# PATHWAYS AND STEPPING STONES: STUDENT TEACHERS' PRECONCEPTIONS AND CONCERNS ABOUT INITIAL TEACHER PREPARATION IN ENGLAND

ANDREW J HOBSON, ANGI MALDEREZ, LOUISE TRACEY AND GODFREY PELL

ABSTRACT

This paper presents early findings from a six-year longitudinal study of beginner teachers' experiences of initial teacher preparation (ITP) and early professional development in England. Data reported in the paper were generated via a questionnaire survey, completed by 4790 student teachers, and face to face interviews with 85 student teachers, across a range of ITP routes and providers throughout England. The main findings are that: (1) in general, many student teachers enter ITP with an apprenticeship orientation to their own learning of teaching, and with a number of concerns, relating particularly to workload, pupil behaviour and personal finances; whilst (2) there are some interesting differences between the preconceptions and concerns of student teachers following different ITP routes. Implications are discussed for the practice of teacher education, particularly with respect to the need to discover particular student teachers' orientations and prior conceptions.

## INTRODUCTION

It is well established that learners view and interpret new information and experiences through their existing network of knowledge, experience and beliefs (Huberman, 1993; Desforges, 1995; Fosnot, 1996; Richardson, 1997). In the context of initial teacher preparation (ITP)[1], Wideen, Mayer-Smith and Moon (1998:141) state that "the story of how beginning [student] teachers experience programmes of teacher education begins with who they are and what beliefs they bring to preservice teacher education", and Hollingsworth (1989) maintains that student teachers' preconceptions act as 'culturally-based filters' to the way that they make sense of their initial teacher preparation and teaching experience. Sugrue (1996) argues that trainees'[2] prior beliefs can create barriers in their receptiveness to different aspects of ITP programmes, whilst Wubbels (1992) and Korthagen, *et al*. (2001) have shown that student teachers' preconceptions about teaching and student learning can impact on their experience of ITP and their early professional development. Feiman-Nemser, *et al*. (1989:1), amongst others (e.g. Fosnot, 1996; Edwards and Ogden, 1998), have thus argued that "[u]nless teacher educators help their students surface and examine initial beliefs and assumptions, these taken-for-granted ideas may distort the lessons taught and learned during teacher preparation".

It follows that teacher educators might benefit from up-to-date information concerning the perspectives from which student teachers will view the initial teacher preparation process, including their perceptions of what they feel they need to learn and how they think they might best learn those things, and any concerns that they might have when embarking upon their ITP. As von Glasersfeld (1996:7) argued:

> [S]tudents perceive their environment in ways that may be very different from those intended by the educators... This emphasises the teacher's need to construct a hypothetical model of the particular conceptual worlds of the students they are facing. One can hope to induce changes in their ways of thinking only if one has some inkling as to the domains of experience, the concepts, and the conceptual relations the students possess at the moment.

Several studies have identified various aspects of what student teachers in different contexts have previously 'brought' to their ITP in terms of their preconceptions, expectations and concerns about the process of learning upon which they were about to embark. For example, Edwards (1998) found that many (primary phase) trainees in England "...come into schools with ready-made *identity projects* they want to enact…" (Edwards, 1998:218; emphasis added), essentially concerned with presenting an appearance of competent performance to pupils, mentors and tutors (Edwards and Ogden, 1998). Hobson (2002) found that the majority of student teachers enrolled on four one-year secondary PGCE programmes in England expected to learn more from time spent in schools and with school-based mentors than from time spent in universities and with university tutors. And summarising various studies, Tomlinson (1999a) highlighted three amongst a range of possible student teacher stances on the learning of teaching. He suggested that some trainees subscribe to "…a 'behaviourist-didactic' conception of ITP as being 'told what to do'", whilst some "…hold the view that one *only* learns to teach by getting into the action and 'having a go oneself'…", and others come to their courses with "…a talent view of capability of the 'teachers are born, not made' kind" (Tomlinson, 1999a:4; cf. Perlberg and Theodore, 1975:4; Hagger, *et al.,* 1993).

Other studies have focused on the concerns of those embarking upon programmes of initial teacher preparation. Kagan (1992) reviewed 40 research studies on professional growth among student teachers and newly qualified teachers (NQTs), and found that, in general, most trainees appeared to be intensely concerned, at the outset of their ITP, with the image of self-as-teacher (cf. Fuller, 1969), with their attention shifting towards concerns about situation and task, and the impact of teaching on students, only after their most urgent self-related concerns were resolved (cf. Conway and Clark, 2003). Capel (2001) surveyed student teachers at different stages of a secondary PGCE programme and found that at the beginning of their programme, trainees were most concerned with '*maintaining the appropriate degree of class control*' whilst, over time, there was a rise in the incidence and importance of other concerns, such as meeting the needs of different kinds of learners. And Berry and Loughran (2002) note that student teachers are often concerned most, in the early stages of their ITP, with *what* they teach as opposed to *how* they might teach it or *why* they might employ different teaching methodologies in different contexts.

Whilst such studies provide some insights into the preconceptions, expectations and concerns about teaching and initial teacher preparation that student teachers may bring to their courses, we cannot assume that these will be the same for all student teachers at all times and across different contexts, even within a particular country, especially given the variety of ways in which the initial preparation of teachers has changed in a number of countries in recent decades. In England in the last 10–15 years, for example, we have witnessed a number of government-driven changes to ITP, including an increase in the number of routes into the teaching profession, various changes to the ways in which student teachers are assessed, and an increase in the minimum amount of time that trainees must spend in schools. The growth in the number of pathways into the profession raises the question of whether trainees choosing different ITP routes[3] come to their courses with different beliefs, expectations and concerns regarding teaching and teacher preparation.

This paper reports findings about the preconceptions and concerns, relating to initial teacher preparation, of around 4800 student teachers who were undertaking ITP programmes throughout England in 2003–2004. It also examines the extent to which student teachers' preconceptions and concerns about ITP were differentiated according to the ITP route they were following, including university-administered undergraduate and postgraduate courses, school-centred and employment-based programmes.

Claxton (1990) uses a journey metaphor for learning, and likens planned

opportunities for learning to stepping stones. In acknowledging the importance of prior conceptions, he states that if we do not know where the person/learner is, then we cannot place the stepping stones in the appropriate places. It is intended that the findings from this study will provide teacher educators in higher education institutions (HEIs) and schools with information which will help them place (or re-place) their stepping stones, for a variety of student teachers who, via a range of different ITP pathways, are about to embark upon what can be a daunting, dangerous, yet potentially exciting and rewarding journey – that of becoming a teacher.

RESEARCH DESIGN

*Research instruments*

Data reported in this paper were generated via two methods. Firstly, a self completion questionnaire was administered to student teachers who were beginning one-year ITP programmes, or beginning the final year of two, three or four year programmes, in the 2003–2004 academic year. Secondly, face-to-face, in-depth, part-structured interviews, employing open-ended questions, were conducted with a sub-sample of survey respondents. The interviews lasted for an average of 50 minutes each.

*Sampling*

The sampling strategy underlying the questionnaire survey was informed by two main concerns. Firstly, we sought to generate a representative sample of student teachers for each of seven different ITP routes undertaken by student teachers in England, namely Bachelor of Education (BEd), Bachelor of Arts/Science with Qualified Teacher Status (BA/BSc QTS), university-administered Postgraduate Certificate of Education (PGCE), Flexible PGCE, School-Centred Initial Teacher Training (SCITT), and Graduate and Registered Teacher Programmes (GTP and RTP – collectively referred to as GRTP).[4] Secondly, it was hoped to ensure that a sufficient number of trainees were recruited from among the routes with the lowest numbers of trainees nationally, in order to enable viable statistical analysis by route up to the end of the research project in 2009 (allowing for attrition over a five year period). ITP providers were thus stratified by route and a random sample of providers within each route was selected. In addition, a small number of additional providers of some of the less popular routes (nationally) were purposively selected to boost the number of respondents following those routes. In total, 110 ITP providers were approached to participate in the survey, of which 74 took part, a response rate of 67 per cent. From those ITP providers, completed questionnaires were returned by 4790 student teachers. The breakdown of respondents by ITP route can be found in Table 1.

As a result of the sampling strategy outlined above, in particular the over-representation of trainees from some of the smaller routes, it should be noted that reporting of aggregated data (for student teachers across all routes) is not necessarily representative of the total population of trainees in England.

Eighty-five case study participants across all ITP routes being studied were recruited from those trainees who indicated, in their questionnaire responses, that they would be willing to take part in face-to-face interviews. Table 2 provides a breakdown of the case study sample by ITP route and phase (i.e. whether trainees were seeking to teach in primary or secondary schools).

*Table 1: Questionnaire respondents' by ITP route*

| ITP route sample | Achieved achieved sample† | Percentage of |
|---|---|---|
| University-administered Postgraduate Certificate in Education (PGCE) | 1,756 | 37 |
| Bachelor of Arts (BA)/Science (BSc) with Qualified Teacher Status (QTS) | 1,385 | 29 |
| Bachelor of Education (BEd) | 413 | 9 |
| Graduate and Registered Teacher Programme (GRTP) (including SCITT-based GRTP) | 707 | 16 |
| School-Centred Initial Teacher Training (SCITT) (excluding GRTP) | 342 | 7 |
| Flexible-based PGCE. | 187 | 4 |

† Due to rounding totals may not sum to 100.

*Table 2: Case study participants by phase and route*

| Route | No. of primary phase trainees | No. of secondary phase trainees | Total no. of trainees per route |
|---|---|---|---|
| PGCE | 7 | 9 | 16 |
| Flexible PGCE | 7 | 7 | 14 |
| BEd | 7 | 2 | 9 |
| BA/BSc QTS | 6 | 8* | 14 |
| SCITT | 6 | 8 | 14 |
| GTP | 6 | 8 | 14 |
| RTP | 2 | 2 | 4 |
| Total by phase | 41 | 44* | 85 |

*This figure includes four trainees following a Key Stage 2/3 ITP programme

Case study participants were drawn from 19 ITP providers in total. They comprise 65 females and 20 males. Seven of the 85 case study trainees were from minority ethnic groups.

*Data analysis*

Categorical survey data were analysed using the conservative *chi-square* test to examine whether any differences between the responses of different sub-sets of student teachers, or student teachers from different demographic groups, were statistically significant, using a probability value of less than or equal to 0.05 to indicate statistical significance (this denoting a 5 per cent chance, or less, of occurring randomly). Where non-parametric statistical techniques revealed statistically significant differences, *Analysis of variance (ANOVA)* was subsequently employed to further investigate the relationships within the data – for example, to examine

which variables (including ITP route, the phase of education in which respondents were seeking to teach, their gender and their age) accounted for the greatest degree of systematic variation in responses to particular questionnaire items.

Case study data were initially subjected to a grounded analysis (Glaser and Strauss, 1967), the results of which informed a subsequent thematic analysis of the data. All interviews were transcribed and coded using NVivo software which facilitated comparison between different groups or 'categories' of trainees, notably those undertaking different ITP routes.

FINDINGS

Findings are presented below in three sub-sections, dealing with: (1) student teachers' preconceptions and expectations about ITP learning outcomes; (2) their preconceptions and expectations about different learning strategies which might be employed by their ITP providers; and (3) their prior concerns, or worries, about undertaking initial teacher preparation. Within each section (and in relation to each of these three issues), we examine the extent to which significant differences existed between student teachers following different ITP routes.

*Student teachers' preconceptions about ITP learning outcomes*

Analysis of the interview data suggested that the types of knowledge and skills that student teachers expected to learn/develop during ITP, and felt that they needed to learn/develop, were, in rank order and with illustrative quotations:

(1) Subject knowledge (44 of the 85 interviewees referred to this, without specific prompting)

I thought a bit more subject knowledge, to make sure that is up to scratch, because I thought that that was important. (*Male, 35–39, BA/BSc QTS, secondary, design and technology*)

I think I expected to have an emphasis on just the knowledge, the actual skills base, and the understanding you needed in the subject areas because of this whole thing about being a jack of all trades in primary schools. So you need to have a knowledge in all of those areas. (*Male, 35–39, BEd, primary*)

(2) A range of appropriate teaching methodologies (n=20)

Although you may know all the, you've done your O levels and your A levels and your degree and you have got the subject knowledge but it is, how do you impart that to the children at a level that is suitable for them. So I was obviously hoping that [we would learn about] teaching techniques that would be suitable for the children. (*Female, 35–39, Flexible PGCE, primary*)

(3) behaviour management strategies (n=19)

[O]ne of the key things that I thought they would teach us on the course because, and that was one of the first things that everyone was concerned about when they were going into their schools, was the discipline. (*Female, 25–29, PGCE, secondary, english*)

(4) legal issues and policies (n=11)

I just assumed it was just looking at your general rules and responsibilities, child protection, that sort of thing because that's very much in the public eye and is well recognised. (*Female, 25–29, PGCE, secondary, history*)

(5) knowledge of how children learn and different learning styles (n=10)

> Actually an idea of how to get into the mindset of the children that you are going to teach and perhaps giving a bit more cultural information on the age range of the children, what kind of things 11 year olds are interested in, that sort of thing. (*Female, 25–29, PGCE, secondary, RE*)

In the questionnaire, respondents were asked to indicate how important they had thought it was (immediately prior to starting their ITP) that student teachers should develop each of 14 specified kinds of knowledge or skill. The results are summarised in Table 3. We can see that the highest numbers of respondents stated that it was very important for student teachers to develop what might be regarded as 'practically-oriented classroom-based outcomes', with 91 per cent indicating that they had thought that it was very important that trainees learn the '*ability to bring about pupil learning*', 86 per cent that they had thought it very important that trainees should learn the '*ability to maintain discipline in the classroom*', and 74 per cent stating that they had considered it very important that they develop '*knowledge about their teaching subjects*'. In addition, over 70 per cent of respondents stated that they had believed that it was very important that student teachers develop '*knowledge/understanding of pupil motivation and behaviour*' (73%) and '*how pupils learn*' (71%).

In contrast, a relatively low 23 per cent stated that, prior to beginning their ITP programmes, they had considered it very important for trainees to develop an awareness of '*research findings about effective teaching methods*', whilst just 10 per cent of respondents said this about '*knowledge/understanding of the philosophy of education*' and five per cent about '*knowledge/understanding of the history of education*'.

Statistical analyses reveal that there were some significant differences, in the responses to this (ITP course outcomes) question, between respondents following different ITP routes, between those seeking to teach in primary and secondary schools, between female and male trainees, and between student teachers in different age groups. In this paper, we focus on comparisons between student teachers following different ITP pathways. ANOVA tests suggest that on most (8 out of 14) items, a greater degree of systematic variation in responses occurred in relation to respondents' ITP route than the other variables mentioned here.[6]

Table 4 compares the percentages of respondents from different ITP routes who indicated that they had considered each of the items listed in Table 3 to have been very important. Amongst the more notable findings are that:

(1) higher proportions of respondents from the more traditional HEI-based routes of *BEd, BA/BSc with QTS* and *university-administered PGCE* than from *Flexible PGCE, SCITT* and *GRTP* indicated that they had felt that it was very important for trainees to gain '*knowledge/understanding of education policy*'

(2) a higher percentage of respondents following *GRTP* programmes (92%) than following other routes stated that it was very important for student teachers to learn '*the ability to maintain discipline in the classroom*'

(3) a higher percentage of respondents from *university-administered PGCE* programmes (78%) than from other pathways reported that it was very important for trainees to gain '*knowledge about their teaching subject(s)*'.[7]

*Table 3: How important or unimportant respondents reported having thought it was, immediately before they started their training[5], that they should develop the following knowledge and skills during their ITP programme*

| | Per cent (%) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Very important | Fairly important | Neither important nor un-important | Fairly unimpor-tant | Very unimpor-tant | Don't know | N† |
| Ability to bring about pupil learning | 91 | 8 | 1 | 0* | 0 | 0 | 4718 |
| Ability to maintain discipline in the classroom | 86 | 13 | 1 | 0 | 0 | 0 | 4718 |
| Knowledge about their teaching subject(s) | 74 | 23 | 2 | 1 | 0 | 0 | 4717 |
| Knowledge/understanding of pupil motivation and behaviour | 73 | 24 | 3 | 1 | 0 | 0 | 4716 |
| Knowledge/understanding of how pupils learn | 71 | 25 | 3 | 1 | 0 | 0 | 4712 |
| Ability to use a range of teaching methods | 70 | 26 | 3 | 1 | 0 | 0 | 4715 |
| Time management skills | 60 | 33 | 6 | 1 | 1 | 0 | 4709 |
| Knowledge/understanding of the principles of assessment for learning | 43 | 44 | 10 | 2 | 0 | 1 | 4708 |
| Ability to deal with pastoral issues | 35 | 53 | 8 | 1 | 0 | 2 | 4692 |
| Staff supervision/ management skills | 35 | 46 | 14 | 3 | 1 | 1 | 4711 |
| Knowledge/understanding of education policy | 31 | 54 | 11 | 3 | 1 | 1 | 4715 |
| Awareness of research findings about effective teaching methods | 23 | 56 | 16 | 4 | 1 | 2 | 4713 |
| Knowledge/understanding of the philosophy of education | 10 | 41 | 33 | 12 | 3 | 1 | 4708 |
| Knowledge/understanding of the history of education | 5 | 38 | 36 | 16 | 4 | 1 | 4711 |

A series of single response items. Totals may not sum to 100 due to rounding.
†Totals vary because those who did not respond to each item were excluded.
* The figure '0' denotes less than or equal to 0.4 per cent.

*Table 4: Knowledge/skills reported by trainees from different ITP routes to have been very important (prior to starting their ITP programmes)*

| | Per cent (%) | | | | | | |
|---|---|---|---|---|---|---|---|
| | BEd | BA/ BSc QTS | PGCE | Flexible PGCE | SCITT | GRTP | N† |
| Ability to bring about pupil learning | 91 | 90 | 91 | 89 | 93 | 91 | 4718 |
| Ability to maintain discipline in the classroom | 84 | 84 | 86 | 86 | 86 | 92 | 4718 |
| Knowledge about their teaching subject(s) | 70 | 72 | 78 | 70 | 74 | 74 | 4717 |
| Knowledge/understanding of pupil motivation and behaviour | 76 | 72 | 73 | 64 | 73 | 73 | 4716 |
| Knowledge/understanding of how pupils learn | 76 | 72 | 73 | 64 | 73 | 73 | 4712 |
| Ability to use a range of teaching methods | 73 | 73 | 69 | 65 | 68 | 70 | 4715 |
| Time management skills | 56 | 54 | 66 | 49 | 63 | 61 | 4709 |
| Knowledge/understanding of the principles of assessment for learning | 43 | 45 | 41 | 35 | 40 | 46 | 4708 |
| Ability to deal with pastoral issues | 32 | 34 | 35 | 34 | 34 | 41 | 4692 |
| Staff supervision/ management skills | 38 | 38 | 38 | 18 | 32 | 27 | 4711 |
| Knowledge/understanding of education policy | 39 | 32 | 32 | 20 | 26 | 28 | 4715 |
| Awareness of research findings about effective teaching methods | 23 | 23 | 25 | 20 | 20 | 21 | 4713 |
| Knowledge/understanding of the philosophy of education | 11 | 12 | 11 | 4 | 9 | 8 | 4708 |
| Knowledge/understanding of the history of education | 6 | 6 | 6 | 1 | 4 | 3 | 4711 |

A series of single response items. Totals may not sum to 100 due to rounding.
†Totals vary because those who did not respond to each item have been excluded.

*Student teachers' beliefs and expectations about ITP learning strategies and programme personnel*

Questionnaire respondents were also asked to think back to immediately before they started their ITP, and to indicate how important or unimportant they had thought it was that a teacher preparation programme should include each of a list of (ten) teaching and learning strategies. The results are summarised in Table 5, which shows that the highest number of respondents (*across all ITP routes*) stated they had considered it to be very important to have '*school teachers/mentors observe your lessons and give feedback*' (75%), which contrasts with the 60 per cent of respondents who said they had considered it very important to have '*university/college tutors observe your lessons and give feedback*'. Almost three-quarters (74%) of respondents also stated that it was very important that they experience another activity firmly rooted in schools, namely '*watching schoolteachers teach*', whilst 71 per cent indicated that they thought it would be very important to get '*assistance with lesson planning*' and two-thirds (66%) that it was very important to be '*given specific strategies for teaching specific subjects/topics*'.

These findings might suggest that a large proportion of trainees came to their courses with a predominantly 'apprenticeship' approach to the learning of teaching. A relatively low 48 per cent of respondents indicated that they had considered it very important to '*study ideas about how pupils learn*' (though an additional 42% indicated that they had thought this to be fairly important), whilst just 22 per cent of respondents stated that they had thought that it was very important to study '*current research on teaching methods*', with seven per cent indicating that this was (fairly or very) unimportant.

Table 6 compares the percentages of respondents from different ITP routes who indicated that they had considered it 'very important' that ITP programmes include each of the ten teaching and learning strategies which were listed in Table 5. Some of the more notable (and statistically significant) differences between the responses of student teachers following different ITP pathways are that:

(1) a higher percentage of BEd respondents (59%) than of those from other routes indicated that they had considered it very important that ITP programmes include the study of '*ideas about how pupils learn*' (just 33% of Flexible PGCE trainees and 43% of GRTP respondents gave this response)[8];

(2) a higher percentage (68%) of respondents following university-administered PGCE programmes than of those following any other route considered it to be very important that ITP programmes should include university/college tutors observing their lessons and providing feedback (compared, for example, to 51% of GRTP trainees and 56% of BEd and BA/BSc QTS students); and

(3) SCITT trainees were more likely than those from other routes to report that they had considered it to be very important for student teachers to share '*the teaching of lessons with experienced teachers*' (69%) and share '*the teaching of lessons with other trainee teachers*' (40%).

*Table 5: How important or unimportant trainees reported having thought it was (immediately before their ITP) that their ITP programme should include the following elements*

| | Per cent (%) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Very important | Fairly important | Neither important nor un-important | Fairly unimpor-tant | Very unimpor-tant | Don't know | N† |
| Having school teachers/mentors observe your lessons and give feedback | 75 | 22 | 2 | 0* | 0 | 0 | 4702 |
| Watching schoolteachers teach | 74 | 23 | 2 | 0 | 0 | 0 | 4692 |
| Getting assistance with lesson planning | 71 | 26 | 3 | 1 | 0 | 0 | 4710 |
| Being given specific strategies for teaching specific subjects/ topics | 66 | 30 | 3 | 0 | 0 | 1 | 4705 |
| Sharing the teaching of lessons with experienced teachers | 61 | 32 | 5 | 1 | 0 | 1 | 4691 |
| Having university/college tutors observe your lessons and give feedback | 60 | 32 | 6 | 1 | 0 | 1 | 4691 |
| Studying ideas about how pupils learn | 48 | 42 | 8 | 2 | 0 | 1 | 4697 |
| Learning to teach by trial and error in the classroom | 48 | 37 | 9 | 2 | 2 | 2 | 4690 |
| Sharing the teaching of lessons with other trainee teachers | 32 | 37 | 19 | 8 | 3 | 2 | 4698 |
| Studying current research on teaching methods | 22 | 50 | 20 | 6 | 1 | 1 | 4692 |

A series of single response items. Totals may not sum to 100 due to rounding.
†Totals vary because those who did not respond to each item were excluded.
* The figure '0' denotes less than or equal to 0.4 per cent.

*Table 6: ITP programme elements respondents reported having considered (prior to beginning their ITP programmes) as very important, by route*

|  | Per cent (%) | | | | | | |
|---|---|---|---|---|---|---|---|
|  | BEd | BA/ BSc QTS | PGCE | Flexible PGCE | SCITT | GRTP | N† |
| Having school teachers/mentors observe your lessons and give feedback | 68 | 68 | 79 | 68 | 83 | 80 | 4702 |
| Watching schoolteachers teach | 77 | 74 | 74 | 68 | 75 | 75 | 4692 |
| Getting assistance with lesson planning | 76 | 69 | 73 | 57 | 73 | 67 | 4710 |
| Being given specific strategies for teaching specific subjects/ topics | 68 | 67 | 67 | 54 | 61 | 65 | 4705 |
| Sharing the teaching of lessons with experienced teachers | 59 | 58 | 63 | 52 | 69 | 62 | 4691 |
| Having university/college tutors observe your lessons and give feedback | 56 | 56 | 68 | 60 | 55 | 51 | 4691 |
| Studying ideas about how pupils learn | 59 | 47 | 50 | 33 | 47 | 43 | 4697 |
| Learning to teach by trial and error in the classroom | 51 | 46 | 49 | 46 | 52 | 50 | 4690 |
| Sharing the teaching of lessons with other trainee teachers | 32 | 33 | 35 | 24 | 40 | 24 | 4698 |
| Studying current research on teaching methods | 24 | 32 | 24 | 17 | 24 | 18 | 4692 |

†Totals vary because those who did not respond to each item have been excluded. More than one response could be given so percentages do not add up to 100.

*Student teachers' concerns about initial teacher preparation*

Questionnaire respondents were asked to report whether they had concerns or worries, immediately prior to starting ITP, about each of eleven issues, which are listed in Table 7. Across all ITP routes, the issues which the highest numbers of trainees reported being concerned or worried about were:

(1) whether they would be able to manage the workload (69%);

(2) whether they would be able to maintain discipline in the classroom (66%);

(3) whether they would be able to manage financially (53%).

These concerns reflect case study participants' statements about what they considered to be the main drawbacks to teaching as a career, where (without being specifically prompted to discuss these issues) 32 interviewees spoke about concerns relating to workload, 21 referred to concerns about pupil behaviour and behaviour management, and 16 referred, in this context, to teachers' salaries. The following quotations are illustrative:

*Workload*

…I did expect it to be a lot of work, but I probably am quite shocked at how much it actually is. I was prepared for it being long hours and hard but obviously I didn't, until I was actually doing it, appreciate just how much it is. (*Female, 25-29, BEd, primary*)

*Pupil behaviour and behaviour management*

…obviously you get the, the worry, the discipline worries and the behaviour you know that's fairly prominent just [because] of the stuff there's in the press… (*Male, 20-24, BA QTS, primary*)

*Teachers' salaries*

…it's not very well paid, but then I was aware of that when I gave up my previous job. Teaching will never be as well paid as my previous job was, or at least the previous industry was. (*Female, 40-44, GTP, secondary, MFL*)

As shown in Table 7, just under half of the questionnaire respondents (across all ITP routes) also indicated that, prior to beginning their ITP, they had concerns or worries about whether they '*would be able to cope with the academic difficulty of the course*' (49%) and whether they '*would be able to bring about pupil learning*' (46%). A relatively low 12 per cent of respondents stated that they had been concerned/worried about whether they '*would be able to deal with pastoral issues*'.

*Table 7: Concerns or worries respondents reported having had (immediately before they started their ITP programme)*

| | Per cent (%) | | | | | | |
|---|---|---|---|---|---|---|---|
| | BEd | BA/ BSc QTS | PGCE | Flexible PGCE | SCITT | GRTP | All Respond- ents |
| Whether I would be able to manage the workload | 72 | 70 | 69 | 63 | 68 | 68 | 69 |
| Whether I would be able to maintain discipline in the classroom | 55 | 56 | 75 | 62 | 63 | 71 | 66 |
| Whether I would manage financially | 61 | 64 | 48 | 49 | 48 | 41 | 53 |
| Whether I would be able to cope with the academic difficulty of the programme | 64 | 63 | 47 | 33 | 41 | 27 | 49 |
| Whether I would be able to bring about pupil learning | 45 | 41 | 50 | 37 | 46 | 47 | 46 |
| Whether I would enjoy the teaching/training | 32 | 36 | 41 | 35 | 35 | 33 | 37 |
| Whether I would be able to pass the skills tests | 43 | 36 | 33 | 29 | 34 | 32 | 35 |
| Whether I would get sufficient help for teaching | 31 | 28 | 33 | 32 | 32 | 39 | 32 |
| Whether I would be able to develop rapport with the children I teach | 16 | 21 | 34 | 24 | 24 | 26 | 27 |
| Whether I would get along with teachers and other staff in school | 31 | 25 | 25 | 16 | 26 | 20 | 24 |
| Whether I would be able to deal with pastoral issues | 8 | 11 | 13 | 9 | 10 | 19 | 12 |
| N = | 394 | 1371 | 1742 | 185 | 336 | 703 | 4731 |

Respondents could give more than one answer so percentages do not add up to 100.

When we compare the responses of those following different ITP pathways (also summarised in Table 7), some of the variations are perhaps predictable. For example, undergraduate students were statistically more likely to report concerns about '*Whether I would be able to cope with the academic difficulty of the programme*' (64% of BEd and 63% of BA/BSc respondents) than those following postgraduate programmes (e.g. 41% of SCITT trainees), whilst trainees following employment-based programmes were statistically less likely to report concerns about '*Whether I would manage financially*'. It is also interesting that higher percentages of respondents from university-administered PGCE and from GRTP routes (75% and 71% respectively) cited concerns/worries about '*whether I would be able to maintain discipline in the classroom*', compared (for example) to 55–56 per cent of BEd and BA/BSc QTS respondents.[9]

Somewhat less predictably perhaps, university-administered PGCE trainees (34%) were statistically more likely than BEd respondents (16%), BA/BSc QTS trainees (21%) and Flexible PGCE and SCITT respondents (both 24%) to express concerns about '*Whether I would be able to develop rapport with the children I teach*'; and respondents following the employment-based GRTP routes were more likely than those on other routes to report being concerned or worried about whether they '*would get sufficient help for teaching*' (39%, compared, for example, to 28% of BA/BSc QTS trainees) (Chi-square: $p < 0.001$ in each case).

DISCUSSION

As we argued in the introduction to this paper, student teachers' experiences of ITP are affected not only by the nature of the individual programmes that they follow but also by their (student teachers') preconceptions, expectations and concerns, which interact with and provide a filter through which student teachers subsequently experience their teacher preparation programmes (Feiman-Nemser, *et al.*, 1989; Hollingsworth, 1989; Wubbels, 1992; Korthagen, *et al.*, 2001). In this paper we have drawn attention to a number of aspects of the preconceptions and concerns brought by student teachers to their ITP, and illustrated how these can differ for student teachers following different ITP pathways. Before discussing some possible implications of these findings, it is important to acknowledge a number of limitations of the data reported here, which require us to exercise caution in drawing conclusions and making recommendations on the basis of these findings.

*Limitations*

The main reservations that we have about the data and findings reported in this paper relate to the fact that student teachers were providing historical accounts of their pre-course conceptions and concerns about initial teacher preparation. This was to some extent inevitable given the difficulties (most notably relating to Data Protection legislation in this country) of gaining access to people who have not yet begun their ITP programmes. Yet as a consequence of this, trainees may have failed to accurately recall the conceptions and concerns that they held prior to the beginning of their courses, or to sufficiently differentiate these from their 'present' (at the point of data generation) perceptions, which may have been partly shaped by their subsequent/intermediate experiences on their ITP programmes. This limitation is likely to have been less of a problem for trainees following one year programmes, who were not asked to think back very far in time, but more so for those participants who, at the point of data generation, were beginning the final year of two, three or four year courses.[10] For this reason, we do have some reservations about the direct comparability of (pre-course perceptions) data generated from trainees following different ITP routes, and we should remain tentative about such findings.

Another limitation of the findings reported in this paper is that, in spite of the large size of the sample (the survey sample in particular), some reservations must

remain about the representativeness of the data. Firstly, as explained in Section 2.2, the survey sample was not completely random and unlikely to be representative of student teachers nationally. Secondly, 36 of the 110 ITP providers who were invited to participate in the study declined to do so. It is thus possible that systematic differences might exist between the student teachers following ITP programmes in those providers and student teachers following programmes in those 74 providers which did participate. Thirdly, whilst for the questionnaire survey we sought to sample all student teachers following the ITP route sampled in the chosen providers, not all student teachers will have been present on the days in which the questionnaire was administered, which may be a source of further bias.

Nevertheless, in spite of these limitations, the findings reported provide indications as to the preconceptions and concerns that student teachers have brought and may bring to their ITP programmes, and they suggest that the preconceptions and concerns of some student teachers following some ITP routes might differ from those of other student teachers following different routes into the teaching profession. Below we briefly consider some implications, for the teacher educator, of some of these findings.

ISSUES AND IMPLICATIONS

*Student teachers' prior concerns*

Both survey and case study data indicate that the two main concerns that trainees had, prior to beginning their ITP, were (1) whether they would be able to manage the workload, and (2) whether they would be able to manage pupil behaviour in classrooms. Whilst policy-makers in England and Wales are making efforts to address such issues, for example, through workforce remodelling, which aims to free teachers from some of the administrative burdens in order that they may focus more fully on teaching, the fact that large proportions of student teachers come to their ITP with these worries, together with the fact that these issues are amongst the more prominent contributory factors cited by those people who fail to complete their ITP courses (Chambers and Roper, 2000), suggests a need for teacher educators to explicitly address these issues from the earliest stages of ITP.

*Initial orientations towards teaching and teacher preparation*

Our data suggest that the majority of student teachers in our study entered their ITP programmes with what appears to have been an apprenticeship orientation to their learning, with the belief that the school-based elements of ITP provision would be most important to their development as teachers, and with more 'theoretical' or 'academic' elements held in less high regard (cf. Asher and Malet, 1999; Blake, *et al*., 1995; Foster, 1999; Hobson, 2003). One interpretation might be that most trainees, perhaps understandably, enter their ITP with what might be termed a lay view of teaching, a view which focuses on the visible in-class performance elements of the profession, and downplays the less visible elements, such as the thinking, planning and scholarship which are required for consistent effective teaching and long term successful membership of the profession (Furlong, 1996; Hirst, 1996; Maynard, 1996; Pring, 1996; Edwards, 1998). If the initial conception of teaching is limited, it follows that initial conceptions of what is required to learn the profession will be similarly limited.

Whilst school-based elements of ITP are indeed crucial to student teachers' acquisition of teaching skill, and whilst teacher educators need to pay careful attention to student teachers' initial survival needs through the provision of support and through assisting them to acquire both a solid subject knowledge and knowledge of, and the skills to use, a range of practical classroom management strategies, teacher educators must also seek to 'move trainees on' (Maynard, 1996) through providing

them with access to additional explanations of school-based phenomena and with further conceptual tools which can assist in the development of 'robust reasoning' (Johnson, 1999).

Yet given that student teachers' preconceptions about teaching and student teacher learning can inhibit their actual learning on ITP programmes (Feiman-Nemser, 1989; Sugrue, 1996; Wubbels, 1992; Korthagen, *et al.*, 2001), it is not sufficient merely that ITP providers include a focus, throughout their programmes, on the 'thinking, planning and scholarship' aspects of teaching and learning to teach, and to ensure (in addition) that such elements are well-integrated into their programmes in order to avoid the 'fragmentation' (especially between school-based and university-based course elements) that has often hindered effective ITP (Zeichner and Liston, 1987; Goodlad, 1990). It is also necessary for teacher educators to attempt to highlight, challenge and modify those conceptions, held by student teachers, which may run counter to their (teacher educators') ideas of what learning to teach involves.

*Surfacing and challenging student teachers' preconceptions*

As noted in our introduction, a number of writers have argued that one of the important tasks of the teacher educator is to 'surface' and examine student teachers' preconceptions. Fosnot (1996) thus states that teacher preparation courses should begin by establishing trainees' existing pedagogical beliefs and subsequently challenging such beliefs "through activity, reflection, and discourse" (Fosnot, 1996: 206; cf. Feiman-Nemser, *et al.*, 1989; Edwards and Ogden, 1998). Whilst much international research tells us that the student teachers' preconceptions are strongly held and resistant to change (Wideen, *et al.*, 1998), and whilst previous research has suggested that many teacher education programmes have, in the past, made little impression on student teachers' thinking (Kagan, 1992), some strategies for surfacing and modifying student teachers' conceptions are reported to have met with some success (Hollingsworth, 1989; Joram and Gabriele, 1998; Nettle, 1998; Korthagen, *et al.*, 2001).

It has been argued that the pedagogical beliefs held by ITP entrants will largely have been experientially developed and are likely to be intuitively held (Lortie, 1975; Desforges, 1995; Tomlinson, 1999b; Atkinson and Claxton, 2000). It is also contended that processes which help to *bring out* these conceptions, to raise them into awareness, are unlikely to be the same as those more traditional methodologies used to develop skills or impart knowledge. Thus, Bullough (1991) and Wubbels (1992) argue that teacher educators will have more success in changing student teachers' preconceptions (or "world images") if they work with powerful analogies and metaphors; and Joram and Gabriele (1998) suggest that where such strategies were employed on an ITP programme in a large Midwestern university in the United States, they were successful in facilitating change in student teachers' initial views of teaching and learning. Claxton (1997) suggests that, in addition to metaphor, leisure, fun, and fantasy can also provide the kinds of conditions in which the products of the 'undermind', or experientially learnt intuitive knowledge, may surface.

*Differentiation: knowing where to place the stepping stones*

Finally, whilst thus far in this brief discussion we have focused on some of the more general issues reported in our findings, our data show that the preconceptions and concerns brought by student teachers to their ITP programmes are not uniform but are differentiated in a number of ways, notably according to the kind of ITP route being followed by those trainees. We have seen, for example, that (at least in England at this time):

- trainees following employment-based and 'Flexible' postgraduate programmes are less likely to come to their programmes believing that it is important to learn '*ideas about how pupils learn*';

- those following university-administered undergraduate programmes are more likely to report concerns about the academic difficulty of their programmes; and

- trainees following university-administered postgraduate programmes are more likely to be concerned or worried about whether they will be able to develop rapport with pupils in schools.

It follows that the 'stepping stones' used by teacher educators to support trainees' conceptual development may need to be laid down in different places according to the ITP route being followed. In addition, teacher educators need to be able to differentiate between individual trainees within a given route in order to be able to guide student teacher learning and 'challenge appropriately' (Malderez and Bodoczky, 1999). This may present a particular challenge for those teacher educators (including school-based mentors) who work with student teachers from different ITP routes, as is the case for large numbers of teacher educators in England. That said, in order for trainees' conceptions to be taken into account so that their learning can be appropriately supported, responsive adaptations of planned provision in the light of student teachers' conceptions and concerns will always be required at route, programme and individual trainee levels.

NOTES

1  In this paper we refer to programmes for the 'pre-service' preparation of teachers as *initial teacher preparation (ITP)* programmes. Officially in England and Wales at this time, the term 'initial teacher training' (ITT) is employed to describe such programmes, whilst some writers and some providers prefer to use the term 'initial teacher *education*' (ITE), often on the grounds that 'training' is sometimes associated with a view of teaching as 'performing a set of mechanical tasks' (Stephens, Tønnessen and Kyriacou, 2004), to the exclusion of 'understanding and intelligent awareness' (Tomlinson, 1995:11; cf. Cameron and Baker, 2004:13).

2  We use the terms student teacher and 'trainee' interchangeably, in spite of the reservations about the term 'training' (in 'ITT') referred to above. As will be seen in some of the data reported in the findings section, many of our research participants refer to themselves and their peers as 'trainees'.

3  It has been reported elsewhere that 90 per cent of over 4300 student teachers surveyed in 2003-2004 indicated that they were following their first choice ITP route (Hobson, *et al*., 2004).

4  For those unfamiliar with the different ITP pathways in England, further information about these routes is provided in the Appendix.

5  The term 'training', rather than our preferred term 'preparation', was used because student teachers are less familiar with the latter term.

6  Whilst the specific focus of this paper, together with limitations of space, preclude a discussion (in this and subsequent sections) of the extent to which student teachers' preconceptions and concerns were differentiated according to gender, age and phase, findings relating to these variables are reported in Hobson and Malderez (eds) (2005).

7  On all three items reported here the differences between the responses of those following different ITP routes were statistically significant (Chi-square: $p \leq 0.01$).

8   Whilst primary phase respondents were statistically more likely than secondary trainees to report that they considered '*studying ideas about how pupils learn*' to be an important element of ITP programmes, differences between the responses of those following different ITP routes remained statistically significant even when controlling for phase.

9   Whilst primary phase trainees were statistically less likely than secondary trainees to report that they had been concerned about 'discipline', again differences between the responses of those following different ITP pathways remained statistically significant when controlling for phase.

10  The decision to survey student teachers at these points in time was based on the requirement that all student teachers in our sample who remained on and successfully completely their courses, qualified to teach at approximately the same time, in order that, at a later date, we are able to compare the experiences of newly qualified teachers (NQTs) and recently qualified teachers (up to the end of their fourth year in teaching) who qualified via different ITP routes.

## REFERENCES

Asher, C. and Malet, R. (1999) 'Initial teacher training in the post-reform period: a sample of opinion in England and France', *Compare,* 29 (1), 71–83.

Atkinson, T. and Claxton, G. (eds) (2000) *The Intuitive Practitioner: On the value of not always knowing what you are doing,* Buckingham: Oxford University Press.

Berry, A. and Loughran, J. (2002) 'Developing An Understanding of Learning to Teach in Teacher Education', in J. Loughran and T. Russell (eds) (2002) *Improving Teacher Education Practices Through Self-Study*, New York: Routledge Falmer.

Blake, D., Hanley, V., Jennings, M. and Lloyd, M. (1995) *Researching School-Based Teacher Education*. Aldershot: Avebury.

Bullough Jr, R.V. (1991) 'Exploring personal teaching metaphors in preservice teacher education', *Journal of Teacher Education, 42 (1),* 43–51

Cameron, M. and Baker, R. (2004) *Research on Initial Teacher Education in New Zealand: 1993-2004. Literature Review and Annotated Bibliography,* New Zealand Council for Educational Research: Ministry of Education, New Zealand

Capel, S. (2001) 'Secondary students' development as teachers over the course of a PGCE year', *Educational Research,* 43 (3), 247–261.

Chambers, G. and Roper, T. (2000) 'Why students withdraw from initial teacher training', *Journal of Education for Teaching,* 26 (1), 25–43.

Claxton, G. (1990) *Teaching to Learn: A Direction for Education*, London: Cassells.

Claxton, G. (1997)*Hare brain, tortoise mind: why intelligence increases when you think less*, London: Forth Estate.

Conway, P.F. and Clark, C.M. (2003) 'The journey inward and outward: a re-examination of Fuller's concerns-based model of teacher development', *Teaching and Teacher Education,* 19, (5), 465–482.

Desforges, C. (1995) 'How does experience affect theoretical knowledge for teaching?' *Learning and Instruction, 5,* 385–400.

Edwards, A. (1998) 'Possible Futures for Initial Teacher Education in the Primary Phase', in A. Hudson and D. Lambert (eds), *Exploring Futures for Initial Teacher Education: Changing Key for Changing Times*, London: Bedford Way Papers.

Edwards, A. and Ogden, L. (1998) *Mentoring as Protecting the Performance of Student Teachers*. Paper presented at the American Education Research Association Annual Conference, San Diego.

Feiman-Nemser, S., McDiarmid, G.W., Melnick, S.L. and Parker, M. (1989) 'Changing beginning teachers' conceptions: A description of an introductory teacher education course', *Research Report*, No. 89 (1), Michigan State University, East Lansing, MI: The National Center for Research on Teacher Education. Available at: ncrtl.msu.edu/http/rreports/html/pdf/rr891.pdf (Accessed 7 June 2005).

Fosnot, C.T. (ed) (1996) *Constructivism: Theory, Perspectives and Practice*, New York: Teachers College Press.

Foster, R. (1999) 'School-based initial teacher training in England and France: trainee teachers' perspectives compared', *Mentoring & Tutoring, 7(2)*, 131–143.

Fuller, F.F. (1969) 'Concerns of teachers: A developmental characterization', *American Education Research Journal,* 6, 207–226.

Furlong, J. (1996) 'Do Student Teachers Need Higher Education?' in J. Furlong and R. Smith (eds), *The Role of Higher Education in Initial Teacher Training*, London: Kogan Page.

Glaser, B. and Strauss, A. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Chicago: Aldine Publishing Company.

Goodlad, J. (1990) *Teachers for Our Nation's Schools*, San Francisco: Jossey-Bass.

Hagger, H., Burn, K. and McIntyre, D. (1993) *The School Mentor Handbook: Essential skills and strategies for working with student teachers*, London: Kogan Page.

Hirst, P. (1996) 'The demands of professional practice and preparation for teaching', in Furlong, J. and Smith, R. (eds), *The Role of Higher Education in Initial Teacher Training*, London: Kogan Page.

Hobson, A.J. (2002) 'Student teachers' perceptions of school-based mentoring in initial teacher training (ITT)', *Mentoring & Tutoring, 10 (1)*, 5–20.

Hobson, A.J. (2003) 'Student teachers' conceptions and evaluations of 'theory' in initial teacher training', *Mentoring and Tutoring, 11 (3)*, 245–261.

Hobson, A.J., Tracey, L., Kerr, K., Malderez, A., Pell, G., Simm, C. and Johnson, F. (2004) *Why People Choose to Become Teachers and the Factors Influencing their Choice of Initial Teacher Training Route: Early Findings from the Becoming A Teacher (BaT) Project,* London: Department for Education and Skills (DfES). Available at: www.dfes.gov.uk/research/data/uploadfiles/RBX08-04.pdf (Accessed 2 October 2005).

Hobson, A.J. and Malderez, A. (eds) (2005) *Becoming a Teacher: student teachers' motives and preconceptions, and early school-based experiences during initial teacher training.* London: Department for Education and Skills (DfES). Available at: www.dfes.gov.uk/research/data/uploadfiles/RR673.pdf (Accessed 2 October 2005).

Hollingsworth, S. (1989) 'Prior beliefs and cognitive change in learning to teach'. *American Educational Research Journal, 26 (2)*, 160–189.

Huberman, M. (1993) *Knowledge utilisation: the state of the art*. Paper presented at the International Conference on Dissemination and Utilisation of Research Knowledge, Haifa.

Joram, E. and Babriele, A.J. (1998), 'Preservice Teachers' Prior Beliefs: Transforming Obstacles into Opportunities', *Teaching and Teacher Education*, 14 (2), 175–191.

Kagan, D.M. (1992) 'Implications of research on teacher belief', *Educational Psychologist,* 27, 65–90.

Korthagen, F.A.J., Kessels, J., Koster, B., Lagerwerf, B. and Wubbels, T. (2001) *Linking Practice and Theory: The Pedagogy of Realistic Teacher Education*, Mahwah, New Jersey: Lawrence Erlbaum Associates.

Lortie, D. (1975) *Schoolteacher: A Sociological Study*, London: University of Chicago Press.

Malderez, A. and Bodoczky, C. (1999) *Mentor Courses: A resource book for trainer trainers*, Cambridge: Cambridge University Press.

Maynard, M. (1996) 'The limits of Mentoring: The contribution of the HE Tutor to Primary Student-Teachers' School-based Learning', in Furlong, J. and Smith, R. (eds), *The Role of Higher Education in Initial Teacher Training,* London: Kogan Page.

Nettle, E.B. (1998) 'Stability and Change in the Beliefs of Student Teachers During Practice Teaching', *Teaching and Teacher Education,* 14 (2), 193–204

Perlberg, A. and Theodore, E. (1975) 'Patterns and Styles in the Supervision of Teachers', *British Journal of Education for Teaching*, 1, 203-–211.

Pring, R. (1996) 'Just Desert', in Furlong, J. and Smith, R. (eds), *The Role of Higher Education in Initial Teacher Training,* London: Kogan Page.

Richardson, V. (ed) (1997) *Constructivist Teacher Education: Building a World of New Understandings*, London: Falmer Press.

Sugrue, C. (1996) 'Student teachers' lay theories: Implications for professional development'. In Goodson, I.F. and Hargreaves, A. (eds), *Teachers' professional lives*, Washington DC: Falmer Press.

Tomlinson, P. (1999a) 'Conscious reflection and implicit learning in teacher preparation: II Implications for a balanced approach', *Oxford Review of Education*, 25 (4), 533–544.

Tomlinson, P. (1999b) 'Conscious reflection and implicit learning in teacher preparation: I Recent light on an old issue', *Oxford Review of Education,* 25 (3), 405–420.

von Glasersfeld, E. (1996) 'Introduction: Aspects of Constructivism', in Fosnot, C.T. (ed.), *Constructivism: Theory, Perspectives and Practice*, New York: Teachers College Press.

Wideen, M., Mayer-Smith, J. and Moon, B. (1998) 'A Critical Analysis of the Research on Learning to teach: Making the Case for an Ecological Perspective on Inquiry', *Review of Educational Research*, 68 (2), 130–178.

Wubbels, T. (1992) 'Taking account of student teachers' preconceptions', *Teaching and Teacher Education,* 8 (2), 137–149.

Zeichner, K. and Liston, D. (1987) 'Teaching student teachers to reflect', *Harvard Educational Review,* 57 (1), 23–48.

APPENDIX: AN OUTLINE OF THE MAIN INITIAL TEACHER PREPARATION ROUTES IN ENGLAND

*Post-graduate HEI-administered programmes (PGCE; Flexible PGCE)*

These routes include both a substantive HEI input and a period of training in schools. Those successfully completing the courses achieve an academic qualification (a Post-graduate Certificate in Education [PGCE]), in addition to Qualified Teacher Status (QTS). Programmes typically last for one academic year (full time), or five or more academic terms (flexible), and applicants must hold a relevant first degree (or equivalent).

*Undergraduate HEI-administered programmes (BA/BSc QTS; BEd)*

BEd and BA/BSc QTS courses allow trainees to achieve both a Bachelors' degree – either in education or in a specific curriculum subject, and qualified teacher status. There are variations in the length of time required to complete BA/BSc QTS and BEd programmes. Traditionally these programmes last for three and four years respectively, though the length of programmes is becoming more variable, with institutions offering two, three and four year programmes. Shorter two-year programmes appear to have been designed for entrants with professional qualifications equivalent to degree level study.

*School-centred Initial Teacher Training programmes (SCITT)*

In the SCITT route single schools or consortia of schools are responsible for the programme of initial teacher preparation. Depending on the training provided, trainees may achieve solely QTS, or may have the opportunity to gain additional academic qualifications, namely a PGCE. Programmes typically last for one academic year.

*Employment-based programmes: Graduate Teacher Programme (GTP) and Registered Teacher Programme (RTP)*

In the GTP trainees take-up a salaried teaching post and (if successful) achieve QTS whilst in-post. Generally, employment-based routes offer QTS only, and typically last for one academic year. As with other postgraduate programmes, applicants to GTP programmes must hold a first degree in a relevant subject. By contrast, the RTP is open to those who do not yet hold a degree but have qualifications equivalent to the first two years of Bachelor's degree study. Typically, the RTP is a two-year programme during which trainees will be employed in a teaching post, whilst also completing a further year of degree-level study on a part-time basis.