	.0	9.0	2.708	2.9190
professional development	12	.0	7.5	.875	2.1755
employment activities	12	.0	5.0	.417	1.4434
external examination at another institution	12	.0	.0	.000	.0000
external examination at own institution	12	.0	.0	.000	.0000

Table 3: Job dimensions (in hours) October 2010: Descending means, and standard deviations

In order to compare the mean scores for the two groups, six months apart in time, a paired samples t-test was carried out. The t-test is useful in the analysis of small sample populations. Although the t-test operates on the assumption of a normal distribution of data, research has revealed that the t-test is robust with respect to the kind of skewed distribution that may be an effect of the present, smaller sample.

In the event, only one significant difference was revealed by the t-test: the increase in the number of hours spent working with groups of students ($t = -3.640$, $p < 0.004$). This suggests that the changes in evidence in this dimension are not the result of chance, but are in fact attributable to extenuating variables. The importance of this finding to the results in general is in suggesting that the changes in the remaining mean scores are not large enough or consistent enough to refute the null hypothesis,

which implies that for these dimensions of the job at least there was no measurable difference in experience recorded in the two weeks selected.

As comment-worthy as the rise in hours undertaken by the teacher educators' in *working with a group of students* may prove to be, it is still the case that *relationship maintenance* accounted for both the highest maximum individual allocation of hours, as well as the highest minimum individual allocation of hours. For this sample of teacher educators at least, *relationship maintenance* appears to be a prevailing and defining characteristic of the work.

Unpacking *relationship maintenance*. In our observation data, we found numerous examples of the job dimension *relationship maintenance* in all but two cases. The widespread nature of this dimension (and the activities underlying the category) was unsurprising given the quantitative analysis of work diary data and the observation data was therefore both confirmatory and explanatory. Superficially, the tasks underlying the job dimension of relationship maintenance could appear to be, in part, general administrative work: making and receiving telephone calls; writing and reading emails; writing letters and talking to an individual student, colleagues at the university and in schools, whether formally (in meetings) or informally in corridors and common rooms. And all unrelated to one of the other job dimensions such as tutoring an individual student, for example, where the focus of the work was either on the progress of academic work (tutorial supervision) or lesson observation and de-briefing. On closer analysis of the work diaries, however, and through observation, we found that these communicative activities were in fact aimed at maintaining (and in some cases building or repairing) relationships with students, staff in schools (professional tutors or mentors) and colleagues at the university. The majority of this work came under the broad heading of 'partnership work' but not all; sometimes, the focus was the individual student's health and well-being, for example.

We observed our participants writing and responding to emails to/from student teachers as early as 7.30am and one reported staying at work the evening prior to the observation to 9.45pm to clear such an email back-log (Monk). Brock spoke about the usefulness of a Bluetooth set-up in her car so that she could make and receive such phone calls while on the move between school visits (three on the day observed). These phone calls were often from or about student teachers under stress - absent from school or barely sustaining their attendance. In one case, that of Drummond, 90 minutes on the day observed was taken up with dealing with one student who had absented herself from school under stress and whose mentor, professional tutor and university link tutor were all concerned. Drummond's relationship maintenance activity involved voice mail messages to the student (in bed, asleep, when Drummond called) and the school's professional tutor (teaching when Drummond called); writing long, very carefully-worded emails when telephone calls weren't possible; answering 'phone calls responding to voice mails; informal conversations with concerned university colleagues; and a 40 minute meeting with the student teacher herself. In another case, Brock made a home-visit to a student teacher off sick with stress, a visit that took one hour including travelling time.

Participants sometimes spoke explicitly about the importance of this dimension of their work on the day of the observation. Monk spent an hour attending a staff-student choir at her institution and regarded it as an investment, arguing that good personal relationships set the ground for good professional ones. Gould encouraged her students in a teaching session to email her with any problems and also gave students her mobile phone number saying they could text her in emergencies. Email was a particularly important channel for relationship maintenance and, with the two exceptions mentioned, all participants were observed being highly responsive. In

several cases, participants used audible signals on their computer to announce an email's arrival and one, Hale, had turned this signal up very loud and was observed to be exceptionally responsive to a high volume of email on the day observed. During a short lunch break in her office, Hale answered four emails while eating and also two telephone calls. During her attendance at a meeting in another building lasting just over an hour, she received nine emails requiring the sort of work we are describing as relationship maintenance.

In one case, we also observed the maintenance of (good) relationships beyond current student teachers and the partnership. Coodle, with over 19 years' experience at the start of the research, was observed exchanging hugs and warm words with former students as she made a round of school visits on the day she was observed. In another, Davis, with management responsibility for a subject knowledge enhancement course (among many other things) had to meet with a student on that course who had been reported to her by a colleague for 'bad behaviour' in some of the sessions. Davis's meeting (unobserved) with this student was intended to both to recognise the behaviour as poor and unacceptable and to help to repair the relationship between the student and the institution. In another example of relationship maintenance, Davis spent ten minutes of a meeting with the school placement coordinator working out which student teachers could be sent to certain schools where mentors had very specific criteria for the student teachers they would and wouldn't work with (one secondary Science mentor, for example, had made it implicitly clear that he only wished to work with male student teachers of Pakistani heritage backgrounds).

The two exceptions to relationship maintenance being observed during our field work were Brooks and Hacker. Brooks was engaged in a whole morning and a part-afternoon teaching session during our observation and her work around these fixed points was more directed at preparation of teaching (a collaborative activity in her particular subject team). It may also be worth noting that Brooks' work diaries revealed that she allocated more time to research during those two weeks than any of the other participants although we cannot be certain this is relevant. Hacker was observed visiting schools and observing lessons during her observation - but not for students she knew well. Hacker's university (for financial reasons, she said) had started a system of general rather than subject-specific visiting and Hacker, as a secondary Geography specialist, was observed visiting primary schools and observing primary student teachers. In Hacker's case, the university's changes seemed to break the more personal links between university lecturers, schools and students.

In the participatory data analysis workshop, Brooks commented that when feeling vulnerable as a new researcher, it was sometimes tempting to devote more time (than one should?) to the tasks that one knows one is good at, usually having been good at that type of work in school - building, maintaining and repairing relationships. This comment produced a mixed response from the participants. It is true to say, however, that good relationships (with students, with colleagues, with schools) are also key performance indicators under most quality assurance and inspection systems. In England, the responsiveness of tutors to students' and mentors' concerns and problems is measured by Ofsted inspections and the TDA NQT Survey as well as by HEIs' own evaluation processes and by external examiners.

b. Teacher educators talking about their work

The telephone interviews with teacher educators - and their responses to our questions during the observations - revealed perspectives on a diverse set of material conditions and institutional priorities. The material conditions of their work -

their teaching load, office space and other resources, contractual arrangements, levels of monitoring or accountability, etc. - were impacted by both local institutional and national policy-level tensions concerned with teaching in HE (and in FE, in two cases) as well as the accountability, quality assurance and regulatory constraints associated with teacher education policy in the two countries. By their own accounts, this sample of teacher educators works hard and is successful. They report multiple transition points in their professional lives and sometimes relish these transitions as 'new challenges'. A great deal of the reward they feel from their work is from the personal and socially transformative nature of their teaching - the success of the individual student in becoming a teacher and the year-on-year 'production' of new teachers for the profession, as well as, at times, the social mobility a teaching job affords for certain groups of working class and minority ethnic students. Research and scholarship do not always figure in their accounts of their motivations to become teacher educators. For some, it is not a contractual requirement; for others, it is merely a desirable 'extra'; for others again, it is deemed important by their employing institutions but they are given little or no guidance as to how to develop their work nor the prospect of any reward for their success (perhaps other than successful completion of a probationary period).

Through attributing phrases such as 'socially important' and 'a real buzz', and substantiating these attributions through personal narratives from their experience, the teacher educators in our sample conveyed both the pleasure they derived from working with student teachers (sometimes expressed as 'adult learners') and what they saw as the socially transformative work of teacher education. Brock, for example, directly linked her work to widening access to higher education and improving social mobility and talked about research she had started (but abandoned due to time constraints) using her own students' demographic data. Teaching was also described as 'high-octane' (Gould) or high-pressure and often this was explained as a consequence of the need to demonstrate exemplary practice and be a 'role model'. All of our sample responded very positively to our question about how they felt about their work as a teacher educator and connected this response to how they felt about their work with student teachers face-to-face. Three of the 4 participants with most experience (all based in England) were regretful about what they saw as policy-dictated changes in their roles and the new importance of what Coodle described as a mainly 'quality assurance' function. But this did not prevent them from enjoying working with their students.

Teacher educators and transitions. Our sample of participants included a number who had more than the expected two careers (school teacher and university-based teacher educator). Alloway, for example, had been an unqualified Mathematics teacher and a banker as well as a qualified primary teacher before joining her current HEI. Several women had taken time away from work to have children. Some had taught in primary and secondary schools and one (Brock) had also worked for two different local authority advisory services as well. One participant, Lenton, saw her current (seconded) role as a HEI-based teacher educator as perhaps temporary - she was considering returning to school. Lenton had had children, had worked overseas and had been a civil servant before entering school teaching. The overall impression was of a group of people who are good at navigating the transitions of a life-course and adapting well to new situations.

Participants also saw their own roles, responsibilities and identities changing in the course of their work as teacher educators. For those relatively new to the work (with less than 6 years experience), this was most often accounted for in relation to research and scholarship. Brooks, for example, had a conscious awareness of identity shifts and of asking herself the question 'am I an academic?' Brooks, as we

have already said, is notable for the amount of time she allocates for research so it is interesting why she still asks herself this question. Hacker spoke about her transition into the Education department of a Scottish university using the metaphor of a game: 'it's a new game and you need to learn the rules of that game, and the rules quite often change'. She reported the conditions of her probationary period being changed during the initial period to raise the stakes from completing a Master's degree to having 'REF-able' publications. Along with all of her colleagues, she had been 'colour-coded' by the management of her department to indicate current research activity and potential. Hacker was at the lowest point on this scale. Unsurprisingly, perhaps, she described writing for publication as 'keeping the wolf from the door'. The arbitrary nature of the game was also visible to Hacker and to Brooks: they may well work hard and produce publications but there was still no guarantee they would be of sufficiently high quality to be entered by their institutions.

Teacher educators who had more experience often spoke about the ways they had had to adapt to the changes within their own institutions. Coodle, for example, a secondary Geographer, had been a course leader for multiple awards (undergraduate and postgraduate) in different subjects. Duff talked about the developmental trajectory of the teacher educator as not being linear; far from it, he saw his own development as conditional and reversible, saying, 'as soon as you get reconciled to, you know, what you're doing, they change everything . . . . So you either revalidate the degree that you're working on, or they drop your specialism, or they reorganise the department that you're working in.... so it never quite sort of flows from one end to the other.'

For those participants with over 15 years of experience, 3 of the 4 saw their next transition point as retirement. It was only Davis, with 18 years' experience, who talked about a future in which research figured more prominently as well as taking on a more formal leadership role.

Contractual complexity. For just under a third of our participants (n = 5), there was a strong degree of contractual complexity. This was true of 3 out of 5 Scottish participants and 2 out of 4 English participants with 4 years experience or less. Alloway talked about being on a yearly contract and not being sure of her job title (seconded teacher, lecturer or perhaps subject coordinator?). Brooks had been on yearly contracts for four years at the time of her interview (she was made permanent during the research). Hacker, as we had noted, had the conditions of her probation changed and Hale had worked for nearly two years under the impression she was on a lecturer's contract when she was in fact on a teaching fellow's contract (something only revealed when her time was costed for a research grant application). Hale was interesting because she was also responsible for the same curriculum subject in two universities in the one city (her time was sold to another university by her employing institution). It is interesting to note that despite this complexity - or confusion - all 5 participants were either engaged in research activity (including doctoral studies) or said they were eager to start.

4.1.5 *RQ4: How do material artefacts (e.g. texts such as Standards frameworks, observation forms, course handbooks; new technologies such as white boards, discussion forums, etc.) mediate these practical activities and shape the interactions between teacher educators and students?*
Material artefacts were observed being used in activities intended to promote student teachers' learning in all but one of the observations. With one exception, all of the artefacts came from the professional context and comprised textual artefacts such as lesson observation forms (e.g. Brock, Coodle, Davis) and exam papers, mark schemes and examiners' reports (Hale); use of software for the interactive white

board was also observed (Brooks); and other items such as puppets (Gresham), large furry dice (Alloway), a tent (Gould)[4], historical artefacts from museums (Duff) and shapes cut out of coloured paper (Monk). The only artefacts that might be construed as emerging from an educational research context were two transcripts of classroom interaction copied onto different coloured paper introduced by Brooks in a session on Assessment for Learning (AfL). We did not observe material artefacts as such used by Drummond during our observation of her at work: much of Drummond's day was taken up by *relationship maintenance* work of one sort or another in which speech and writing were vital, mediating tools (phone calls, emails, meetings etc).

The word *artefact* is sometimes used in preferences to *tool* in CHAT research, the preference reflecting a more anthropological rather than psychological orientation. In our study, we focused our attention on material artefacts but understood them in a Vygotskian sense as tools that human beings use to act on their social worlds. Vygotsky proposed a relationship between the human subject and their environment that was mediated by tools that had developed over time within specific cultures (Vygotsky 1986). From a CHAT perspective, tools can be broadly material (or practical) – our focus in this research - or psychological. Tools develop historically and are therefore regarded as distinctively 'human creations [that] include norms of cognition and imply ways of action' (Miettinen 2001, 299). For Wertsch (2007), this mediating function of tools also demonstrates the 'foundation for another of Vygotsky's theoretical goals, namely building a link between social and historical processes, on the one hand, and individuals' mental processes, on the other' (p. 178). In other words, tool-use reveals something about the cultures within which the tools have developed as well as the thinking of those who work with them and, further, highlights the relationship between these two, social and historical processes.

In conceptualising the action of human subjects on their social worlds as *activity*, CHAT emphasises the importance of the volitional, object-oriented, collective nature of the action (Cole 1996). Object, in a CHAT analysis, is understood as the potentially shared problem or societally significant goal that humans are working on. Leont'ev described the object of activity as 'its true motive' (1981, 59) and one of the insights that a CHAT perspective affords is the analysis of multiple motives working on the same object and distinguishing a diversity of motives among those (collectively) in the subject position. As participants in an activity system rarely talk in terms of how they construct and interpret the object of their activity, it is nonetheless possible for researchers to understand how the object is being construed by analysing how the participants use the available tools (Stetsenko 2005). Our interest in the analysis of our fieldwork data was to try to understand the objects of the teacher education activities we were observing and how the participants (specifically, the teacher educators and their students) used the tools. Fundamentally, we were interested in answering the question *what are they working on – and why?* In undertaking this analysis we also drew on the concepts of *rules*, *community* and *division of labour* developed by Engeström (Engeström *et al* 1999). These categories represent aspects of the social and historical organisation of an activity and are often represented graphically as the bottom line of a triangular representation of an activity system (see Figure 1 below).

[4] The tent was not observed in use but was noticed by the researcher and Gould explained its purpose and use.

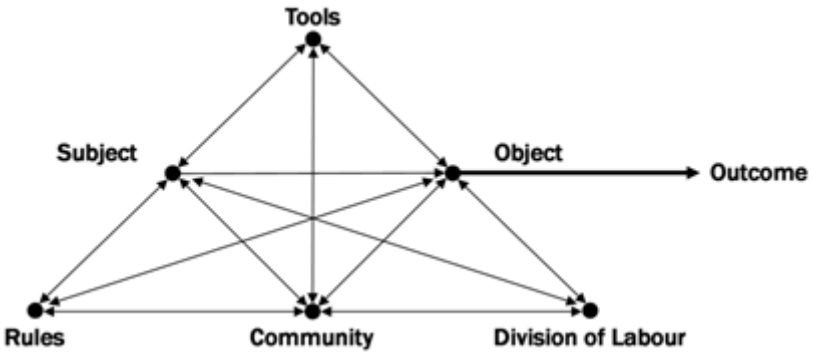

Figure 1: Triangular representation of a human activity system

In seeking to understand how material artefacts/tools mediated the activities of teacher education observed, and particularly in relation to the question of the object of activity, we have followed Kaptelinin & Miettinen (2005) in focusing on the use of the tool, the negotiation of its meaning among those who participate in the processes of mediation, and the social structures that afford and constrain these negotiations:

> The only way to get an insight into the nature of the object-related activity is to understand the material production of tools, the social exchanges among people, and the individual subjective processes that participate in regulating the production of tools and social exchanges. (Kaptelinin & Miettinen 2005, 3)

In each case where material artefacts/tools were observed in use, we noticed actual or potential contradictions emerging in the participants' interactions shaped by – and shaping - the activities observed. These contradictions arose out of the function of the material artefact within the activity system – whether they functioned as a *tool* mediating the learning of student teachers or whether they functioned as a *rule*, as an organisational device (in other words as a behavioural norm or expectation). It is this dynamic tension between material artefacts (mostly from the professional context) functioning as tools or rules that characterises the teacher education activities we observed.

To give an example of textual artefacts in use, we observed lesson observation forms with QTS Standards check-lists being used in ways that suggested both an effort to stimulate student teachers' learning through reflection on their practice *and* as a means of providing evidence for institutional quality assurance regimes. At times, it seemed that such textual artefacts were mediating work on two different objects (student teachers' learning and the quality assurance of partnership processes) so that, in effect, teacher educator and student teacher were participating in two different activity systems simultaneously. However, if viewed solely from the perspective of promoting student teacher learning, the use of the lesson observation form could simply be seen as a rule of participation in a school visit by a HEI tutor. Another example is the use of the Scottish Curriculum for Excellence policy document in student teacher lesson planning, assessed by a teacher educator during a school visit. Curriculum for Excellence as a policy had been promoted within the HEI as a means of working on important kinds of learning beyond the narrow demands of curriculum subjects. In one school, the student teacher had meticulously referenced each phase of the lesson to sections of the Curriculum for Excellence framework. In the interaction following the lesson (the de-brief/feedback), the teacher educator tried to suggest that Curriculum for Excellence was not intended to be used in this way and was rather a higher level set of expectations that were useful above the level of individual lessons. But it was difficult for the student teacher to see

beyond the HEI's requirement to be aware of Curriculum for Excellence and not to interpret this requirement in a very instrumental sense.

These examples are also useful in demonstrating that the affordances of tools designed for, in this case, student teacher learning, are in important ways matters of perception. The meaning of lesson observation forms and policy documents is not intrinsic to the tools/artefacts in question and their function is not *determined* by the historical contexts of their evolution. Rather, the meaning and the potentially mediating function of the tool is only realised when the participants perceive them in relation to a potentially shared object. If the object is perceived as 'compliance with the requirement to use Curriculum for Excellence in lesson planning' then the cultural-historical meaning of the policy tool is unlikely to be realised in the activity of participants.

Tensions in perceiving the affordances of the (potentially) mediating tool were also observed in relation to other kinds of artefacts. In a taught PGCE Science session on Assessment for Learning, where a strong, research-based context was built using transcripts of classroom interaction, a piece of software was used called a random name generator. The purpose of the software in the session, from the teacher educator's perspective, was to model 'hands-down' questioning and to reveal how this strategy could change the usual patterns of classroom interaction that mitigated against assessment of - and for - learning. The student teachers' immediate and enthusiastic response to the random name generator was to ask where the tutor had got it from, how she had inserted their names, and where they might get it one too. Similarly, in a lecture on Music Education to a large group of primary student teachers, the use of glove puppets was intended by the teacher educator to stimulate thinking about characters and the relationship between voice and instrumentation in Prokofiev's *Peter and the Wolf.* It was not clear, however, particularly in the large lecture setting, whether the students saw beyond the puppet to the underlying concepts or whether puppets simply came across as engaging things to use in primary schools. In other words, in each case, there was a careful, conceptual rationale for the use of the particular tool by the teacher educator and the tool was presented for use in such a way as to encourage its meanings and affordances to be realised by the student teachers. But some student teachers interpreted the artefact differently – and were delighted.

This tension between the affordances of a tool to mediate student teacher learning at a deep level and its slippage (in graphical terms) around the activity system to become *something that you do*, a rule, may be exacerbated by the fact that the tools were drawn (with one exception) from the professional context. That is, these tools were used by teachers in schools with colleagues or with children. They presented themselves with a degree of familiarity as school or professional artefacts, the kinds of things used by teachers, and therefore were likely to be perceived more immediately as useful in lessons by the student teachers. By contrast, only one tool derived from the field of educational research was observed and that was the pair of transcripts also used in the session on AfL. These artefacts were less familiar to professional eyes and less immediately useful. The affordances of these transcripts of classroom interaction were potentially very strong, however, and capable of encouraging the student teachers to see familiar things differently and to open up opportunities for their learning about classroom discourse and assessment of learning. In the session observed this seemed to be the case for the majority of

students but the transcripts were also competing with the random name generator for the student teachers' attention.[5]

The expertise of teacher educators in unlocking the meaning of artefacts for children's learning, through modelling or demonstration to student teachers, was clearly and frequently observed. Duff and Monk both spoke explicitly about the significance of artefacts in their practice – as ways of opening up meaning and exposing concepts. In one primary Mathematics session observed, large furry dice were picked from a cupboard during the final ten minutes of a session to generate random digits that could be used to demonstrate the concept of place value. In another, shapes cut from coloured paper were used to show how to calculate the area of a circle using the formula πr^2. The affordance of these paper artefacts was in stimulating understanding of the formula rather than simply an abstract memorization. From our observations and conversations with the teacher educators, these were clearly their intentions. But, at a theoretical level, the question of whether such activities are 'just' about furry dice or coloured pieces of paper remains a possibility. Indeed, at the participatory data analysis workshop, the teacher educator who had been observed improvising some excellent teaching using the furry dice refused to accept the complexity and her expertise in shaping this activity. 'It's just what you do … you're making it too complex', she said.

4.1.6 *RQ5: Within the sample, what differences are apparent in the kinds of learning possible for students in the various teacher education settings studied?*
Beyond our responses to RQs 3 and 4, it is difficult for us to go much further in attempting to analyse learning opportunities for student teachers. Our analytic focus throughout the research has been on the teacher educator, in context, their work, interactions and perspectives. In order to answer this RQ more substantively, it would have been necessary for us to have put student teachers at the centre of our unit of analysis. What we are able to say, as we have in our responses to RQs3 and 4 is that our research shows that student teachers in these HEI-led courses are extraordinarily well-supported emotionally and that our sample of teacher educators make good relationships (with student teachers; between student teachers and schools; and between schools and HEIs) an extremely high priority. Additionally, the activities underlying the job dimensions working with a group of students and tutoring an individual student are common across the sample, regardless of geographic location, type of HEI, phase, subject or length of experience. Within these job dimensions, policy-related artefacts such as QTS Standards in England or Curriculum for Excellence in Scotland do figure but not in ways that could be said to be characteristic of England or Scotland or 'new' or 'old' universities generally. As with the previous and related research of Ellis, McNicholl & Pendry, differences were more likely to be observed on an institutional basis rather than geographic or HEI-type lines. From our data, it is clear that stronger research cultures exist in some HEIs (as it is on the basis of RAE 2008 data) but these cultures are not always visible or meaningful in the work of the teacher educators in our sample.

[5] It is important to note that we are not commenting here on student teacher learning *per se* but on the kinds of interactions observed when teacher educators purposively introduced a material artefact or tool.

5. Project impact and concluding discussion

Our research could have significant impact in the field, especially given the current uncertainty in teacher education policy, especially in England. The insights afforded by this research into the background and perspectives of teacher educators, their practical activities and balance of job dimensions, their expertise and yet their difficult positioning within higher education more generally have the potential to inform the development of the profession from within and, particularly, the strengthening of a specifically academic culture of teacher education. Strengthening the academic culture of teacher education does not mean rejecting the more professional and practical dimensions. The English model of teacher education is unusual in Europe in its model of very early placements – its perceived 'rush to practice' - where trainee teachers are expected to demonstrate competence quite quickly in school. In Finland, for example, teacher education is more firmly rooted in universities and there is no national minimum length of time that must be spent teaching in schools. Our research does not suggest we emulate Finland in that respect and we are sure that would be a politically unattractive option anyway.

Unlike more pedagogically oriented projects, The Work of Teacher Education does not offer specific guidance or strategies for the improvement of teaching and learning; nor does it offer answers to questions of policy. Rather, it identifies questions for policy-makers, HEI senior management, middle managers of Education departments as well as for the personal, professional development of teacher educators themselves. Moreover, our research suggests the need for further research of larger scale and also research that is comparative in nature – comparative in terms of other professional educations in the UK (such as nursing) and also comparative internationally, especially in relation to those countries whose systems are so often touted in the policy sphere.

We believe that our small-scale study opens up questions about the nature of teacher education in school-university partnerships in England and Scotland, specifically about the division of labour between schools and universities and within HE departments or schools of education. Increasing surveillance, heavier burdens of quality assurance and market competition and measures of research excellence have coincided with an expansion of higher education overall and the diversification (some might say fragmentation) of teacher education provision and expertise. The HE-based teacher educator has come to occupy an undeniably difficult position within this complex and sometimes contradictory mix of policy change and has been caught between drivers such as quality assurance and the 'rush to practice' on the one hand and increasing anxieties about research output and competitiveness across the HE sector as a whole on the other.

We also believe the research raises an interesting theoretical question about the affordances of materials artefacts for pedagogical purposes in contexts or cultures different to those of their evolution. For example, a material artefact that has evolved in the professional cultures of schools (e.g. some software for an interactive white board), when removed and subjected to examination for pedagogical purposes in a HE classroom, may not easily reveal its conceptual underpinnings if learners (student teachers) bring different and perhaps more instrumental motives to bear on their perceptions. The kinds of learning opportunities contrived in the HE setting are therefore worth considering.

Partnership teacher education – in which schools work with universities and colleges to train teachers – works. There is abundant existing evidence in support of this fact.

Indeed, from our research, schools seem to need higher education tutors to make the system work effectively. But schools are also mature organisations in terms of teacher education and professional development just as universities are mature in their capacity for research and knowledge mobilisation. Teacher education partnerships in the way we understand them are only twenty years old. Although partnerships are clearly vital for some fairly obvious, common sense reasons, it may be time for the roles and responsibilities within partnerships to be redefined.

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Appendices

1. Telephone Interview Schedule

The main purpose of this interview is to gain a sense of the work biography of the individual as a teacher and teacher educator. We want to elicit a fluent, honest narrative so it may help if we are not too formal and over-structured in our approach. We can be conversational but sparingly so – just enough to keep the flow. We should encourage development of the unexpected but also ensure that we cover key parts of the story, as suggested below.

1 Present role: What is your present role and job title?

Current responsibilities
How long in this job / in teacher education
Main tasks / most time spent on
(ask about research and scholarship, if not mentioned)

2 Prior experience: What did you do before coming in to HE?

Teaching / other
Sector / subject
Length of time
Own educational biography - school attended / enjoy school?
Decision to become a teacher – when, why?

3 Reasons for coming in to HE: What brought you in to HE /TEd?

Reasons / Circumstances

4 Perceived differences between teaching and TEd in HE:
What struck you as different about this job as compared to e.g. teaching in schools?
(nature of the teaching task, the work environment, relationships with colleagues)

First experience/s
Early impressions
Expectations – met or not (Induction into the job? Professional development?)

5 Changes in the work of Teacher Educators: How has your work changed over the years in TEd? (if in year 1 or 2, may not apply?)

Changes in time spent on different things
Changes in context, circumstances, expectations
Relationships within HE, with schools, Local Authorities etc.

6 Futures: Where do you see yourself going from here - plans, expectations?

What changes do you see ahead?
In your HEI / HEIs in general /
In your own work in TEd / in TEd in general

7 Feelings about your work and story
How do you feel about working as a teacher educator?

…and finally, has telling your story helped you in any way?

2. Work-shadowing/observation protocol

Participant observation

- The key here is to observe participants at work, focusing on the artefacts/tools they use and in what context. At the back of our minds the question might be: what are they working on and why? Looking at the tools and artefacts they are using might give us some insight into this question.
- Wherever possible, take photographs of artefacts and tools, either in use or separately. It may be necessary to ask permission for some photography and so 'after the fact' photos or artefacts may be our only option. Our ethical clearance does not permit photography of people under the age of 18 or vulnerable adults.
- When possible (so as not to disrupt the activities) and appropriate, ask about what they are doing during the day (e.g. what sort of priority has it, is it fulfilling and if so how?)
- Ask about working spaces (e.g. personal offices, teaching rooms etc)
- Ask about social spaces and facilities (staff room, team rooms, catering facilities etc)
- Ask about resources available (including colleagues, ICT facilities and resources, practical work facilities and equipment)
- Ask about their perceptions of how their work fits in to the work of the institution as a whole.

Formal questions

1. *In relation to their ITE role*

- What do you spend the bulk of your time on?
- Do you have a sense of comparison with academic work in other disciplines in your institution **or** with academic work in other parts of your department?

2. *In relation to the use of artefacts:*

- What is the origin of this artefact? (where did it come from, e.g. self-produced, borrowed from a colleague or a published source etc)
- What are you using this artefact for? (e.g. in relation to research and/or ITE work)
- Why do you use this artefact in particular for this activity? (e.g. why was it chosen, what advantages for your work does it have, what disadvantages etc)
- Does anyone else use this artefact? (Why? Why not?)

3. *In relation to doing research and scholarship:*

- What are your main research interests and why is this?
- Can you describe the sorts of research activities/tasks you regularly carry out *or would like to carry out?*
- What helps/hinders you in carrying out your own research work?
- If your institution could do one thing to improve your capacity to engage in research and scholarly activity what would it be?

4. *In relation to research-informed ITE work:*

- How does research inform what you do in your ITE work?
- Can you give examples of when research has informed what you do in your ITE work?
- What is the nature of the research you draw upon? (e.g. own, published research)
- Is your engagement with published research direct or in-direct:
    - (i.e. read original academic article/work)
    - (i.e. professional literature based upon published research, other?)

5. *How well did your previous employment experiences prepare you for ITE work?*

3. Work diary proforma

WoTE WORK DIARY (Portrait format)

Activity Characteristics (if applicable)

	tick one			tick one			
	Personal Priority	Professional Priority	Departmental Priority	Professionally Fulfilling	Personally Fulfilling	Unremarkable	
Day and Date:							
Pseudonym :							
Activity Log: Fill in Every Hour							
Before 7am							
7.00							
8.00							
9.00							
10.00							
11.00							
12.00							
13.00							
14.00							
15.00							
16.00							
17.00							
18.00							
19.00							
20.00							
After 8pm							

4. Details of WOTE blogs

A blog was set up for each participant. At the introductory meetings, participants were shown how to access and contribute to the blogs. The access point to the blogs and further information can be found at: http://workofteachereducation.org/