Undergraduates' Personal Constructs: classroom teaching and the role of the teacher

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Abstract

This in-depth study shows how Personal Construct Theory (PCT) can be used to investigate the bipolar constructs of teaching and the role of the teacher held by five university undergraduates from a range of subject disciplines. The approach adopted was developed from that devised by George Kelly (1905 - 1967) which was originally applied to psychotherapy. As a phenomenological approach, PCT draws out the perceptions that individuals hold about the world rather than trying to impose a pre-existing theory or psychological framework. In this study, the participants' constructs of teaching and the role of the teacher originally derived from their experiences as pupils in school were elicited. The contention is that when 'real-world' classroom experiences are offered, prior to making career decisions, undergraduates have the opportunity to develop or change their views related to teaching. The study employed PCT pre and post-experience conversations which were analysed for changes in these views and reported as individual case studies. PCT pre and post-experience conversations provide evidence that time spent in a classroom does change the views of undergraduates about teaching and the role of the teacher. In this case, all five participants agreed that teaching was a career they would be pursuing either immediately or in the near future, which represents a significant change for two of the participants who had not previously planned to pursue a teaching career. The study provides evidence that a practical classroom experience (*practicum*) changes an individual's views of the teaching from a previously held view that teaching was not a career option to teaching becoming a career choice. This study argues that this type of practicum should precede a full-time teacher training course to allow any candidate unsure about embarking on the training to 'try-out' teaching first. This detailed study provides evidence for the validity of the PCT conversation as an effective approach for eliciting personal constructs and identifying any changes around the issues of teaching and the role of a teacher as a result of a school placement.

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Participant N

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This study into undergraduates' personal constructs of teaching and the role of the teacher could not have been achieved without the help and guidance of certain people.

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1. Introduction

This chapter introduces the concept of Personal Construct Theory (PCT) and begins to consider how this psychological framework can be applied to teaching, teacher education and the role of the practicum in Initial Teacher Training (ITT), and sets it within an historical context. The chapter includes a brief outline of the Student Associates Scheme (SAS) from which the participants of the research were drawn. It concludes with the key questions of the study, an outline of the participants' experiences and an overview of the thesis.

1.1 Personal Construct Theory and Education

Personal Construct Theory (PCT) was developed by George Kelly (1905 – 1967), and emerged through the practice of psychotherapy. During the 1950s when Kelly was practicing the two theories of personality most used by psychologists were psychoanalysis and behaviourism. Although very different from each other, these psychological theories were similar in one important way - they both argued that people were moved by forces mostly out of their control. By contrast with these two theories, PCT claimed that the person *is* a responsible agent in control of her/his choices and decisions.

The secret of personality for Kelly was to understand the highly individual ways in which people make sense of the things they experience. As a phenomenological approach, PCT emphasises the perceptions that individuals hold about the world rather than trying to impose on them a pre-existing theory or psychological framework. Because of its emphasis on agency, PCT is sometimes referred to as a humanistic approach, one that is in some ways similar to the theory of Carl Rogers (who Kelly succeeded as Director of Clinical Psychology at Ohio State University). Nevertheless, Kelly's view was regarded as revolutionary in the world of psychology in 1955 when he wrote *The Psychology of Personal Constructs*. Indeed, he is said to have taken great delight in raising the ambiguity of categorised systems that sought to place his view point within one framework or another:

> Personal Construct Theory has also been categorised by responsible scholars as an emotional theory, a learning theory, a psycho-analytical their (Freudian, Alderian and Jungian – all three), a typically American theory, a Marxist theory, a Thomistic theory, a Behaviouristic theory, an Apollonian theory, a pragmatic theory, a reflective theory, and no theory at all. It has also been classified as nonsense which indeed, by its own admission, it will likely someday turn out to be.
>
> (Kelly, 1970, p 10)

In the foreword to George Kelly's (1930) chapter 'Social Inheritance', Bannister suggests that 'the most significant aspect of this early essay is the argument running through it that education should be about personal meaning' (Stringer and Bannister, 1979, p 3). It is that emphasis on personal meaning that links Kelly to contemporary constructivist approaches in education. In particular, issues such as the *perspective of the personal*, his focus on relevance and responsibility within the teaching and learning process, his theoretical stance and his recognition and valuing of alternative perspectives, have all had an impact on education. Pope and Denicolo (2001) provide a comprehensive discussion of the ways in which Kelly's ideas have been used within education. According to Fransella (2005) current thinking on constructivism within education often fails to consider Kelly's pioneering spirit that enthused many personal construct psychologists to take his lead and explore the educational implications of his work. Bruner (1990) recognised that Kelly was in the forefront of those concerned with how people make sense of their worlds. Since the 1980s many teacher educators and educational researchers have echoed this viewpoint. Clark (1988) suggested that 'the teacher is a constructivist who continually builds, elaborates and tests his or her personal theory of the world' (p 9). Further support came in Bell and Gilbert's (1996) work and in their book on teacher development they suggested:

> Kelly's great contribution to constructivism is his assertion that there are no predetermined limits on constructs in terms of the nature and range of their application. The limit to their creation is only set by the imagination of the individual concerned and by the constructs being continually tested.
>
> (Bell and Gilbert, 1996, p 46)

It is the emphasis on personal meaning that harmonises Kelly's perspective and that of those who have drawn on his work and, in particular, the contemporary approaches to education as illustrated above. This study concerns itself with Kelly's *perspective of the personal* with respect to undergraduates' constructions of teaching and the role of the teacher. By using a PCT conversation approach a clearer picture emerges of how undergraduates view teaching as a career and, very importantly, how each sees her/himself in the role of a classroom teacher.

1.2 The state of teaching and teacher education

A number of studies of teacher thinking and the nature of the bases of pedagogical knowledge, e.g. Berliner, 1986; Clark, 1988; Borko and Livingston, 1989, consistently point to differences in the ways pre-service and experienced teachers conceptualise and, therefore, approach teaching. Although the process by which pre-service teachers (see Appendix 8.1, p 228) develop pedagogical expertise is complex, varied and individual, direct interaction with experienced teachers is commonly seen as an important factor in helping pre-service teachers develop competency in teaching. Indeed, reforms of teacher preparation have included the extension of student teaching and the introduction of mentoring to facilitate increased interactions between beginning and experienced teachers.

Pre-service teachers can enter their teaching preparation courses with strong beliefs about teaching and with personally constructed theories of classroom instruction, and many also enter with an established teacher role identity developed from many years of observing and interacting with classroom teachers as learners (Lortie, 1975; Ost, 1989; Weinstein, 1989). Although this prior knowledge of teaching may be undeveloped and theoretically uninformed when pre-service teachers begin their training, it nevertheless serves as a filter for interpreting new information about teaching that is acquired during teacher preparation (Buchmann and Schwille, 1983; Anderson, 1984; Crow, 1987; Shulman, 1987; Hollingsworth, 1989).

1.3 The role of the practicum

Practical experience, the *practicum*, has always been part of teacher education regardless of the approach taken, but the weight of the practicum was reduced when teaching was studied theoretically and pre-service teachers were then inducted into teaching by gradually putting the theory into practice (Smith & Lev-Ari, 2005). More recently the reflective model is widely used and a larger part of teacher education takes place in schools with pre-service teachers being encouraged to reflect on their experiences.

Lauvås *et al.,* (2001) claim that the reflective approach has become much more mainstream in Scandinavian teacher education. In the Netherlands, Korthagen and his colleagues advocate the *realistic approach* to teacher education - pre-service teachers are put into schools and start a practicum from the very beginning of the training programme, and they are carefully guided in the reflection on practical experiences which aim at developing a set of competencies necessary for teaching (Korthagen, *et al.*, 2001).

Clearly, any form of practice in schools provides experiences that cannot be replicated in the university classroom, but Samaras and Gismondi (1998) noted that:

> the practicum has been viewed as an unmediated and unstructured apprenticeship which lacks course work and adequate supervision.
>
> (Samaras and Gismondi, 1998, p.716)

A number of studies assert that unless structures are in place to promote reflection and evaluation the practicum can become an experience of uncritical practice that can work against quality teacher education (Burant & Kirby, 2002; Moore, 2003). Perhaps the suggestion in the Government's White Paper, *The Importance of Teaching* (2010) that pre-service teachers should spend more time during their training in school, learning from experienced teachers, may go some way to addressing this issue.

1.4 Prior knowledge, experience and personal constructs

Studies that examine how prior experiences influence pre-service teachers may help teacher educators gain a better understanding of pre-service teachers' personal, implicit theories of teaching and how these theories influence their teacher development. Taken a step further, the question arises about how powerful these prior experiences and personal theories are in influencing the decision to teach in the first place, i.e. at pre-training.

Following the principles of Personal Construct Theory (PCT) provided by Kelly (1955/1991[1]), Pope (1982) describes personal constructs as representative models of reality that serve as cognitive frameworks for behaviour. With regard to teaching, Sigel (1978) describes personal constructs as theoretical perspectives that pre-service teachers have acquired about teaching and learning. Sigel further holds that personal theoretical perspectives of teaching are continuously being developed throughout life from formal experiences with school learning environments and from other experiences outside school. These theoretical perspectives (Sigel, 1978) and cognitive frameworks (Pope, 1982), which have developed from prior experiences, comprise a distinctive knowledge base and consequently a set of personalised implicit theories about teaching and learning (Sigel, 1978). Ausubel (1968) asserted that:

> the most important single factor influencing learning is what the learner already knows; ascertain this and teach him [her] accordingly.
>
> (Ausubel, 1968, p iv)

In Kelly's (1991) view, a basic psychological function of a person is to organise experienced events into themes that can be used to predict future events based both upon their similarity and difference from past events. Prior knowledge is the organising factor of individuals' thought processes. New experiences are integrated into these organised thought patterns and establish the basis on which learners make inferences about new and future events in an attempt to maintain a stable worldview (Akerson, *et al.*, 2000). In this framework for understanding prior knowledge, learners' ideas about the world are defined as experience-

[1] Kelly's work was republished in 1991 and it is the 1991 version that has been used throughout this work.

based explanations that each learner constructs so that a wide range of events and objects can be made more intelligible (Wandersee, *et al.*, 1994).

It is widely accepted that pre-service teachers begin their professional education with deeply grounded beliefs about teaching and learning (Kagan, 1992; Pajares, 1992), influenced by their socialisation into the educational aspects of their culture (Lortie, 1975; Cortazzi and Lixian Jin, 1996). In the current study these beliefs are taken to mean:

> a set of conceptual representations which signify to its holder a reality or given state of affairs of sufficient validity, truth or trustworthiness to warrant reliance upon it as a guide to personal thought and action.
>
> (Harvey, 1986, p 660)

Research in cultural anthropology and social psychology suggests that cultural knowledge systems of 'shared pre-suppositions about the world' (Holland and Quinn, 1987, p vii) provide the medium for each person to negotiate her/his identity as a social being. Belief development can be viewed as a dimension of this assertion of identity and as arising from a constant traffic between personal meaning-making and the social validation or invalidation of these meanings.

Thus, pre-service teachers' beliefs reflect the ways in which they make sense of an evolving identity – 'self as teacher'. They also mediate how they interpret information about teaching and learning, and how they translate that information into their classroom practices (Clark and Peterson, 1986; Bullough and Knowles, 1992; Kagan, 1992).

The attitudes held on entry to pre-service training courses greatly influence what prospective teachers learn and often reduce their receptiveness to the learning theories and approaches promoted in training courses (Korthagen, 1988; Hollingsworth, 1989; Holt-Reynolds, 1992; Mackinnon and Erikson, 1992). Because the beliefs of teachers have been identified as primary influences on classroom practices (Nespor, 1987; Pajares, 1992), consideration of pre-service teachers' beliefs should be key when considering pre-service teacher training courses (Richardson, 1996). In considering the influence of beliefs on practice,

a goal of teacher training is to help pre-service teachers transform naïve and undeveloped beliefs through the identification, examination and reformation of their beliefs (Fenstermacher, 1979; 1994; O'Connell Rust, 1994). Sugrue (1997) takes this further by analysing pre-service teachers' lay theories of teaching and teaching identities and assesses their implications for pre-service teachers and teachers' professional development.

Richardson (1996) identifies teachers' beliefs as being derived from three main sources:

1. Personal experiences of individual teachers have been shown to affect approaches to teaching, in particular experiences of community (Clandinin and Connelly, 1991) and/or parenting (Bullough and Knowles, 1991).

2. Experience with schooling influences beliefs about children's learning (Anning, 1988) and the role of the teacher (Britzman, 1991) and is considered to be a more powerful influence on beliefs than experiences afforded by teacher training courses (Lortie, 1975; Feiman-Nemser, 1983; Brousseau, *et al.*, 1988).

3. Formal knowledge in the context of pedagogical knowledge, although not as powerful as other factors, has been found to influence teacher beliefs (Clift, 1987; Grossman, 1990). The effect, it has been suggested, may take several years to start to happen and that it needs a trigger such as a pupil asking a question in class, to activate it (Featherstone, 1993).

Pre-service teachers can have strong beliefs that learning to become a good teacher can be facilitated only through their experience (Richardson-Koehler, 1988) and can be confident of their own abilities as teachers (Book and Freeman, 1986). Indeed, the attitudes and beliefs of pre-service teachers have been described as *unrealistically optimistic* (Weinstein, 1988; 1989). Pre-service teachers tend to see teaching as a mechanical transfer of information (Richardson, 1996) whereby the teacher hands knowledge to children and learning involves memorisation of material (Black and Ammon, 1992).

Research into teacher beliefs and attitudes has examined changes in beliefs at pre-service and in-service levels and changing these beliefs is an extremely difficult and challenging task. Hollingsworth (1989) and Richardson (1996) found that changing beliefs can occur and this is often as a result of a training course. However, pre-service teachers are not seen typically to develop new perspectives during training courses (Zeichner and Tabachnick, 1981; Stofflet and Stoddart, 1991) unless they are confronted with their previously held beliefs (Tom, 1997). As Calderhead (1997) notes, becoming and staying a teacher involves complex changes and development not only in teaching behaviour but also in cognition and emotion.

Experiences of around twelve years as pupils in formal schooling leave their mark on students who aspire to the teaching profession. Thus, pre-service teachers often enter teacher training courses with potentially problematic or unexamined assumptions, beliefs and knowledge about pupils and schools (Trier, 2006). Challenging such assumptions is crucial, and as White (2000) suggests, pre-service teachers with naïve epistemological beliefs (where knowledge is simple and easily transmittable) tend to have a simplistic view of classroom problems and draw only upon personal experience to solve them. On the other hand, White (2000) argues, those with more sophisticated epistemological beliefs (where knowledge is seen as actively constructed and evaluated) are more likely to see complexity in classroom problems and seek out alternative viewpoints, including those of the child, family and school, before deciding on a course of action.

1.5 The value of reflection

Reflection is an essential part of the learning process, which enables pre-service teachers to problematise the impact they have and interrogate the types of learning, communication and pedagogy that they observe and in which they take part. Reflection can operate at several levels such as academic and critical (Koth, 2003), and can also be used to derive personal knowledge and develop strategies for making meaning through process (Bartolome, 2005).

The central premise of reflective practice in teacher education is that meaning is constructed and Dewey first articulated this 'deliberation' when he referred to:

> The kind of thinking that consists in turning a subject over in the mind and giving it serious and consecutive consideration.
>
> (Dewey, 1904, pp 7 - 8).

In the 1980s, reflective practice gained renewed currency through the work of Cruikshank (1987), Schön (1983; 1987), Zeichner (1987) and Korthagen (1988). Schön's work, in particular, gave a new impetus to those searching for ways to understand the practice of teaching and apply this understanding to the preparation of teaching professionals. Schön characterised the 'reflective practicum' as:

> learning by doing, coaching rather than teaching and a dialogue of reflection-on-action between the coach and the student.
>
> (Schön, 1983, p 303).

Having a 'mechanistic' approach to teaching may provide pre-service teachers with immediate skill, but habits of critical reflection, open-mindedness and willingness to accept responsibility for one's action and decisions will give pre-service teachers (and pre-training undergraduates considering teaching as a career) the power to continue developing as teachers for the rest of their careers.

1.6 Being a teacher

Many terms have been used to describe what it means to be a teacher. These include using words such as *profession* and *vocation*. Much of the terminology has traditionally been used when referring to, for example, the medical or legal professions. The origins of this are long-standing:

> [a profession] is an occupation that has had the power to have undergone a developmental process enabling it to acquire, or convince others (e.g. clients, the law) that it has acquired a constellation of characteristics we have come to accept as denoting a profession.
>
> (Ritzer & Walczack, 1998, p 62)

The characteristics Ritzer and Walczack are referring to are those of:

- altruism
- autonomy
- authority
- knowledge
- distinctive occupational culture and community
- legal recognition.

Usually applied to the medical and legal professions, their application becomes harder when it comes to the teaching profession.
Professional jobs were once viewed as secure and desirable. High levels of attainment and recognised specialised expertise helped ensure professionals' control over job content. For example, Drucker (1968) described the knowledge worker as:

> the man or woman who applies to productive work ideas, concepts and information.
>
> (Drucker, 1968 p 259)

He suggested that future demand for these workers would be 'insatiable' and concluded that:

> We have to learn to give the knowledge worker a job big enough to challenge him, and to permit performance as a 'professional'.
>
> (Drucker, 1968 p 260).

Since then, the characteristics which once distinguished professionals from workers in other occupations have changed, e.g. in the areas of influence over job content and authority to exercise discretion. Organisational psychologist, J. Richard Hackman recalls that, in 1980, professional jobs seemed destined to become '... ever more rich and interesting', whereas in later research he suggested '... surprisingly limited latitude for exercising professional judgement' (Hackman, 1998, in Hurd, 2000).

In education the classroom teacher now has little say over what is being taught. Many (e.g. Etzioni, 1969; Ritzer and Walczack, 1986) have described teachers not as professionals but as *semi*-professionals:

> Semi-professionals – their training is shorter, their status is less legitimised and their right to privileged communication less well established; there is less of a specialised body of knowledge and they have less autonomy from supervision or societal control than 'the' professional.
>
> (Etzioni, 1969, p v)

1.7 The professional teacher

Hargreaves (2000, p 151) describes teacher professionalism as having passed through four historical phases or ages:

1. The age of the pre-professional teacher
2. The age of the autonomous professional
3. The age of the collegial professional
4. The post-professional or postmodern age

1. The age of the pre-professional teacher

In the pre-professional age, teaching was viewed as managerially demanding but technically simple. Its principles and parameters were treated as common sense, and an individual learned to become a teacher through a practical apprenticeship, and improved by individual trial and error.

A 'good' teacher was devoted to her /his craft and demonstrated loyalty with reward coming through service. It is in this age that teachers were considered to be 'amateurs' - enthusiastic people, who both knew and loved their subject, but also knew how to 'get it across' and could maintain order in their classes. The implication was that these teachers needed little training or on-going professional learning.

By applying Ritzer and Walczack's (1998) characteristics to Hargreaves' (2000) age of the professional teacher, what is clear is that during this 'age' there was a high degree of altruism with teachers dedicated to their work probably for their whole lives. There seems to have been little emphasis placed on autonomy – you taught as you were shown how to teach.

2. The age of the autonomous professional

The status and standing of teachers changed significantly from the 1960s onwards, compared with the pre-professional age. Teacher education became embedded in universities and teaching moved closer to becoming an all-graduate profession perhaps showing for the first time open acknowledgement of the importance of knowledge. It was also a time in England and Wales when teachers enjoyed extraordinary autonomy over curriculum development and decision-making. This was particularly true where teachers worked on courses or with age groups that were not constrained by the requirements of external examinations (Lawton, 1980; Lawn, 1990 in Hargreaves, 2000).

This was an era of curriculum innovation and of individual teacher initiative as means for educational change (Weston, 1979, in Hargreaves, 2000). At this time, the words 'professional' and 'autonomy' were used more and more by educators.

This age of professional autonomy challenged many of the traditions on which teaching was based and was supported by teachers who, at this time, could choose the methods they thought best for their own pupils. At the time this professional autonomy seemed to stimulate many innovations, but there were few support structures so very few of the innovations moved to successful implementation. Even fewer became institutionalised throughout the system as a whole (Fullan, 2001, p135).

This author of this work believes that it was also true that any benefits that came from in-service education rarely became integrated into classroom practice because most 'course-goers' went back to unenthusiastic and uncomprehending colleagues who had not shared the learning with them.

3. The age of the collegial professional

By the late 1980s individual teacher autonomy became unsustainable as a way of responding to the increased complexities of schooling. The teacher's professional world was changing, with teachers being asked to teach in ways they had not been taught themselves (Hargreaves, 2000, p 162).

As the concept of the collegial professional developed, there were increasing efforts to build collaborative professional cultures. The common purpose being that of: coping with uncertainty and complexity; responding effectively to change and reform; creating a climate which valued continuous improvement; developing stronger senses of teacher effectiveness and creating ongoing professional development that would replace former patterns of staff development which were generally 'individualised, episodic and weakly connected to the priorities of the school' (*ibid*, p165).

Professionalism here is seen as 'new' rather than 'old'; collegial and collective, rather than autonomous and individual. At the same time it must be remembered that imposing this collegiality on teachers would quickly be resented and eventually resisted by them. This was best demonstrated with the introduction of the National Curriculum which, initially, resulted in a great deal of teacher collaboration but then, the increasing number of directives that accompanied it, and that followed its introduction, resulted in 'coordination' among teachers rather than 'collaboration', and the teacher became an 'educational technician'. Hargreaves (2000) described this as teacher professionalism and professional learning being at a crossroads; 'becoming more extended and collegial in some ways; more exploitative and overextended in others' (*ibid*, p 166).

Applying Ritzer and Walczack's (1998) characteristics to this age highlights how altruism, autonomy and authority were all being eroded. However, the development of new university courses and in-service training courses indicated an acknowledgement of the importance of a good knowledge base for teachers.

4. <u>The post-professional or postmodern age</u>

Further changes and developments in education and in society at the turn of the millennium, suggested that teacher professionalism and professional development was entering a new age - the age of postmodernity[2].

[2] Postmodernism reflects that movement which rejects the notion of a 'grand narrative' in favour of an approach which favours personal interpretation over ultimate principles. Examples can be seen in the work of Foucault (1926-1984) and Derrida (1930-2004).

> This postmodern age saw new patterns of international economic organisation with corporate and commercial power, globalisation and a digital revolution in communications created a proliferation of knowledge and information.
>
> (Hargreaves, 2000, p167).

It became a market-driven world and, as a consequence, schools became 'rationalised, cut-back, made more economically efficient, less of a tax burden and set in competition against one another for 'clients' ' (*ibid* p 168). Teachers, also became targets for economies. Teacher preparation was moved from Higher Education into schools and the result, according to Hargreaves (2000), was a return of teaching to an amateur, de-professionalised, pre-modern 'craft', with skills and knowledge passed on from expert to novice - where practice is reproduced not necessarily improved. This all points to a return to the 'amateur' teacher. Coupled with a shortage of teachers in many subject areas many teachers found themselves teaching outside of the comfort zone of their subject specialism and learning from other teachers.

Further to this, teachers were still dealing with centralised curricula as a result of the Education Act of 1988 and testing regimes which yet again cut back the range and autonomy of teachers' judgement. Teachers also faced systems of performance management in the form of targets, standards, monitoring and accountability. So not only had teachers lost a lot of their autonomy, their authority was also being undermined.

This is the world that not only the newly qualified teacher enters but is also experienced by the pre-service teacher.

1.8 The Student Associates Scheme (SAS)

In 2006 the Training and Development Agency for Schools (TDA – formerly the TTA) in England and Wales issued a tender for the development and delivery of a scheme to be known as the *Student Associates Scheme* (SAS), which aimed to contribute to the recruitment of able and committed students to

ITT and raise the levels of attainment and aspirations of pupils in schools in England and Wales (TDA, 2006).

Along with many other countries in the world, England and Wales had been undergoing a teacher recruitment crisis (Roberts, 2002) and this resulted in a number of initiatives aimed at addressing the problem, of which SAS was one. The scheme's strategic aim: to increase the number and quality of recruits into teaching, particularly in shortage areas such as physics, chemistry, mathematics and modern languages. All Student Associates are trained prior to a 15-day school placement where they follow a programme closely aligned to the standards for Qualified Teacher Status (QTS). While in school each undergraduate student is guided by a mentor and has to complete a Core Goals Programme of 14 activities (see Appendix 8.12, pp 281 - 289) which introduces them to the life and role of a teacher in school. They are also encouraged to negotiate other activities with their mentor to develop other interests and/or particular skills. The undergraduates targeted for the SAS scheme are drawn from the shortage areas for teaching but there are places also available for other subjects and the placements can take place in either primary or secondary schools. In 2009, the TDA commissioned an independent evaluation of the SAS programme. This evaluation examined the impact of the scheme on participating student, teachers and pupils (York Consulting for the TDA, 2009).

1.9 The focus of the current study

This study's focus was to examine the influence of prior experiences on pre-training teachers' implicit views and beliefs of teaching. The study uses the theoretical framework of Personal Construct Theory (PCT), drawing upon Pope's 1982 later interpretation as applied by Sigel (1978). In doing so it aims to determine each participant's set of bipolar constructs around the issue of teaching and the role of the teacher and then to investigate any changes in these perceptions brought about as a result of a school-based experience.

The study reports on a practicum offered to five pre-training undergraduate students. The research investigates the undergraduates' bipolar constructs of teaching and the role of the teacher before experiencing some time in the

classroom (practicum). The contention is that when such 'real-world' experiences are offered prior to the decision (or not) to embark on a teacher training course, the undergraduates have an opportunity to develop sophisticated epistemological beliefs related to pedagogy, as shown by conversations after the practicum. The undergraduates were given the opportunity to observe and enact theories of communication, language and learning in real-world contexts. While the practicum is a form of 'authentic learning' as experienced on teacher training courses, the purpose of this current research was also to broaden the undergraduates' ideas about learning and pedagogy.

Key questions

- What are the undergraduates' bipolar constructs of teaching and the role of a teacher?
- Do these bipolar constructs change as a result of a school placement?
- How are these bipolar constructs changed as a result of a school placement?
- Are there any consequences as result of any changes in the bipolar constructs?

1.10 Participants' experience - sequence of events

- Participants were recruited from the 2008/9 cohort of SAS volunteers.
  The undergraduates recruited to the study were from the third full year of the national SAS programme and came from a cohort of 60 students.
- Pre-experience conversations.
  PCT-based conversations using statements written on cards as stimuli.
- Participants' school placements.
  15 days were spent in a secondary school during which time the participants experienced life as a teacher.
- Post-experience conversations.
  Participants were re-presented with the sets of cards they chose in the pre-experience conversations and asked to talk about them again.

1.11 Overview of the thesis

- Chapter 1 is an Introduction that provides an overview of the background to the study and establishes a context. The following five chapters outline the literature underpinning the study area, together with the methodology, findings including five case studies, discussion and conclusions of the study.

- Chapter 2 is the Literature Review which surveys the existing literature that is relevant to this study. The chapter offers an overview of a range of findings from existing work and highlights a gap in the research around the issue of pre-training undergraduates' personal constructs of teaching and the role of the classroom teacher in England and Wales. The chapter is augmented by seven sub-headings: teacher education in England and Wales; recruitment, retention and attrition of teachers; the role of the practicum; education, learning and training; teacher learning and professional practice; personal constructs, self-concept and teacher education and issues and challenges. The chapter provides a framework for examining undergraduates' personal constructs and for comparison with the study's findings.

- Chapter 3 outlines the methodology and includes a justification for choosing Personal Construct Theory (PCT) as the framework. It details variations in the PCT approach and considers the tools used to gather and analyse the data.

- Chapter 4 outlines the findings and includes data from a preliminary study. This chapter also contains five detailed case studies of the participants including numerous relevant quotes and supporting descriptions.

- Chapter 5 is a discussion which revisits the preliminary work together with the main study and makes particular reference to the conversations and the individual participants' experiences.

- Conclusions are drawn in Chapter 6, discussing the findings and how they compare with existing findings as outlined in Chapter 2, together with implications and recommendations for further work.

Summary

It can be seen that the influence of Kelly's work in the 1950s is still salient today. In particular its application to the changing attitudes towards motivation in pre-training undergraduates through practical experience has shown a number of significant questions can be posed and addressed in a PCT conversation than were present in Kelly's original methodology. These can be seen in the key questions listed above and later in the thesis.

2. Literature Review

This chapter surveys the literature pertaining to the belief systems of pre-service and in-service teachers. It examines the role of the practical experience (the practicum) in influencing those belief systems plus the influence of the practicum in teacher training. The chapter also explores the motivations for teaching and, by linking Personal Construct Theory (PCT) to teacher education, it examines the literature around teacher recruitment, retention and attrition. Thus, it provides a background for the study's examination of the changes in the bipolar constructs of a small group of undergraduate (pre-training) students and the subsequent consequences of these changes following a short practicum.

Most children have 'played school' at one time or another and by the time they leave school or college at 18/19 years old, most have closely observed and scrutinised teachers and their behaviours for at least 12 or 13 years. These activities can leave a deep-rooted impression on them as they develop their ideas about what is needed to be a teacher (Doolittle, *et al.*, 1993). It has been recognised that pre-service teachers hold firm beliefs about the teaching profession long before they enter the classroom and that these beliefs can persist throughout their teacher preparation and into their early years of teaching (Doolittle, *et al.*, 1993). Consequently, examining pre-service teachers' perceptions about teaching is important for informing the development of how teacher preparation courses can be structured to better align prospective teachers' strongly held beliefs with the pedagogical practices that they will need to learn for their subsequent teaching careers (O'Loughlin and Campbell, 1988; Mahlios and Maxson, 1995; Virta, 2002; Cabaroglu and Denicolo, 2008).

Over a century ago, John Dewey (1904) argued for teacher education programmes that went beyond building immediate classroom proficiency skills for teachers. Dewey criticised teacher education programmes for placing too much emphasis on skill acquisition and the mechanics of classroom management, arguing that, although first-hand experience in the school is critical for the preparation of new teachers, the experience might well become counterproductive if it halts the growth of further learning. It was Dewey's view that:

> Practical work should be pursued primarily with reference to its reaction upon the professional pupil in making him a thoughtful and alert student of education, rather than help him get immediate proficiency. For immediate skill may be got at the cost of power to go on growing. Unless a teacher is... ... a student [of education] he may continue to improve in the mechanics of school management, but he cannot grow as a teacher, an inspirer and director of soul-life.
>
> (Dewey 1904, p 151)

Research on pre-service teachers' perceptions suggests that teacher education courses do little to alter the perceptions students develop during their 12 or 13 years of experience as pupils (Bird *et al.*, 1993; Doolittle, *et al.*, 1993; Doyle, 1997; Lerman, 1997). In fact, Holt-Reynolds (1992) found that students tend to accept their own schooling experiences as prototypical and generalisable towards the teaching profession. Raffo and Hall (2006) suggested that pre-service teachers' prior beliefs can, in some cases, create barriers to their receptiveness to the different component parts of ITT courses, since:

> The complex and real interdependencies of personal biography, identity, predispositions and the social and cultural dimensions of context create particular paradigms of understanding.
>
> (Raffo and Hall, 2006, p 60)

From a US perspective, Haritos (2004) argued that it is important to identify pre-service teachers' teaching concerns and teacher role beliefs *before* their entry into ITT courses since these are likely to play a key role in their professional development. From her study with 47 primary and 47 secondary school teachers, she characterised such beliefs as *interpretive lenses* through which pre-service teachers attempt to identify, understand and ultimately resolve their teaching concerns, many of which relate to their own experiences as pupils. An understanding of pre-service teachers' early perceptions and beliefs may therefore enable teacher educators to offer them more appropriate support during their ITT courses so they may be less likely to withdraw from ITT or (subsequently) from the teaching profession (Ashby, *et al.*, 2008). As a result of in depth interviews with nine PGCE students and their mentors, Raffo and Hall (2006) suggested that pre-service teachers themselves should be encouraged:

> to explore from the outset their own predispositions and forms of cultural capital and how and why these appear to be afforded in certain contexts and not in others.
>
> (Raffo and Hall, 2006, p 64)

It is also important to recognise that the task of modifying the beliefs and prior conceptions of learners in general, and pre-service teachers in particular, can be an extremely difficult undertaking due to their entrenched nature (Zeichner and Liston, 1987; Duit, 1996).

According to Atherton (2010), for individuals to survive in any environment, they must adapt to physical and mental stimuli. Assimilation and accommodation are both part of this adaptation process. In assimilation, what is perceived in the outside world is incorporated into the internal world, without changing the structure of the internal world, but potentially at the cost of *squeezing* the external perceptions to fit, e.g. terms to describe this includes *pigeon-holing* and *stereotyping*. In accommodation, the internal world has to accommodate itself to the evidence with which it is confronted and thus adapt to it, which can be a more difficult process. In reality, both are going on at the same time so that although most of the time a person is assimilating familiar material in the world around her/himself, the mind also has to adjust to accommodate it.

Resonating with this is the concept of situated cognition expressed in the work of, for example, Brown, *et al.,* (1989) and Lave and Wenger (1991) who discuss in detail the importance of activity and the situations in which it is produced. A concept, for example, will continually evolve with each new occasion of use, because new situations and activities inevitably recast it in a new form. So a concept is always under construction. Together with their thoughts on enculturation where, given the chance to observe and practice *in situ* the behaviour of members of a culture, the observers (in this case teachers in training) will pick up relevant jargon, imitate behaviour and gradually start to act in accordance with its customs. Offered the opportunity to observe and practice them they will adopt them with great success. This is in sharp contrast to those researchers (e.g. Doolittle, *et al.*, 1993) who believe that prior

experience as pupils in school results in pre-service teachers in training accepting their own schooling as typical. Therefore, information obtained from studying these inherent belief systems in pre-training undergraduates can serve to inform recruitment and curriculum development for teacher educators.

Belief systems have been examined further using meta-analyses across multiple studies (e.g. Kagan, 1992; Pajares, 1992). In a comparison of 16 studies, Pajares (1992) concluded that the perceptions of pre-service teachers play a pivotal role during pedagogical training, even to the point of influencing the interpretation of course material. He also noted that these perceptions can even affect the practices of beginning teachers. Likewise, Kagan (1992), after reviewing 40 'learning-to-teach' (Kagan, 1992, p,129) studies, noted that pre-service teacher perceptions lie at the heart of teaching, influencing interaction among teachers and professional growth, while remaining unrecognised by the teachers. The next step, as proposed by Kagan (1992), is to bring pre-service teachers to a recognition and realisation of their perceptions. By examining these perceptions in undergraduates who have yet to embark on teacher training courses (or even to decide to do so) this study highlights a way of bringing these perceptions to the undergraduates' notice for consideration when making career choices.

Specifically, pre-service teachers generally expect that their relationships with pupils will be similar to the relationships they experienced with their own teachers, having experienced teaching vicariously for 12 or 13 years (Book, *et al.*, 1983; Holt-Reynolds, 1992; Doyle, 1997). Since pre-service teachers expect their teaching contexts to be no different from their pupil contexts, as a consequence they often see little or no reason to study pedagogy (Book, *et al.*, 1983; Holt-Reynolds, 1992; Doyle, 1997), even interpreting material presented in teacher training courses in ways that support their *own perceptions* about teaching (Doolittle, *et al.*, 1993). Regardless of the form that teacher training takes these perceptions persist throughout the period of training and remain with new teachers well into their early years of teaching (Tabachnick and Zeichner, 1984; Griffin, 1989; Doolittle, *et al.*, 1993; Lerman, 1997; Taylor and Sobel, 2001). The issue to be considered is whether a period of time in school, no

longer as a pupil, and prior to training, results in an earlier acknowledgment of these beliefs.

Investigating pre-training undergraduates' perceptions about, for example, the specific characteristics of good teachers could be considered as critical to determining the extent to which teacher training courses can affect consequent classroom practice. They may also influence approaches to recruiting students on to these courses who are more likely to complete the training, go on to make teaching their chosen career, and then remain in that career. Teacher educators need to be aware of student pre-training perceptions as research shows that these core beliefs tend not to change over time (Tabachnick and Zeichner, 1984; Griffin, 1989; Doolittle, *et al.*, 1993). Also of value is what pre-training students believe and how it influences their career decisions.

Coulthard and Kyriacou (2002) describe those who wish to enter teaching as a very distinct group with a *teacher personality* which they suggest is irrespective of gender and age. Similarly, Smethern (2007) comments that over half of the beginning teachers in her small-scale survey of 18 new teachers, articulated the concept of 'always wanting to teach' (Smethern, 2007, p 470). However, there is evidence that people with different characteristics do have different reasons for entering ITT and are influenced by different factors (Edmonds, *et al.*, 2002). It should also be remembered that not all who enter teaching do so for positive reasons. Powney, *et al.*, (2003) found that a few participants in their study appeared to hold a developed concept of a career, and noted that some had drifted into teaching because of a lack of suitable alternatives, or to escape 'less palatable jobs' (Powney, *et al.*, 2003, p29). This is similar, perhaps, to those described by Huberman (1989) as 'tourists – mostly men who had entered the profession accidently, just to have a look' (Huberman, 1989, p 44).

Therefore, teacher educators need to understand the perceptions and belief structures of pre-service teachers in order to improve professional preparation and teaching practices. This could be done by eliciting pre-training teachers' perceptions of teachers and teaching prior to the start of a training course and at intervals during that course.

2.1 Teacher Education in England and Wales

The government of England and Wales established the Teacher Training Agency (TTA) in 1994 at a time of falling recruitment to the teaching profession. Its responsibility was for the recruitment and training of future teachers and to provide an effective response to a number of challenges facing the teaching profession at that time. These included the need for teachers to be better regarded, better qualified, better trained through more effective Initial Teacher Training (ITT) and better inducted into their role.

A changed Post Graduate Certificate in Education (PGCE), established in 1996, became the one year professional teacher training course in England and Wales completed by the majority of secondary school teachers. It comprises a 36 week course, of which 24 are spent in schools. This means that schools have considerably more responsibility for training (something that has meant a diversion of normally centrally held funds into schools). In 1998 the TTA developed a set of standards that all trainee teachers must meet to be awarded Qualified Teacher Status (QTS) (DfEE Circular 4/98).

These standards have now been revised (TDA, 2008) and are:

1. Professional attributes:

- Relationships with children and young people
- Frameworks
- Communicating and working with others
- Personal professional development.

2. Professional knowledge and understanding:

- Teaching and learning
- Assessment and monitoring
- Subjects and curriculum
- Literacy, numeracy and ICT
- Achievement and diversity
- Health and well-being.

3. Professional skills:

- Planning
- Teaching
- Assessing. Monitoring and giving feedback
- Reviewing teaching and learning
- Learning environment
- Team working and collaboration.

The Office for Standards in Education (OFSTED) in England and Wales is responsible for evaluating all of this activity and inspections of ITT providers happen regularly. The results can have serious financial implications for all involved, especially the Higher Education Institutions (HEIs). These external pressures all point to increased stress in ITT for all HEIs, i.e. the time and effort involved in recruiting a decreasing number of students embarking on ITT, followed by the issue of retaining the students on the course.

Grace (1991) described the concerns of the Select Committee for Education including the difficulty in filling posts in a range of subjects that included mathematics, physics, design and technology and modern languages and also religious education, business studies and early years' education (Grace, 1991). In his examination of the teacher training system in England, Sir Stewart Sutherland (1997), in the *Dearing Report on Higher Education*, highlighted the need to assess the current arrangements for recruitment in the shortage subject areas (Sutherland, 1997). He also raised concerns about attrition and suggested that more work needed to be done to establish more accurately why this was happening (*ibid,* 1997*)*. This was prompted by long-standing concerns over teacher numbers.

2.2 Recruitment, retention and attrition of teachers

Recruitment and retention

Summaries of international literature on recruitment and retention of teachers (Hatch, 1999; Macdonald, 1999) indicate that low recruitment and retention is a common problem. For example, in South Africa, Cheune, *et al.,* (1999) investigated the views of 34 pre-service and novice mathematics teachers. Using qualitative analysis of semi-structured interview data, they identified the reasons for choosing teaching as: extrinsic, altruistic and intrinsic (see Appendix 8.1, p 228). In Slovenia, Kyriakou and Kobori (1998) analysed questionnaire data from 95 pre-service teachers of English and 226 of their pupils and found that wanting to help children to succeed in and enjoy the subject were two of the most frequently and highly rated reasons which motivated them to become teachers. In the US, Young (1995) found that student teachers stated that they

would remain in teaching only if they derived the expected satisfaction from working with children. Altruistic reasons for choosing teaching as a career were also cited by first year Caribbean teachers in Brown's (1992) structured questionnaire study. Lunenberg, *et al.,* (2000) described how a shortage of teachers in the Netherlands accelerated a move towards a competence and school-based approach to ITT.

Edmonds, *et al.*, (2002) reviewed studies into the main factors affecting recruitment to and retention in ITT courses and concluded that teaching as a profession appears to be have been chosen largely for intrinsic reasons: the enjoyment of working with children, the expectation of intellectual fulfilment and the desire to contribute to society. In a study of 2004, Hobson, *et al.*, interviewed 16 pre-service teachers and surveyed a further 224 and reiterated the point that for the majority of teachers a desire to work with children or young people and help them learn was central to the decision to embark on ITT. Also, males have been found to be more likely than females to have been influenced by extrinsic factors such as salary, status and long holidays (Edmonds, *et al.*, 2002).

Cockburn and Haydn (2004) identified the importance of *social transmission* factors in the decision to enter the teaching profession. These include contact with people in the profession and their advocacy of it as a career and their own positive or negative personal experiences at school. Resonating with this is the work of Hobson (2002; 2003) who suggested that many pre-service teachers (especially those with friends and family in the profession) may have based conceptions of teaching and learning on their own experiences as 'consumers' of education, either as pupils themselves or, for some older pre-service teachers, as parents of school-aged children. If for them the life and activities of the staff room have so far taken place, literally behind a closed door, it is hardly surprising that images of the classroom dominate their early conceptions of teaching and may also impact on their expectations of ITT.

In a study of the motivations and preconceptions of PGCE trainees who had recently started their course, Younger, *et al.*, (2004) described how participants

recalled inspirational teachers from their own schooling. The trainees placed an emphasis on their [inspirational teachers] effective instructional strategies and positive, caring relationships with pupils which were based on respect. These factors which were also dominant in the pre-service teachers' characterisation of 'good' and 'bad' teachers.

The issue of retention has been explored in some depth with particular emphasis on students who withdrew either before registering or within 3 weeks of starting their ITT courses (Baumfield and Taverner, 1997; Chambers and Roper, 2000). The main reasons for withdrawing appeared to be financial. Students already having a large debt from undergraduate study and the image of the teaching profession, i.e. students' perceptions of the profession as having a low standing in society, poor remuneration and teachers having low morale, combine and result in the subsequent withdrawal from courses.

A number of international studies have examined the motivations of those who are considering teaching as a career (e.g. Brown, 1992; Chuene, *et al.,* 1999; Kyriacou and Kobori, 1998; Kyriacou and Coulthard, 2000). Generally, the evidence suggests that applicants and entrants to ITT are primarily motivated by intrinsic reasons rather than extrinsic ones. Intrinsic reasons mentioned were those that related to the essential elements of teaching itself and the personal fulfilment offered by engaging in teaching. Extrinsic reasons, on the other hand, referred to factors that are not inherent in the work itself, such as financial rewards, job security, career progression and status (Bielby, *et al.*, 2007).

Intrinsic reasons for choosing teaching as a career were also identified in two other studies. Teeman, *et al.*, (2005) explored the views of 800 successful and unsuccessful applicants to PGCE and ITT courses. The factors that were most frequently cited by the survey respondents as influencing their reason for applying to ITT were a desire to work with children and a desire to contribute to the community. Barmby (2006), in a survey of 246 teachers, found that higher proportions of the respondents were motivated to continue into teaching following their training by intrinsic and altruistic factors than by extrinsic reasons such as job security and salary. Furthermore, Barmby (2006) found that

extrinsic factors such as financial incentives and salary were rated as less important by teachers in their decision to continue into teaching following their training.

Conversely, Hayes (2004) found that pre-service teachers were primarily motivated by extrinsic factors. This survey focused on 550 pre-service teachers studying at the University of Plymouth. The most common motivating factors for deciding on a career in teaching included: favourable working hours, long holidays, liking the subject and the prospect of being able to teach different subjects. Intrinsic factors were mentioned by fewer respondents, but included an interest in working with children, the work being worthwhile and schools being enjoyable places to work.

Lortie's (1975) study asserted that the teaching profession may attract individuals who consider the job to be most suited to them both intellectually and socially and who want to make a contribution to society and work with children. By comparison Ochsner and Solman (1975) draw upon a market-response model which states that individuals make occupational choices based on demand and the levels of compensation. It predicts that students prepare for an occupation which has high demand and will enable them to maximise earnings, i.e. extrinsic motivation. It is worth noting that the Teach First[3] programme in England is aimed at attracting more highly qualified students to teaching and one of its reforms has been to increase starting salaries. In fact, the government is now recommending extending this programme to more graduates and developing a new programme, Teach Next, to encourage potential teachers to change from other careers to teaching (DfE, 2010). Ginzberg (1988) had an alternative suggestion regarding career choice describing occupational choice as a process where choice moves from 'fantasy' (from early childhood to age 11), to 'tentative' (between the ages of 11 and 17), to 'realistic' (between 17 and young adulthood). During this last part of the process individuals begin to look for ways they can utilise their talents and interest in a manner that will satisfy as many goals and values as possible.

[3] Teach First is an independent charity founded in 2002 to encourage top graduates, who might not normally enter teaching, to teach for at least two years in challenging secondary schools.

Kohl (1986) believed that people were attracted to teaching because of its altruistic rewards and approached teaching as a calling:

> I believe that the impulse to teach is fundamentally altruistic and represents a desire to share what you value and to empower others. Of course, all teachers are not altruistic. Some people teach in order to dominate others or to support work they'd rather do or simply to earn a living. But I am not talking about the job of teaching so much as the calling to teach. Most of the teachers I know, even the most demoralised ones, who drag themselves to oppressive and mean schools where their work is not respected and their presence not welcome, have felt that calling at some time in their lives.
>
> (Kohl, 1986, p7)

Findings from studies of an individual's motivation for choosing teaching as a career are of particular interest given the global recruitment crisis. A large number of these existing studies are based on the views of student teachers, i.e. people who have already made the decision to teach (Brown, 1992; Reid and Caudwell, 1997; Kyriacou and Kobori, 1998; Chuene, *et al.,* 1999; Johnston *et al.,* 1999; Kyriacou and Benmansour, 1999). Consequently, their image and perception of teaching could be very different from their peers who have not made the decision to teach. This implies that the view pre-service teachers have of what they want from a career and their views on teaching as a career, often as a vocation, are probably very different from those who choose not to enter the teaching profession.

According to Pop and Turner (2009) knowing how pre-service teachers view teaching as a profession and what specific reasons they have, can add valuable information in understanding a possible mismatch between pre-service teachers beliefs and expectations about the teaching profession, and the reality of teaching practice which can fuel attrition.

From their study of 298 university undergraduates, Kyriacou and Coulthard (2000) argue that it is the extent of the match between what someone wants from a career and the extent to which a particular career can offer it (perception versus actuality), which will have a crucial influence on that individual's decision-making. The view of what is wanted from a career and what teaching

is thought to offer will vary from person to person and if highly-qualified graduates, as in the Teach First programme, are to be encouraged to consider teaching as a career it is important to identify the factors that are significant during the decision-making process if that decision-making is to be influenced. Kyriacou and Coulthard (2000) also report that the image of teaching as a career held by both undergraduates and school pupils is largely based on opinion poll surveys (Yong, 1995; Young, 1995; Richardson, *et al.*, 2006; Rots, *et al.*, 2007), and studies using this approach do not seek to make comparisons between the views of those who wish to become teachers and those that do not.

It should be noted that Kyriacou and Coulthard's (2000) study was only carried out in one university so any generalisations to the wider population must be viewed with some caution. However, the findings do indicate that the undergraduates who were seriously considering a career in teaching tended to display a much closer match between the factors that were important to them in their choice of career and the factors that they think teaching as a career can offer, compared with students not considering teaching as a career. Apart from the implications for recruitment campaigns (the present ones seem to focus on those factors that appeal most to those who have already embarked on ITT) there seems to be a need to focus attention on factors that the undecided students view as important in their career decision-making, and then demonstrate that teaching can offer these.

A number of studies have reported on the appeal of teaching. According to data in 2004 for the United Kingdom, 94% of adults agreed that teaching is a highly skilled job and 84% of parents believed that teachers do a good job (OECD, 2004). A 2003 public opinion survey indicated that being a teacher ranked second (12% of respondents) behind doctor (29%) on a list of eleven occupations as the job they would be most proud for a member of their family to do (Taylor, *et al.*, 2003). Teaching has shown the largest gain since the first survey in 2001 when it was ranked third (9%) behind being a lawyer. When asked their reasons for not choosing teaching as job they would be proud for a member of their family to do, 18% indicated there are too many discipline/behaviour problems in school, 17% indicated other careers were

better, 13% said the job is too stressful and 12% said that the pay is too low. Other UK research indicates that the main aspects of teaching that deter young people from considering it as a career are low pay, too much paperwork and dealing with disruptive pupils (Haydn, *et al.*, 2001).

In an extensive review of the literature, Spear *et al.*, (2000) summarised that those attracted to teaching were more likely to:

- be female
- be young
- have attended a grammar school rather than an independent or state school
- have achieved low A level grades
- be expecting low degree results
- have attended an traditional university rather than a post-1992 university
- be studying English rather than a science subject.

N.B. This study did not differentiate between primary and secondary entrants and this may have skewed the findings towards primary teachers who are most often female.

They summarised the attraction of teaching to undergraduates as providing high job satisfaction, a sense of providing a service to society, imparting subject knowledge and application of their degree subject and working with young people. Prospective teachers were most influenced by wanting to work with children and valued job satisfaction, career opportunities, sharing knowledge of their subject and improving children's life chances. Material rewards from the job were identified as less important. Practising teachers reflecting on their decision to teach wanted to work with children, had an academic interest in their specialism, and had a desire to guide and shape pupils' learning. They perceived the relatively low salary as the greatest drawback to teaching.

Some studies have focussed on practising teachers reflecting on their decision to become teachers, the appeal of teaching to undergraduates or the motivation of trainee teachers. Lortie's (1975) classic study of American schoolteachers found that the appeal of teaching was its interpersonal nature, the sense of service that

it carried and the fact that it allowed teachers to continue their engagement with a subject they themselves studied and enjoyed. In addition there were also material benefits and time compatibility.

Concern was shown, however, by Young (1995) that those who decided to teach might have a *distorted view* of what teaching entailed meaning they might leave the job when that view changed. She found that a number of pre-service teachers in California had chosen to teach for altruistic reasons and had fairly realistic views about working conditions. Many planned to remain in teaching, however, only if the expected satisfaction of working with children emerged.

Heafford and Jennison (1998) made a study of 165 teachers from a cohort of 236 pre-service teachers who completed teacher training over 16 years earlier, asking them to reflect on their careers. They found that almost half were still teaching with the remainder continuing in the field of education, although not teaching. Findings revealed job satisfaction associated with forming positive relationships with young people together with a continued involvement with their subject as key factors.

Attrition

Over recent years the US and Europe have reported that large numbers of beginning teachers leave the profession within the first few years after qualifying. High teacher attrition has costs for both the individuals and the schools involved. Given current teacher shortages, e.g. in the Physical Sciences and Mathematics in England and Wales, and concerns about retaining valuable skills in schools, reducing teacher attrition has become an important policy issue. Even where beginning teachers do not leave the profession, a difficult start to their career may so reduce new teachers' confidence that their long-term effectiveness suffers, and pupils and schools do not benefit from the new ideas and enthusiasm they can bring (OECD, 2005). Teacher attrition rates tend to be higher in the first few years of teaching. Some of those who leave teaching will eventually return to the job, but high attrition rates suggest that large costs have been incurred in preparing people for the profession which they found did not meet their expectations, was insufficiently rewarding, which they found

difficult, or some combination of all three factors. Since beginning teachers tend to leave the profession at a higher rate, this can mean that schools lose many teachers before they gain the experience necessary to become effective (OECD, 2005).

Perhaps an early, i.e. pre-training, experience of the work of a teacher might result in fewer 'unsure' individuals entering training, qualifying as teachers only to leave the profession feeling that they were poorly informed of all aspects of the profession.

Existing evidence indicates that teachers seem to perceive that their job has lower status than wider public surveys would indicate. For example, in the UK a large public survey in 2003 indicated that only 30% of teachers felt that the public respected the teaching profession, which contrasts with the much more positive findings from the public opinion survey cited earlier (Taylor, *et al.*, 2003). Such results imply that teachers' self-image needs to be improved. Also, a number of strategies have been suggested that might be adopted to attract more individuals into considering teaching as career.

For those who are already interested –

- providing potential applicants with increased opportunities to gain classroom experience (Teeman, *et al.*, 2005)
- making further use of visits and school-based activities (*ibid,* 2005).

For those who have not previously considered teaching –

- use positive 'real life' experiences of teaching to challenge, mitigate or address negative perceptions of teaching (Thornton and Reid, 2002).

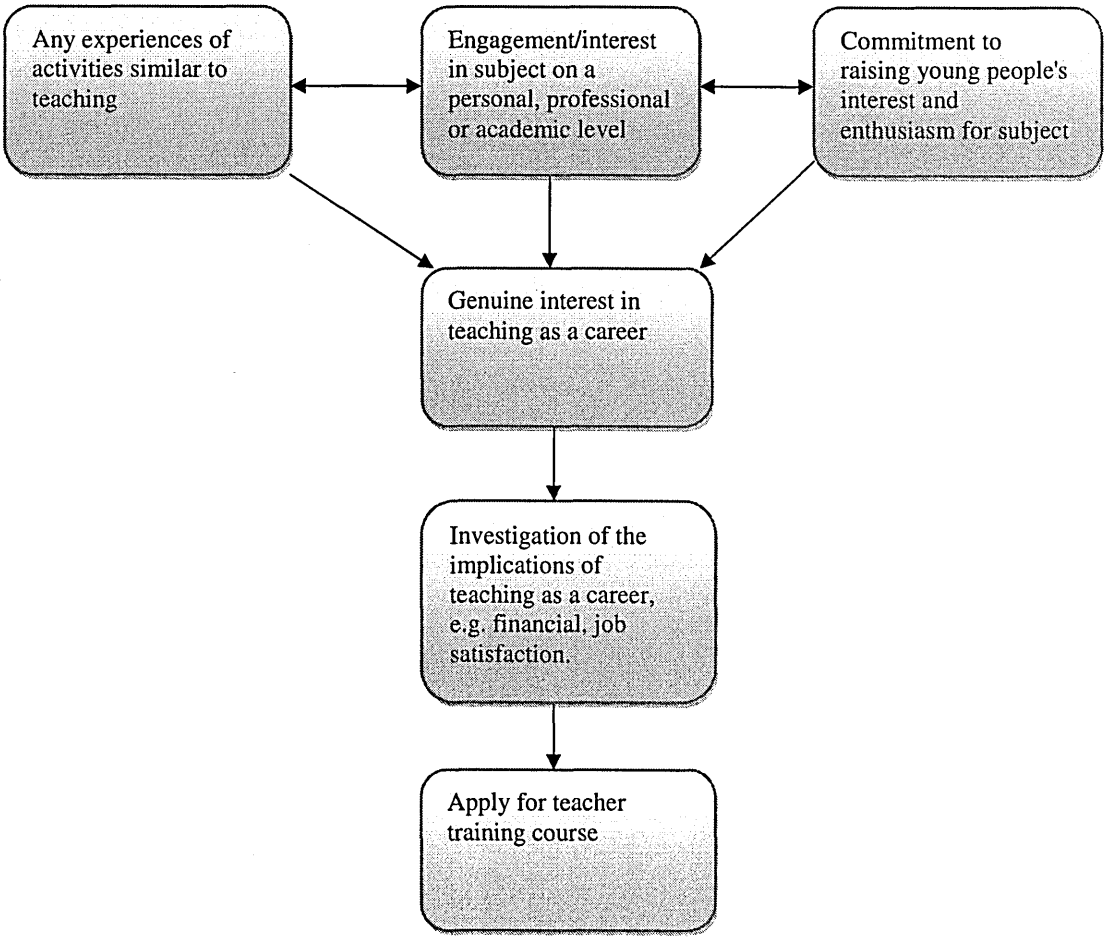
Also, according to Teeman, *et al.*, (2005) one of the reasons that successful candidates gave for not proceeding on to ITT courses was feeling that they had insufficient experience.

2.3 The role of the practicum

Studies such as those of Fleener (1998) and Wilson, *et al.*, (2001) confirm that beginning, as well as more experienced teachers, perceive practical experiences in schools during their Initial Teacher Training as a powerful component of their professional education. There is also evidence that pre-service teachers who received increased amounts of 'field' experience (practicum) remain in the profession at significantly higher rates than those prepared largely through university-based courses (Fleener, 1998). Actual school and classroom experience has the potential to provide pre-service teachers with insight into the complex dynamics of schools and teaching and opportunities to learn about effective strategies and their capacities for implementing them (Wilson, *et al.*, 2001).

Hammond (2002), in contrast with other studies, puts a significant emphasis on previous teaching or 'teacher-like' activities on the motivation to teach. All the pre-service teachers in Hammond's study group of 15 could point out activities from the past which they had enjoyed and had given them the confidence to embark on training. In most cases these experiences were noticeable factors in the decision to teach as opposed to learner experiences. By experiencing 'teacher-like' activities the group found that they could 'rehearse and enjoy the role of the teacher' (Hammond, 2002, p 145) in a safe setting. This led them to reflect further on the attractions of teaching a subject in which they had a strong interest together with their suitability for teaching (Figure 1).

Figure 1 Arriving at the Decision to Teach (*after*, Hammond, 2002)



Existing evidence has identified that teaching practice is very significant during training and it is at this point some people realise that they are unsuited to teaching (Baumfield and Taverner, 1997). One of the requirements for acceptance on to ITT in the UK is experience of working with children and young people and a number of studies do suggest that potential pre-service teachers would benefit from experience of working in the classroom. Several studies (Campbell, 1988; Stewart, 1990; Adams, *et al.*, 1996) have suggested that providing young people with the opportunity to visit or work in schools has great potential for having a positive impact on recruitment. In 1988, a *Taste of Teaching* course, (Campbell, 1988) offered graduates who were considering teaching science or maths a three day experience at a local comprehensive school. On completion the graduates all felt that they had gained a realistic insight into schools and issues around being a teacher and 50% went on to train as teachers.

A second UK study (Stewart, 1990) focused on six science undergraduates and offered them one afternoon a week in school for a term. On completion, they all felt that they had benefited and three out of the six went on to train as teachers. A third initiative, the *Teacher Apprenticeship Programme* (TAP), in Canada (Adams, *et al.*, 1996) was aimed at candidates who had already applied for teacher training but had been rejected because they lacked experience with children. Each trainee worked under the guidance of a mentor (from the school) in a school over a seven month period. All participants were subsequently accepted onto teacher training courses the following year and their tutors commented that, compared with many of the others on the course, these students demonstrated a greater depth of knowledge and understanding of teaching. The TAP programme was successful in that it provided a means of recruiting from candidates who might otherwise have been excluded from the teaching profession because of a lack of classroom experience (a prerequisite in the application process). It suggests an approach that might encourage retention on ITT courses because it provides potential teachers with a realistic view of teaching as a career. Consequently they are less likely to withdraw from their training courses.

A number of studies of both teacher thinking and the nature of pedagogical knowledge bases consistently point to differences in the ways pre-service and experienced teachers conceptualise and approach teaching (e.g. Berliner, 1986; Clark, 1988; Borko and Livingston, 1989). However, direct interaction with experienced teachers is commonly seen as an important influence in helping pre-service teachers develop competency in teaching. Indeed, reforms of teacher preparation have included the extension of student teaching and the introduction of mentoring to facilitate increased interactions between beginning and experienced teachers.

Research into the effects of the practicum is long-standing. Work done by Ingle and Robinson (1965), Ingle and Zaret (1968) and Hedberg (1979) focused on the degree to which early practicum enhances student performances on training courses. These researchers determined that students who had been exposed to classrooms performed better on education courses than their counterparts who

lacked such exposure. Denton (1982) found that early practicum could help prospective teachers acquire pedagogical concepts and instructional skills if these classroom experiences complemented coursework. Pre-service teachers with early practical experience performed better because they understood classroom dynamics and school context and therefore began to assimilate information based on experience.

Other researchers have investigated the influence of early practicum on prospective teachers' attitudes and self-concepts. Marso's (1971) study of 36 pre-service teachers found that as a result of this early practicum they perceived themselves to be better prepared for teaching than their peers who had no opportunities for classroom instruction prior to student teaching. Benton and Osborn (1979) conducted a similar study and found that practicum does have a positive influence on pre-service teachers' general attitude towards teaching. Both studies involved surveys and interviews of the participants. Austin-Martin, *et al.,* (1981) found, in a study of 40 pre-service teachers, that early practicum had a positive effect on prospective teacher interpersonal skills and that:

> A prospective teacher participating in a pre-student teaching course is better equipped to establish a more effective relationship with administrators, teachers and pupils than her counterpart who did not participate in such a course.
>
> (Austin-Martin *et al.,* 1981, p 151).

Research on beginning teachers has mainly described their practical problems (e.g. Bielby, *et al.,* 2007). From a developmental perspective the concerns of these beginning teachers and their development in the profession have been examined extensively (Gold, 1996). Moreover, other studies have focused on the explanation and/or prediction of teaching commitment and attrition of first year teachers (Billingsley, 1993; Fresko, *et al.*, 1997). In particular, Weiss (1999) studied teaching commitment and its relation to school workplace conditions. However, empirical research on the entrance of graduating teachers into the teaching profession is scarce. Drawing on Krumboltz's (1979) work on *Social Learning Theory of Career Decision Making*, Chapman (1984) and Chapman and Green (1986) developed and empirically tested a conceptual

model of retention in the teaching profession. These validation studies indicated that the decision of teacher education graduates not to enter the teaching profession or to leave this profession within five years was influenced by a large number of factors. The factors with the strongest impact were:

- career satisfaction
- initial commitment to teaching
- availability of other jobs
- quality of the first teaching experiences.

The evidence of other researchers, (e.g. Grady, 1990; Ruhland, 2001, 2002) support Chapman's findings and concluded that teacher attrition (immediately after graduation or after a few years in the profession) was not only related to the immediate school context or the current job market but also to initial teaching commitment and the quality of early teaching experiences. Therefore, the results support the crucial role of teaching practice as an essential part of pre-service teacher education, together with strong support during the early part of a teacher's career. Overall, these findings suggest that ITT experiences can have a meaningful impact on teacher retention through the reinforcement and encouragement of commitment to teaching.

Chapman's (1984) model provides some insight into the factors that contribute to initial teaching commitment and to the entrance of teacher education graduates into the teaching profession. Some crucial variables (e.g. perception of preparation for teaching, teaching commitment and quality of first teaching experiences) were identified by Chapman (1984; 1986) and are of great value.

However, it is unrealistic to expect that the reason(s) behind the decision to teach can be measured adequately by any single factor taken in isolation (Kline, 1998). A major disadvantage of considering each factor in isolation is that this cannot capture the multi-faceted dimensions of such a decision. Hence, much research has not provided sufficient insight into the actual characteristics of teacher education that may enhance graduates' teaching commitment and influence their decision to enter the teaching profession.

Practical experience, the practicum, has always been part of teacher education regardless of the approach taken, but the weight of the practicum was reduced when teaching was studied theoretically and pre-service teachers were then inducted into teaching by gradually putting the theory into practice (Smith and Lev-Ari, 2005).

Although Segall (2002) claims that the practicum experience is the most valuable aspect of teacher education courses, Goodlad (1990), Zeichner (1996; 1999) and Schulz (2005), who question the ways conventional practicums are approached in teacher preparation courses, suggest alternative models. The technical model of focusing on skill development, mastering lesson plans and classroom management should be, and continues to be, an important component, but it is not sufficient preparation for pre-service teachers. In a Canadian study, Schulz (2005, p.148) identified a need for a change towards:

> A practicum experience that provides teacher candidates with opportunities for inquiry, for trying and testing new ideas within collaborative relationships, and for talking about teaching and learning in new ways.
>
> (Schulz, 2005, p.148)

Instead of demonstrating instructional skills learned in training courses, Zeichner (1996) suggested that the practicum should be a time for growth and learning, where pre-service teachers come to understand the broader implications of being a teacher, and to appreciate the ultimate aim of a teacher – to help pupils learn.

Lauvås *et al.,* (2001) have suggested that the reflective approach has become more main-stream in Scandinavian teacher education. In the Netherlands Korthagen and his colleagues advocate the *realistic approach* to teacher education in which pre-service teachers are put into schools and start a practicum from the very beginning of their course, and they are carefully guided in reflection on practical experiences which aims at developing a set of competencies necessary for teaching (Korthagen, *et al.*, 2001). Practicum has the power of experience which can shape the pre-service teacher's perceptions of teaching and learning (Gustafson and Rowell, 1995).

Clearly, practice in schools provides experiences that cannot be replicated in the university classroom, but Samaras and Gismondi (1998) noted that:

> The practicum has been viewed as an unmediated and unstructured apprenticeship which lacks course work and adequate supervision.
>
> (Samaras and Gismondi, 1998, p.716).

Unless structures are in place to promote reflection and evaluation, the practicum can become an experience of uncritical practice that can work against quality teacher education (Burant and Kirby, 2002; Moore, 2003).

Smith and Snoek (1996) report, in a comparative study, that pre-service teachers from the Netherlands and Israel saw the practicum as the most valuable part of their teacher education. Moreover, the practicum strongly influenced the way they changed their views on the role of teachers from the first to the fourth year of their training course. In the US, Reinolds *et al.,* (2002) found that pre-service teachers who had spent the practicum in Professional Development Schools (PDS)[4] expressed a higher satisfaction with their education than those who did not. In Finland a different approach has been adopted in the form of Normal Schools which were created to train high school graduates to be teachers. The purpose was to establish teaching standards or *norms*, hence the name. Normal Schools are under national university administration and pre-service teachers do most of their compulsory training period in normal schools and teach under the supervision of a senior teacher in the school. For example, *Helsinki Normal Lyceum* which was initially conceived in 1867 and is part of the University of Helsinki and the *Normal College Bangor* which is situated next to the School of Education, Bangor University in Wales.

The view that comes out strongly is that the practical aspects of the preparation for teaching are more highly valued than other elements of the programme. These views are supported by Smith and Lev-Ari's (2005) study of 480 teachers who claim that teaching is best learned by actually teaching. Yet it is not that

[4] PDSs are designed to provide new models of teacher education by serving as exemplars of practice and places where professional understandings among teacher educators, teachers, and pre-service teachers can be communicated. These schools are intended to be the analogous to teaching hospitals for the medical profession, where practitioners, researchers, and medical school staff work together to expand the knowledge base of medicine, improve medical services to patients, and prepare future practitioners.

simple. The pre-service teachers in their study also expressed appreciation of more theoretical aspects of teacher education such as becoming knowledgeable in the subject matter, mastering the skills of teaching (pedagogy and didactics), being able to handle children with diversity and to better understand their problems and being equipped to help:

> Most of the students found the practicum very useful in preparation for teaching (91%). They were satisfied with the days they spent in school and with the feedback they received in the process of searching for improvement (60%). More than half of the students perceived the practicum as an opportunity to apply the theories they had learned in the theoretical parts of their education. About half of the students rated the fact that they experienced the practicum gradually (from observing mentor teachers to independent teaching of full classes).
>
> (Smith and Lev-Ari, 2005, p 295)

Fundamental to this conception of learning for teachers is the idea that they learn collaboratively, e.g. in groups or communities or networks. Here they can construct meaningful local knowledge that can be used to transform teaching and learning. The goal of this type of knowledge generation is, therefore, different from that generated by 'outside' researchers because it aims to affect the ways in which the participating teachers work on a day-to-day basis. This conception of teacher learning has been reflected in the changes in teacher training with pre-service teachers being required to think more about who they are both as teachers and students (e.g. using reflective journals). An example would be a programme where the learning of pre-service teachers and experienced teachers is linked (e.g. 'Masters' units for experienced teachers based on their work as mentors). Another example can be found in the Professional Development Schools in the US (see footnote 4, p 48) where student teachers learn alongside experienced teachers as they construct knowledge of practice (Levine and Trachtman, 1997).

Although pre-service teachers and mentors have consistently declared that pre-service teaching is the most valuable aspect of a teacher education programme, Segall (2002), and others (Dewey, 1904; Goodlad, 1990; Zeichner, 1996) have raised concerns about the underlying assumptions of

'on-the-job' experience, questioning the educative value of conventional apprentice-oriented approaches to the practicum.

Traditionally the experience has been played out in practicum settings where pre-service teachers are evaluated on their performance or delivery of newly learned techniques. The focus has been on pedagogical knowledge, even though this is only a small part of a teacher's knowledge.

There is a need for change from the practicum model, which most teachers themselves have experienced, to one with a broader educative focus: a practicum experience that provides pre-service teachers with opportunities for enquiry, for trying and testing new ideas within collaborative relationships, and for talking about teaching and learning in new ways. More and more, ITT courses now emphasise enquiry (Cochran-Smith & Lytle, 1999; Norlander-Case, *et al.*, 1999).

Zeichner (1996) has also viewed the practicum as an important opportunity for growth and learning, rather than for demonstrating things already learned. He contends that a practicum is educative if it helps pre-service teachers to understand the full scope of a teacher's role, to develop the capacity to learn from future experiences, and to accomplish the central purpose of teaching - helping pupils to learn.

2.4 Education, learning, training

> I am more and more persuaded that the critical difference between "education" and "learning" is qualifications. We hate school because of exams; we enjoy lifelong learning because of the fascination of personal development. Perhaps the most hopeful way forward will be progressively to transfer the assessment of qualifications from human examiners to computer programmes. That is not far off.
>
> (Ball, 2001)

So states Sir Christopher Ball (2001) and although he is referring to electronic learning, his comment about the difference between education and

learning is resonant with current thinking around the issue of teacher education, especially if 'training' is added to the list.

Historically many pre-service teacher training courses included a gradual introduction of the would-be teacher to the school and classroom experience. This included visits to schools and classrooms to observe, help individual pupils, and assist teachers. From this it was assumed that the pre-service teacher became increasingly ready to assume the role of teacher with short practicum assignments leading to a 'full teaching practice' somewhere near the end of the course. Recently the length of the practicum experience has increased but as Russell (2005) states, 'this type of change has not been accompanied by more fundamental analysis of the role of the experience in learning to teach' (Russell, 2005, p 136). Over 30 years ago Lortie (1975) drew conclusions about the practicum and they sound familiar still:

> Because if its casualness and narrow scope ... the usual practice teaching arrangement does not offset the unreflective nature of prior socialisation; the student teacher is not forced to compare, analyse and select from diverse possibilities. The risk, of course, that practice teaching may simply expose the student to one more teacher's style of work. The value of practice teaching is attested to by many who have participated in it, but there is little indication that it is a powerful force away from traditionalism and individualism. It may be earthy and realistic when compared with education courses; but it is also short and parochial.
>
> (Lortie, 1975, p 71)

There are still tensions between theory and practice with structural links often missing from the practicum experiences. Russell (2005) asks:

> How are assumptions about the place of the practicum in teacher education programs related to new teachers learning to learn from their own teaching experiences, including the perspectives of their students?
>
> (Russell, 2005, p 136).

Whether in universities or schools, change processes appear to be similar and fundamental change seems rare (Sarason, 1971) and when Sarason (1996) revisited his earlier 1971 analysis, he concluded that changes in the conditions for learning must occur for pupils and teachers in parallel. He

singled out the pupil-teacher relationship, what he called the 'asker-answerer', as the fundamental feature requiring change. Russell (2005) argues that this pattern of 'teacher asks and pupil answers' is fundamental to the *theory first, practice later* approach which characterises how teachers teach but also how teachers learn to teach.

In *The Case for Change: Rethinking the Preparation of Educators*, Sarason (1993) summarises his position:

- The primary aim of education is to nurture the sense of discovery and growth in pupils and teacher
- The arena of classrooms and schools contains mammoth obstacles to actions consistent with the primary aim
- Those who seek to become educators have a major asset: they have spent years as 'learners' in classrooms.

(Sarason, 1993, pp 138 - 9)

Sarason's third point about dealing with past and present experiences of school has rarely been a fundamental feature of learning to teach. The importance of considering future educators' past school experiences, however, is supported by what Bruner (1996) calls *folk pedagogy* when referring to the deep-seated pedagogy formed from our perceptions of teaching:

> In theorising about the practice of education in the classroom ... you had better take into account the folk theories that those engaged in teaching and learning already have. For any innovations that you ... may wish to introduce will have to compete with, replace, or otherwise modify the folk theories that already guide both teachers and pupils.
>
> (Bruner, 1996, p 44)

Many would-be teachers seem to approach a pre-service teacher training course with the assumption that they themselves are 'empty vessels' when considering the art and craft of teaching. What Bruner sees as 'folk theories' about pedagogy are probably just as powerful as pupils' prior conceptions of scientific phenomena, conceptions that prove to highly persistent outside the science classroom despite the best efforts of science teachers:

> Folk pedagogies ... reflect a variety of assumptions about children: they may be seen as wilful and needing correction; as innocent and to be protected from a vulgar society; as needing skills to be developed only through practice; as empty vessels to be filled with knowledge that only adults can provide; as egocentric and in need of socialisation. Folk beliefs of this kind, whether expressed by lay people or by 'experts', badly want 'deconstructing' if their implications are to be appreciated. For whether these views are 'right' or not, their impact on teaching activities can be enormous.
>
> (Bruner, 1996, p 49)

Those learning to teach may be assumed to enter the pre-service practicum with significant folk theories about pedagogy. According to Kessels and Korthagen (1996), writing in the context of teacher education reform, the events of the practicum are often unprepared to deal with these folk theories. Their argument is based on what they consider to be a fundamental contrast between *episteme* and *phronesis*. Episteme, or objective knowledge, being the bedrock on which knowledge rests, e.g. a textbook, with phronesis, or subjective knowledge, being closely linked with perception. Kessels and Korthagen argue that phronesis has the potential to address the theory-practice (praxis) problem which, according to them, is glossed over from the perspective of episteme:

> Someone may acknowledge the importance of practicing periods in teacher education programs and still completely miss the point of phronesis. In fact, many teacher educators who stress the value of practical experience nevertheless work on the basis of epistemic conception of knowledge; they struggle with the gap between theory and practice, they worry and puzzle about transfer problems, and they brood on how best to connect to the student's existing knowledge.... The point of phronesis is that the knowledge a student needs is perceptual rather than conceptual. Therefore it is necessarily internal to the student; it is the student's experience instead of outside it in some external, conceptual form. It is thoroughly subjective ... And so there is little or nothing to transmit, only a great deal to explore. And the task of the teacher educator is to help the student teacher explore and refine his or her perceptions. This asks for well-organised arrangements in which student teachers get the opportunity to reflect systematically on the details of their practical experiences.
>
> (Kessels and Korthagen, 1996, p 21)

A new scholarship of teaching and teacher training emphasises the preparation of teachers who learn their teaching throughout their careers. This new scholarship supports reform that respects and builds on the knowledge of pre-service teachers, while at the same time challenging them to adopt a critically thoughtful stance as ongoing students of education. No place exists within this framework for the notion of 'teacher training', a term rooted in the Latin *traho*, which means to 'draw along'. If this new scholarship has value, teacher training in the twenty first century cannot be apprenticeship training, rooted in a model of the teacher as technician who is 'drawn along'. Teaching is not a series of routine, habitual, technical acts to be learned, perfected and repeated year after year. Rather, teaching is a complex and creative decision-making activity with clear pedagogic subject knowledge. Therefore, teacher educators need to prepare teachers not as followers, but as leaders, as professionals who are thoughtful, reflective, inquiring, self-directed and active participants in goal-setting and decision-making. Cochran-Smith and Lytle (1999) have described this shift from:

> prevailing concepts of teacher as technician, consumer, receiver, transmitter and implementer of other people's knowledge.
>
> (Cochran-Smith and Lytle, 1999, p 16).

to a concept of the teacher as knower, thinker and researcher.

When pre-service teachers enrol on training courses, they have had a long apprenticeship of observation in school as pupils. If teacher educators want to change prevailing practices and challenge some of the lessons learned during this apprenticeship, they must provide frameworks that encourage different ways of thinking about teaching and learning about teaching and of course, courses must address the technical and procedural aspects of teaching. In both school and teacher training contexts, research perspectives on conceptual change and self-directed learning have major implications for how teachers teach. Extending these perspectives into the structure of practicum elements and the assumptions about them could provide invaluable assistance in moving forward concurrently with school and teacher training improvements.

2.5 Teacher learning and professional practice

A primary focus of teacher training courses is to facilitate pre-service teachers in developing professional knowledge. Teacher educators are becoming increasingly aware that on entry to training courses pre-service teachers bring with them countless experiences, assumptions and beliefs about teaching and learning (Feiman-Nemser and Remillard, 1996). One of the most effective ways to help pre-service teachers construct meaningful knowledge and understanding of teaching and learning is by first identifying those preconceptions and beliefs and then working to tease out and examine the sources and legitimacy of those beliefs (Bullough and Gitlin, 1995).

According to Cochran-Smith, *et al.*, (2008) learning to teach can be conceptualised around four broad themes:

1. Learning to *think* like a teacher – this requires a critical examination of existing beliefs, a transition to pedagogical thinking and the development of meta-cognitive awareness. Learning to think like a teacher means moving beyond naïve beliefs, for example, that teaching is easy and learning involves the simple transfer of information from teacher to pupil. It means learning to place the activities of teaching and learning in a pedagogical framework that links ends and means (Lortie, 1975; Feiman-Nemser and Buchmann, 1986). It means developing the capacity to think on one's feet, reflect on and adjust one's practice as in Schön's 'reflection-in-action' (Schön, 1987).

2. Learning to *know* like a teacher highlights the different kinds of knowledge that good teaching depends on, including the knowledge teachers generate in practice (Cochran-Smith and Lytle, 1999).

3. Learning to *feel* like a teacher signals the fact that teaching and learning to teach are deeply personal work, engaging teachers' emotions and identity as well as their intellect.

4. Learning to *act* like a teacher means having a repertoire of skills, strategies and routines and the judgement to work out 'what to do when'. The hectic nature of classrooms requires the establishment of routines to make teaching manageable. At the same time the unpredictability of teaching means that teachers are constantly absorbing new information and using it to decide what to do next. So learning to act like a teacher means developing what cognitive scientists call 'adaptive expertise' (Hatano and Oura, 2003).

Cochran-Smith and Lytle (1998) developed another framework based on three conceptions of teacher learning, the first two of which can be applied to pre-service teacher learning:

- Knowledge *FOR* Practice (pedagogical subject knowledge) } Procedural
- Knowledge *IN* Practice (pedagogical content knowledge) } Knowledge
- Knowledge *OF* Practice (pedagogical knowledge)

They suggest that these can lead to different approaches for improving teacher learning and in particular pre-service teacher learning. The first two are of particular interest when applied to pre-training students.

Knowledge *FOR* Practice

Teacher training has changed with the most conspicuous change being increased school-based teacher education. Until relatively recently, Higher Education Institutions (HEIs) had much greater control of the training of teachers; this is no longer necessarily the case in England and Wales. This development of a school-based training model for teachers and the realisation of 'partnerships' has been applied internationally as university-school partnerships become with changes world-wide in the way teachers are trained. Schools have being made responsible for the training of teachers and the issue of how to link theory and practice has resulted in the development of different models of school-based training. In their research, ten Dem and Blom (2006) describe this approach as *collaborative* school-based teacher training. The leading idea is that an important part of the

process of learning to teach should be embedded in experiences in a school setting, thereby stressing the situated nature of knowledge and learning (Lave and Wenger, 1991).

Teacher training should prepare pre-service teachers to participate in educational practice in an increasingly competent way. From the perspective of cognitive learning theory, learning relates to the acquisition of knowledge and transferable cognitive skills (Anderson, *et al.,* 2000), whereas a socio-cultural approach shifts the focus to 'activities' and the 'process of becoming a member of a certain community' (Anderson, *et al.,* 2000, pp 11-13). Learning then is a constructive and socially and culturally situated process. The participation metaphor is often used to characterise this conception of 'learning' (Salomon and Perkins, 1998; Sfard, 1998). This assumes that learners themselves must be able to make sense of and give meaning to the content of learning. Becoming a more central participant in a society is not just a matter of acquiring knowledge and skills; it also implies becoming a member of a community of practice. This requires people to see themselves *as* members, taking responsibility for their own actions (including the use of knowledge and skills) in that position. According to Wenger (1998), students who still have to learn the *trade* are seldom accepted as legitimate *peripheral* participants. This means that pre-service teachers are only sometimes considered as equal participants in a school, whose contributions are taken just as seriously as that of experienced teachers and often this is not the case.

Drawing on the work of Lave and Wenger (1991), Wardekker (2004) argues for education as a *secondary apprenticeship system* which would combine the advantages of apprenticeship (direct contact with a cultural practice) with those of the school (distance from societal and commercial requirements, availability of resources, space and intellectual instruments for reflection). In such a system, the pre-service teachers function in a *community of enquiry* where participation and critical reflection, both on the nature of the practice and on their own relation to it, are balanced.

The training of teachers should be aimed at increasing the ability of pre-service teachers to make use of varied knowledge resources (Edwards, *et al.*, 2002). This should occur in such a way that the teacher contributes to the richness of the situation and hence the learning possibilities of that situation. It is about exchange, co-operation and collaborative construction of meaning. This requires the realisation of a *community of practice* (Wenger, 1998). In the context of teacher training, a community of practice must function as a *community of learners*, in which members participate in practice with other involved members. This is a shared interpretation of meaning regarding the participants' work on the development of a communal repertoire of tools. By working together in a shared practice and, thereby, acting in dialogue with each other, participants contribute to the development of educational practice. Participation in a *community of learners* contributes in turn to the personal and professional identity development of both established teachers and pre-service teachers. In this way the latter learn to take responsibility for their own role in relation to that of others and to the totality of the school in which they participate.

Knowledge *IN* Practice

The emphasis in this case, is on 'knowledge in action', i.e. what very competent teachers 'know' as the artistry of teaching, and reflection on practice, for example.

Haigh and Ward (2004) describe teaching as a complex, creative profession and have an expectation that practicum should support the reflexive, possibility-thinking and risk-taking creative endeavours of the beginning teacher. Practicum is central to pre-service teacher training. However, practicum experiences must be more than the mere provision of a practice setting in which pre-service teachers work. A practicum placement should provide professional experiences for pre-service teachers as they prepare to enter a complex and creative profession.

Practicum placements are not simply a context for pre-service teachers to apply theories of practice to which they have been introduced in their teacher training course. Instead practicum placements should provide the opportunity for pre-service teachers to examine critically the assumptions underpinning their developing pedagogy.

According to Ethell and McMeniman (2000) pre-service teachers require support if they are to become reflective practitioners, who are creative, can challenge norms, both of practicum and teaching generally and be successful risk-takers. Pre-service teachers are expected to practise teaching, to apply skills and techniques (Ethell & McMeniman, 2000), but they are also expected to tolerate doubt, ambiguity and complexity, be flexible, possess interpersonal skills, be active learners, have strong self-efficacy, be reflective and be prepared to form pedagogical goals (Butler, 1996; Hill, 1999).

Although Haigh and Ward's (2004) work found that there is considerable good intent within the practicum, the practicum has also been shown to be less than ideal for all members of the partnership. Visions of mentors working with pre-service teachers in social constructivist and collaborative frameworks were only partially realised. It was also not evident in Haigh and Ward's (2004) studies that pre-service teachers were being given the freedom to develop professional agency to any great extent, so limiting their opportunities for 'possibility-thinking' and 'risk-taking'. Nor was it particularly evident that the pre-service teachers necessarily had the skills and dispositions to exercise such professional agency. If this is the case, how can the pre-service teachers or their mentors be expected to act creatively regarding their teaching practice?

But, as students of the practice of teaching, pre-service teachers on practicum are observing and participating in the activities and rituals of teachers in the field as they participate in the authentic activity of teaching. They become involved in the wider aspects of the teaching community through meetings and staffroom discussions, appropriating the required dress

code, norms of behaviour, beliefs, values and attitudes of those in the profession, resonating with the work of Lave and Wenger (1991). As such, they are appropriating the existing culture of the teachers in that particular school (Kagan, 1992). Samaras and Gismondi (1998) noted:

> ... the newcomers' legitimate peripherality provides then with more than an observational lookout post: It crucially involves participation as a way of learning – of both absorbing and being absorbed in – the culture of practice ... with opportunities to make the culture [of teaching] theirs. It is our belief that neophytes' knowing about teaching develops not only through membership in a community, but through their interest in becoming agents of its activity.
>
> (Samaris and Gismondi, 1998, p 720)

Although the practicum is often a major influence on the affective development of pre-service teachers (Gustafson and Rowell, 1995; Zevenbergen, 2005), in an overview of the professional growth of pre-service teachers, Kagan (1992) was critical of the idiosyncratic and unstructured nature of the school experience and the potential damage this could do to developing teachers by reinforcing beliefs and practices they developed as school students. Kagan (1992), Mewborn (1999) and Nesbitt Vacc and Bright (1999) all promoted the need for pre-service teachers to reflect critically upon their school experiences, and in particular upon the beliefs and values of both themselves and their associates in the school setting.

Therefore, Hill (2000) suggested that pre-service teachers need plenty of meaningful teaching practice if they are to be encouraged to relinquish their familiar beliefs and attitudes in favour of new views and dispositions of teaching and learning:

> For meaningful and lasting changes in attitudes and practices to occur in [mathematics] education, students must practice teaching [mathematics] for relational understanding, experience the responses of children to their teaching approaches and discuss and reflect on these experiences. The cycle must be repeated over a substantial period, allowing time for students to become familiar with the new ideas.
>
> (Hill, 2000 p 29)

In Grootenboer's (2005) investigation, participants who had experiences during their practicum they regarded as good, generally continued to hold positive views about teaching. It seemed that the practicum experiences confirmed the changes that arose during the training course, and therefore they became more assured in their new views. Consistency between the reality of the practicum experiences and the views and knowledge developed through their course appeared to be necessary for effective development of the pre-service teachers.

It would seem, according to Grootenboer's (2005) scheme, that the knowledge teachers use to teach, e.g. in their actions and judgements, is acquired not only from experience but also from reflecting on that experience. This is now seen as important aspect of teachers' practical knowledge and something to be encouraged in pre-service teachers.

Schön's (1987) ideas about professional learning examined what he called *professional practicum* (pre-service teacher training). Schön distinguished between professional practicum and learning on one's own (while this offers freedom, it also often involves unnecessarily 're-inventing the wheel') and apprenticeship (which offers real world experience but is not necessarily supportive of education). What Schön suggested was a kind of half-way house of a practicum that was not entirely situated in the real world which he thought might be overwhelming for the newcomer, but still approximated to the world of practice. In this way practicum can both reinforce and challenge attitudes. This, of course is the essence of the teaching practice/field experience/practicum of the pre-service training teacher. Since the mid-1990s most pre-service teachers have learnt to teach on training courses which are run as partnerships between schools and Higher Education Institutions (Furlong, *et al.*, 2000). In these partnerships, class teachers operating as mentors have assumed a greatly enhanced responsibility for the training and assessment of student teachers.

The legislation that reformed ITT in England and Wales in 1994 required graduates who have gained degrees to spend 24 of the 36 weeks of their

postgraduate training year in school, working with pupils. The intention was that they learn to teach while actually teaching. However, unlike the West African tailor apprentices observed by Lave (Lave, 1977), pre-service teachers still in training were given little opportunity for 'peripheral participation' (Lave and Wenger, 1991) in pedagogic practices. Instead, once placed in a mentor's classroom for an extensive period of school experience, they were frequently expected to participate rapidly and independently as teachers with responsibility for the delivery of the curriculum to pupils (Edwards and Collinson, 1996). It is unsurprising that the pre-service teachers concentrated on teaching as an individual performance and some mentoring practices enhanced this emphasis e.g. with little team teaching where mentors worked alongside the pre-service teachers, enabling their peripheral participation and access to teacher's decision making while teaching. Instead, mentors often carried out traditional supervisions during which they observed a teaching session and provided written and oral feedback to the pre-service teacher. Mentors consequently assisted the learning of pre-service teachers using a model of support which was commonplace before training partnerships were established.

In a participatory view of learning the emphasis is on how learners learn slowly to interpret situated cues and possibilities, and learn to respond to them while they participate in social practices. In a participatory-social practice version of learning, learners appropriate the meanings and actions used by more expert members of the practice community through a process of peripheral participation and eventually become fully fledged community members able to contribute to current understandings while they take action in the field (Lave and Wenger, 1991; Dreier, 1999).

Dewey (1904) made the distinction between an apprenticeship model and what he called a 'laboratory model' of teacher training. He felt strongly that pre-service teachers should not be plunged into the real world of schools too early because they could easily become involved with issues other than

teaching, e.g. management issues and these would detract from their teaching experience:

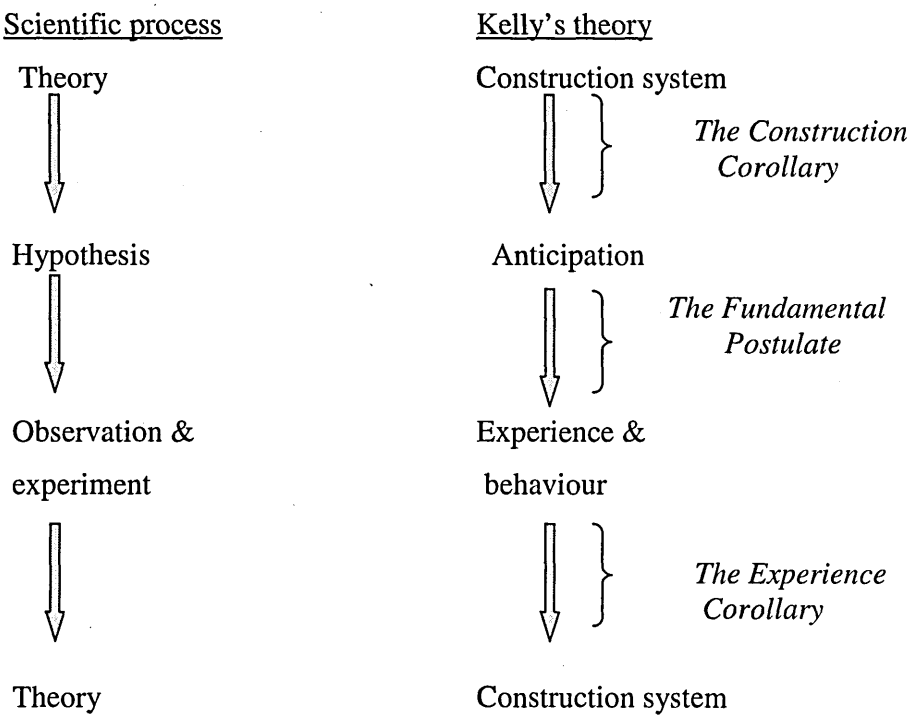
> The student adjusts his actual methods of teaching, not to the principles which he is acquiring, but to what he sees succeed and fail in an empirical way from moment to moment; to what he sees other teachers doing who are more experienced and successful in keeping order than he is; and to the injunctions and directions given to him by others. In this way the controlling habits of the teacher finally get fixed with comparatively little reference to principles in the psychology, logic and history of education.
>
> (Dewey, 1904, p 14)

2.6 Personal constructs, self-concept and teacher education

George Kelly (1991) viewed ordinary people as scientists – they have constructions of their reality like scientists have theories. They have anticipations or expectations like scientists have hypotheses. They engage in behaviours that test these expectations like scientists do experiments. They improve their understandings of reality on the basis of these experiences like scientists adjust their theories to fit the data, from this metaphor, which he called his 'fruitful metaphor', comes Kelly's entire theory.

Kelly organised his theory into a *fundamental postulate and 11 corollaries* (see Appendix 8.7, p 249). His fundamental postulate states that a 'person's processes are *channelized* by the way s/he anticipates events' (Kelly, 1991, p 32) and this is central in the scientific process – from hypothesis to experiment or observation, i.e. from anticipation to experiences and behaviour (see Figure 2). By 'processes' Kelly means, for example, experiences, thoughts, feelings, and behaviours. All these things are determined, not just by external referents, but by a person's efforts to anticipate the world, other people, oneself, from moment to moment as well as day-to-day and year-to-year.

Figure 2 The Scientific Process and Kelly's Theory (Boeree, 2006)



Personal constructs should not be confused with the idea of self-concept. The 'self' is organised around a self-concept, the ideas and feelings that we have about ourselves. The 'self' is constructed in the sense that it is shaped through interaction with other people. Another term often used in this context is 'self-actualisation'. Self-actualisation is a term that has been used in various psychology theories, often in slightly different ways (e.g. Goldstein, 1934; Maslow, 1943). The term was originally introduced by Goldstein for the motivation to realise all of one's potentialities. In his view, it is the master motive – indeed, the only real motive a person has. However, the concept was brought to prominence in Maslow's hierarchy of needs theory as the final level of psychological development that can be achieved when all basic and mental needs are fulfilled and the "actualisation" of the full personal potential takes place.

2.7 Issues and Challenges

The structure of the practicum clearly requires pre-service teachers to move beyond the classroom walls to understand the full scope of a teacher's role. The requirements of the practicum also encourage them to adopt a learning, rather than primarily, a performance stance, in their school experience. It is

evident from the responses of the pre-service teachers, in Schulz's (2005) work, that the experiences of the practicum have, as Dewey (1904) advocated, made them thoughtful and alert to the importance of enquiry and ongoing learning about teaching, and maintained that making ongoing enquiry a key component of teacher training is a way of empowering teachers to become problem solvers in their own schools, and knowledge generators for the profession. Stenhouse (in Ruddock and Hopkins, 1985) argued that systematic, self-critical enquiry:

> is linked to the strengthening of teacher judgement and consequently to self-directed improvement of practice
> (Stenhouse, 1985 p 3)

It would seem that for their practicums, pre-service teachers need to be placed with collaborating teachers/mentors who question and study their own practice and invite pre-service teachers to do the same. Joint efforts to prepare new teachers will create learning opportunities for all that are richer than the opportunities either the school or the HEI can provide alone.

In preparing pre-service teachers for their role in the classroom and understanding of their personal constructs around being a teacher seems essential if the pre-service teachers are to benefit most from their course and classroom experiences. It would also seem that by taking a step back and examining the constructs of pre-training teachers more can be gained around the issue of teacher recruitment and retention.

Summary

In summary, this chapter has reported studies that vary in sample size from less than ten participants to over five hundred but all suggest that initiatives that provide classroom experience prior to training have the potential to help those who are already considering a career in teaching. However, the issue remains whether or not such opportunities would encourage young people, who are as yet undecided about their future careers, to consider teaching. The question is how to identify those who are potentially interested in a career in teaching and discover if classroom experience, offered at an

appropriate time, encourages some of these people, who might not otherwise have done so, to consider teaching.

It is the purpose of this study to examine more deeply the relationship between practical school experience and decisions made by undergraduates' to pursue, or not to pursue, a career in teaching.

3. Methodology

This chapter outlines the underpinning principles of Personal Construct Theory (PCT) which act as a theoretical framework for the current study and examines the various adaptations of George Kelly's (1905 -1967) approaches. This, in turn, shapes the empirical investigative methods adopted in this study. The chapter includes a detailed account of the preliminary work carried out as a means of developing the research tools used in the final study. The methods used are explained in detail and the ethical issues around the research and how these have been addressed are also discussed.

Personal Construct Theory was pioneered by the American psychologist George Kelly (1905 – 1966). Kelly argued that a person's processes are psychologically *channelized* by the ways in which s/he anticipates events. His theory was described in two volumes, *The Psychology of Personal Constructs* (1991), and among the reviewers, Bruner (1956) said:

> These excellent, original and infuriating prolix two volumes easily nominate themselves for the distinction of being the single greatest contribution of the past decade to the theory of personality functioning. Professor Kelly has written a major work.
>
> (Bruner, 1956, p 355)

3.1 Personal Construct Theory (PCT)

A fundamental principle of PCT is that in order to understand a person, then one must understand how that person perceives the world, and so how personal choices and decisions are constructed. As Butt and Burr (1992) observed:

> Kelly insisted that if you want to help people to change, you must first understand the construction they are placing on the world, the theories they hold and the questions they are asking.
>
> (Butt and Burr, 1992, p 3).

The strength of PCT is that it provides a vocabulary with which to interpret the constituents and processes by which a person interprets his or her experience, and how that interpretation might change. As a research

framework, it is associated with other constructivist and interpretivist approaches to research which:

> share the goal of understanding the world of lived experience from the point of view of those who live it
> (Schwandt, 1994, p 118)

The characteristics of PCT

Kelly (1991) proposed that each person has access to a limited number of constructs by which s/he evaluates the phenomena that constitute her/his world. These phenomena can be, for example, people, events, ideas, objects or institutions, and are known as 'elements'. He went on to suggest that the constructs that a person employs can be thought of as bipolar, i.e. capable of being defined in terms of adjectives such as good/bad or phrases such as makes me happy/makes me sad.

To Kelly, a personal construct differs from the notion of a concept in two crucial respects. As already stated, constructs are bipolar but they are also hierarchically organised as a system. One consequence of this is that a personal construct should not be represented as a single label (as in a concept) but as a *dimension of meaning*. Also, its meaning lies in its functional relationship with the rest of a person's construct system. A further consequence is that its development may take place not only in the *content* of one's ideas, but also in movement along the dimension of the construct, and in *structure* – in the fundamental relationship constructs may have with each other.

Kelly (1991) argued that the validity of any theory is to be found in its usefulness and that usefulness has been tested in widely differing fields such as linguistics, history, psychotherapy, management, organisational development, market research, sociology, human geography and psychiatry, not to mention psychology. Its usefulness has been demonstrated by the abundance of practitioners all over the world. Bannister and Bott (1973) suggested:

> ... if we substitute for validity the notion of usefulness, or at least make usefulness the central feature of validity, we shall

> be less concerned with the correlation between a test and some relatively arbitrary criterion and more concerned with the values which users of a test find in it.
>
> (Bannister and Bott, 1973, p 162)

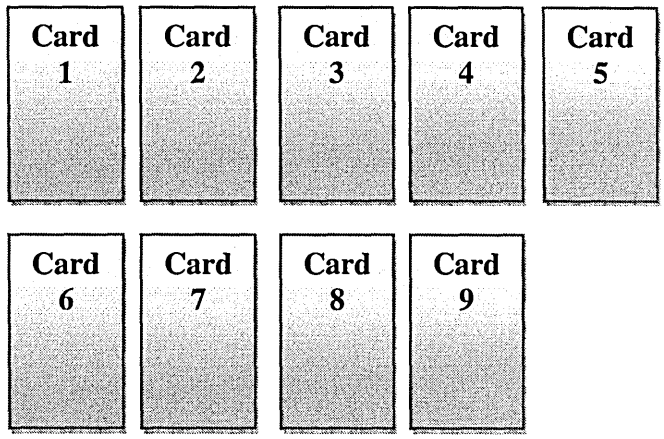
Construct elicitation

The bipolar dimensions of constructs allow us to understand, organise and anticipate events, people or objects in our world. They represent templates through which individuals view their world. An examination of a person's set of constructs allows insight into that person's psychological space or world. The elicitation of these constructs, therefore, is an important step in the process of understanding a person from a personal constructive perspective.

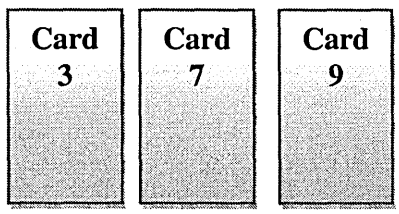
Kelly's method of eliciting personal constructs required a subject to complete a number of cards (elements), each showing the name of a person in her/his life. In identifying elements, the subject was asked, 'Is there an important way in which two [elements] – any two – differ from the third?' See Figure 3:

Figure 3 Stages of the Triadic Technique

1. Complete set of 9 element cards with words or statements written on each is shown to the subject:

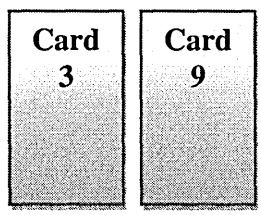


2. Subject is asked to choose 3 cards:

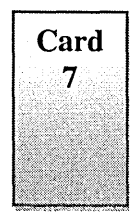


3. Subject is then asked to place together two cards with words or statements that s/he feels are similar and separate from the card that s/he feels is different

Similar cards:



Different card:



This approach requires the subject to name the elements and their thoughts or construct underlying that choice and is central to Personal Construct Theory. Kelly gives it precise expression in his Individuality Corollary – 'Persons differ from each other in their construction of events' (see Appendix 8.7, p 249). There have been several different forms of this approach developed since Kelly's original work, and of particular importance to this study is the variation which provides the elements for the

subjects rather than eliciting them from them. One justification for this approach is implicit in Ryle's (1975) commentary on the Individuality Corollary (see Appendix 8.7, p 249). Ryle explains that Kelly paid rather little attention to developmental and societal processes and he further observes that Kelly's concern was with the personal and not the social. Ryle (1975) believes that the Individuality Corollary would be strengthened by the additional statement that suggests that people *resemble* each other in their construction of events. Denicolo and Pope (2001) agree with Adams-Webber (1970) who argues that the practice of providing constructs can be reconciled with the Individuality Corollary and suggest:

> Since it is personal constructs one is interested in then, where possible, free elicitation of constructs should be adopted.
>
> (Denicolo & Pope, 2001, p 75)

In general, the *triadic elicitation* procedure seeks to generate bipolar constructs by comparing and contrasting a triad of elements. Elements are people, objects or events to which constructs are applied. For example, a group of elements might be a specific friend, a work-colleague, someone the subject dislikes, the subject's mother and the subject her/himself. The subject is asked to consider in which way two elements are similar to each other yet different from the third member of the triad. A word or phrase may be used to represent this similarity. For example, the subject may choose a particular friend and her/his mother and describe them as similar because they are both 'caring'. This word or phrase forms one pole of the construct. The subject is then asked to generate the contrast pole by stating in which way the third member of the triad is different. In this case it might be a work-colleague who is described as 'selfish'. Kelly (1991) described six variations on the general triadic elicitation procedures. The approaches differ in terms of how elements are presented to an individual, and the nature of the elements.

Caputi and Reddy's (1999) study suggested that personal constructs are elicitation method-dependent. The triadic method of elicitation seemed to produce constructs that were less functionally independent, more

meaningful in that they were better able to discriminate among elements and the method produced construct sets that were more cognitively complex. When the triadic method of elicitation was employed, participants tended to focus first on the positive attributes of the elements. Positive constructs seemed to represent highly desirable qualities of the self and others that were readily brought to mind. The themes of sociability, consideration of others, affiliation and competence represented by these constructs also had an abstract quality, for example, one may not be able to recall a specific incident when the self or others were 'popular' or 'successful'. In contrast, the negative constructs seemed to represent more concrete themes of self and others as lacking in positive attitudes such as lacking in motivation, social skills and tolerance.

3.2 Variations of PCT Approaches

The PCT approach implies certain principles for its users, one being that any attempt to engage with another person relies, for its effectiveness, on first forming some picture of how s/he interprets the world. We need to understand how s/he sees self, relationships and the situation in which we meet. Another is the ability to think and refer to oneself as if you were someone else - reflexivity.

As a consequence:

> The principle of constructive alternativism .... means that all the different theories of human nature that we encounter can be seen as different constructions, and our task is not to try to discover what is the 'correct' one but to examine the usefulness of each in helping us understand the nature of people.
>
> (Butt & Burr, 1992, p 3)

In the case of PCT applied to pre-training undergraduates, its 'range of convenience' ('A construct's range of convenience comprises all those things to which the user would find its application useful' (Kelly, 1991, p. 5) lies in uncovering the nature of the undergraduates' personal theories about teaching and the role of a teacher. Its particular strengths lie in providing detailed representations of how undergraduates perceive specific contexts

and relationships and in mapping the complex processes of change in their perceptions.

PCT can enable the analysis of pre-training undergraduates' thinking in terms of structural relationships between constructs. This can be seen in the work of Sendan and Roberts (1998) who attempted to describe the complexities of change in student teacher thinking. They were critical of research that approached teacher thinking in terms of one-dimensional 'lists' of variables, which reflected neither the complexity of learning processes nor the systematic nature of changes in teacher thinking. Therefore, they attempted to describe the way in which pre-service teacher thinking developed as a process and how personal constructs related to each other as a system. Sendan and Roberts (1998) found the content/structure dimension to be of great importance when describing conceptual change in pre-service teachers. When structural development was taken into account it was necessary to qualify the conventional view of pre-service training as a not very powerful intervention on pre-service teachers' personal theories.

By using this approach the aim of this study is to ascertain:

- The nature of observed changes (if any) in the structure and content of the undergraduates' personal views and beliefs about teaching
- The nature of the undergraduates' construct of 'current self' and 'ideal self' as a teacher in relation to the different types of teacher they know
- The consistencies and/or discrepancies between the undergraduates' construction of 'current self' and 'ideal self' as a teacher.

Elicitation of a participant's perceptions and reactions to experience can constitute a significant intervention. It demands considerable self-disclosure, and may lead to shifts in personal perceptions of self and others. Therefore, it is essential that a measure of control and agency be shared with participants.

An effective PCT study relies on a researcher's interpersonal and technical skills, underpinned by a genuine respect for the individuality and agency of the participants. The PCT researcher requires sensitive elicitation and probing skills as elicitation goes to the heart of a person's beliefs, her/his view of self. If there are personal insecurities or tensions, then the process could uncover them. Therefore the researcher's elicitation skills need to be allied to the ability to recognise any signs of stress or discomfort in the participant, i.e. knowing when to stop. This is not a straightforward question and answer type of interview – it is a conversation in which the participant takes the lead. In the current study, the constructs for each participant were elicited from them in conversations (prior to a short placement in a school), rather than being provided by the researcher. The elicitation of constructs avoids the imposition by the researcher of potentially irrelevant, inappropriate or personally meaningless construct labels. After the placement each participant was provided with their pre-experience element triads and the resulting constructs. These 'provided' constructs have the immediate advantage of comparability with those from the pre-experience conversation. Furthermore, because the post-experience conversation was based on the pattern of their own responses pre-experience, participants can reflect on their own evolving frames of reference.

3.3 Modifications of Kelly's technique

Kelly's (1991) original repertory grid technique was used to investigate the roles and relationships between patients and their families and friends, and for assessing the relationships between a patient's constructs about people. The repertory grid, however, is not a test but a method involving highly flexible techniques and variable application. Although in the past its main use has been to investigate constructs about people, denoted as elements in a grid, there is no theoretical reason why the elements should not include inanimate objects or even abstract ideas. Indeed Bannister and Mair (1968) and Fransella and Bannister (1977) summarised many of the forms and applications of repertory grid techniques which have developed beyond

Kelly's own approach. The procedure has its theoretical roots in Kelly's definition of a construct – 'In its minimum context it is a way in which two elements are similar and contrast with the third' (Kelly, 1991, p 61).

For Kelly, constructs do not exist in isolation. His Organisation Corollary (see Appendix 8.7, p 249) made explicit his view that constructs are linked with each other in a more or less coherent or hierarchical manner. The organisation of constructs at any particular moment in time sets a boundary beyond which it is not possible for a person to perceive, and thus the organisation of constructs has a controlling influence on behaviour. Kelly noted the importance of eliciting more than one construct or dimension. He wrote:

> An event seen only in terms of its placement on one dimension is scarcely more than mere datum. And about all you can do with a datum is just let it sit on its own continuum. But as an event finds its place in terms of many dimensions of consideration, it develops psychological character and uniqueness.
>
> (Kelly, 1969, p 118)

Kelly (1991) regarded a personal construct as a perceived basis of comparison and distinction among elements of experience and his original procedure for eliciting constructs preserved this feature but variations have been introduced in relation to the method of construct elicitation itself. The *difference method* follows Kelly's (1991) original preference for asking individuals to identify how any two things are alike in some way, yet different from a third. An important alternative to this, however, was introduced by Epting, *et al.*, (1971). In this variation, participants were first asked to identify how two elements were alike, and then to nominate the opposite to that similarity. Epting, *et al.*, (1993) found that this *opposite method* enhanced the bipolarity of the constructs elicited, emphasising the important impact of this procedure on the nature of the constructs that it elicits.

Hagans, *et al.*, (2000) have nominated two additional ways in which the opposite method might affect the nature of the constructs elicited. First,

encouraging participants to produce opposites might invite more extreme contrasts. Instructions to produce the *opposite* of 'hardworking', for example, may invite the consideration of 'lazy' as a contrast pole. By comparison, instructions to identify how another element is *different* (the difference method) might invite less extreme contrasts, such as 'easy-going'. In addition, Hagans, *et al.,* (2000) noted that with the difference method, the contrast pole necessarily must be located within, and therefore apply to, at least one other element. By contrast, the opposite method does not impose this requirement; having identified two elements, there is no requirement that its opposite characterises any of the other elements. As Hagans, *et al.*, (2000) point out:

> These differences between the opposite and difference methods of construct elicitation carry direct implications for the measure of construct system differentiation.
>
> (Hagans, *et al.*, 2000, p 158).

The differences between the two methods suggest that the *opposite* method would produce less complex and less well-differentiated construct systems (e.g. Caputi & Reddy, 1999; Hagans, *et al.*, 2000). Simply put, individuals may be less likely to apply more extreme and negative contrast poles to the elements.

Some researchers have adopted PCT as a means of getting a better understanding of the phenomenological world of an individual by exploring the nature and inter-relationships between various elements and constructs elicited by the method. Denicolo and Pope (2001) suggest considering a number of issues when making methodological decisions. These include:

1. Contact and purpose
2. Choice of elements
3. Construct elicitation
4. Analysis and interpretation.

(Denicolo and Pope, 2001, p 68)

Each of these will now be considered in detail:

1. Contact and purpose.

The interview can be seen as a conversation (Thomas and Harri-Augstein, 1985). Although this method of data collection and analysis has systematic and scientific aspects, construct elicitation requires a sensitive approach exploiting the art of conversation. At the outset of such a conversation it is essential to negotiate a contract with the participant for the duration of that conversation. It is the researcher's ethical responsibility to convey to the participants the aims of the conversation and that commitment is sought from the participant. The approach can be a powerful instrument to tap an individual's view of self and her/his world but the researcher must ensure there is a feeling of trust from the subject while maintaining objectivity. It is important that the researcher be constantly alert for any signs of distress on the part of the participant and to desist from probing too far should this arise. The participant must also be assured of the confidentiality of the conversation and be made aware that s/he will have the opportunity to view the transcript and ask for any part to be omitted if they so wish. The conversation is not intended to explore all aspects of a person's construct system but is rather focused on a particular topic. In this study that would be aspects of teaching and the role of a teacher.

The establishment of purpose is important, since personal constructions on a topic cannot be gathered if the participants do not know what the researcher is interested in, or do not have a focus for the conversation. Defining the purpose helps identify a suitable element set and focus for construing within the conversation. The purpose is the most important preliminary consideration before the process of eliciting can be begin. According to Denicolo and Pope (2001) purpose has at least two aspects:

a) What is the topic to be investigated?

b) What is the intended use of the information?

(Denicolo and Pope, 2001, p 69)

The negotiation of these issues is a critical aspect of any conversation and requires care. In this current study the purpose, made known from the outset to the participants, was to identify views and beliefs of teachers and teaching

and any changes in these resulting from a school placement, and the possible implications for the recruitment and retention of teachers.

a) Identifying the topic to be investigated

Since the elements should be representative of the problem area to be explored, it is essential that adequate time is given to a discussion of this aspect of the purpose. Even in situations where elements and constructs are provided rather than elicited this is an important consideration. When the elements are provided they should be representative of what Kelly (1991) referred to as the 'universe of discourse' (Kelly, 1991, p 5) which is central to the problem area. The procedure is used to help gain an understanding of how an aspect is perceived by a person. Each investigation is on a particular topic and must be focused on an area which represents to participants, an area they are able to interpret.

Conversational elicitation of constructs helps participants to focus their attention on those aspects of their thoughts and feelings which are relevant to the purpose, without hinting at, implying or suggesting what those ideas and feelings might be. A clear negotiation and definition of purpose is, therefore, a very necessary first step and one which has an effect on the types of elements chosen.

b) What is the intended use for the information?

Denicolo and Pope (2001) suggested five possible uses for the information and this study focuses on two of these uses:

- Gathering of information about an individual's views on a particular topic
- A monitoring of changes in perspectives.

The other possible uses are:

- A conversation with one's self
- A comparison of the viewpoints of two people in terms of either a degree of agreement between them, or the degree to which either can gauge the other's point of view
- An exploration of the nature and sharing of construing within a group.

Each of these purposes calls for a slightly different approach. If the purpose of elicitation is to gather information and come to some understanding of the views of another individual, an interactive conversational approach is necessary, as in this current study. The researcher doing the eliciting must ensure that, as far as possible, the intended meaning of an element has been understood. Although a participant may from time to time have some difficulty in articulating a particular construct, the individual should be encouraged to articulate as clear a description as possible in order that anyone reading the construct can gain a degree of understanding. This is also important when the participant is required to use the same construct and elements on different occasions over a period of time.

2. Choice of elements

When considering how the interview is to be conducted one of the first questions often raised is whether the researcher should 'provide' the elements and constructs or whether they should be 'elicited' from each individual on a personal basis. In its original use as a clinical technique, personal elicitation of elements and constructs was the method adopted. Indeed purists would argue that Kelly's theoretical base for the technique emphasises individuality and that, by definition, constructs are personal. According to Denicolo and Pope (2001) there has been an increasing tendency to modify the technique so the:

> Use of a standard form in which both elements and constructs are provided for the person, rather than elicited from the individual concerned, is becoming more widespread.
>
> (Denicolo and Pope, 2001, p 72)

Whether or not a researcher provides or elicits elements and/or constructs may depend on the initial purpose of the research and its application. For example, if a researcher is exploring the nature and sharing of construct formation within a group, it is often the case that a common set of elements is selected and provided for each individual – this could be followed by either provision or elicitation of constructs or a combination of both. It should be emphasised, however, that if a researcher decides to provide elements and/or

constructs then adequate groundwork should be done in order to obtain what the researcher hopes are representative elements and constructs (see Methods of this study, pp 85 - 92). This entails a series of discussions with a comparable group of people who represent the same population, society and culture, so that the items selected for elements may represent a range of events which can be construed by such people and that the nature of the provided elements is in line with the sort of dimensions which would, in the main, be used by them when construing the elements chosen.

Kelly (1991) insisted that in order to be useful and meaningful, each item should be representative of an individual's life experiences. In some cases provided labels may be identical with those normally used by the research participant in practice, but on the other hand, they may be far removed or incomprehensible to the particular research subject. As can be seen from the current study (see Methods of this study, pp 85 - 92), care needs to be taken to ensure that, if one uses provided rather than elicited elements or constructs, extensive preliminary work needs to be carried out to establish a reasonable selection of elements and constructs whilst acknowledging the need for caution during the interpretation phase.

Whether elements are elicited or provided, it is important that they are representative of the area to be considered and that they span the range of items which are considered to be important in that area for the participant(s).

When deciding on how many elements to use in a conversation there is no fixed standard required. However, in practice if small numbers of elements are used they may give rise to findings lacking sufficient detail or interest in terms of content. However, working with large numbers of elements can be a very tedious exercise. In practice, existing studies show that between 8 and 15 elements provides a useful basis for elicitation or provision within a reasonable timeframe (Denicolo & Pope, 2001).

Having decided on a type of element, it is also important to ensure that all the elements are at the same level of specificity within the type. This makes it

easier for the participant to identify with and understand. When considering the representativeness of the element set, it is important that it not only represents the universe of discourse under consideration, but also that it reflects a range of possibilities. It is generally suggested that the element set should be consistent as a lack of consistency can pose similar problems to a situation where there are different levels within the element set. Normally the element set will consist of people, events, and situations. The essential issue must be that the participant is able to understand the element set and finds it relevant.

3. Construct elicitation

Kelly (1991) describes six approaches to the elicitation of constructs. Of these, the *Minimum Context Form* or 'triadic method' is very widely used, since it is the closest to Kelly's theory about how constructs are actually formed. Having defined a list of representative elements, the next step is a process of construct elicitation. In practice, it is often useful to have each element written out on a separate card. This allows participants physically to sort through the elements and to consider them in groups of three or more, depending on the process of elicitation adopted by the researcher.

As with the choice of elements, the researcher must decide whether to elicit or supply constructs. This issue has been debated widely in the literature (e.g. Adams-Webber, 1970). Denicolo and Pope (2001) suggest that since it is the personal constructs one is interested in then, where possible, elicitation of constructs from the participant should be adopted. Depending on the purpose of the investigation, it is possible to consider that there may be at least four different types of constructs that may be central to the particular elicitation:

- sensory/perceptual
- behavioural
- inferential
- feelings/attitudinal.

(Denicolo and Pope, 2001, p 72)

The aim of the construct elicitation is to collect as many different constructs as the participant wishes to offer. Occasionally, the participant may repeat constructs when faced with different triads. These should be noted as part of the research record.

The conversation

The researcher needs to provide a facilitating climate in which elicitation of constructs can be fostered. The researcher also needs to look carefully for signs that the participant is struggling because although the participant may have no difficulty in naming the way in which a pair is similar (emergent pole) s/he may have difficulty in articulating the contrast or implicit pole (see Appendix 8.1, p 228). A climate needs to be created in which the participant does not feel pressured to complete the naming of the contrast pole, but through conversation they may eventually be able to find a form of words that encapsulates their thoughts/feelings. As with all forms of interviews/conversations, the researcher must refrain from offering a suitable pole name and may need to be content with a simple response of 'not the same' (the emergent description) as an answer. The participant may be unable to explain themselves any further. The triadic method can result in some of the elements not being able to be considered within a particular construct dimension as the approach relies upon the subject choosing the elements and s/he may simply not choose particular elements to talk about.

One way in which individual constructs are refined is through iterative interactions with those constructs and a way of achieving this is through the use of *laddering*. Laddering originated in the doctoral thesis of Hinkle (1965) and can be used during construct elicitation. During the conversation, laddering is used when the researcher feels it could be helpful to push the level of the conversation into a more detailed description of the construct. Continuing to ask the ladder question 'why?' may result in superordinate constructs (see Appendix 8.1, p 228) which identify critical dimensions of the participant's value system with regard to the topic under investigation.

4. Analysis and interpretation

Once constructs have been elicited, the results are open to several types of analyses. One possibility is an analysis of the conversations of the types of constructs offered, which is based upon assumptions about the similarities of meanings of the constructs or a visual inspection of the similarities of pattern between elements and constructs.

The type of analysis chosen for the current study was based on the purpose of the study and the practical feasibility of implementing particular analyses. The researcher began with the recording of the conversation(s) followed by an in-depth analysis of the transcript(s).

A number of researchers have detailed a range of ways to analyse any sort of conversation. As Heritage (1984) puts it:

> Specifically, analysis is strongly 'data-driven' – developed from phenomena which are in various ways evidenced in the data of interaction. Correspondingly, there is a strong bias against *a priori* speculation about the orientations and motives of speakers and in favour of detailed examination of conversationalists' actual actions. Thus the empirical conduct of speakers is treated as the central resource out of which analysis may develop.
>
> (Heritage, 1984, p 243)

Sacks (1992) once pointed out that in analysing a conversation we are only reminding ourselves about things we already know:

> I take it that lots of results I offer, people can see for themselves. And they needn't be afraid to. And they needn't figure that the results are wrong because they can see them ... As if we found a new plant. It may have been a plant in your garden but now you've seen it's different than something else. And you can look at it to see how it's different, and whether it's different in the way that somebody has said.
>
> (Sacks 1992, I, p 488)

However, the way the analysis of a conversation obtains its results is rather different from how a researcher might intuitively try to analyse talk. Peräkylä (2004) depicts the careful inductive method used in analysis in terms of the following stages:

- Explore the data in an unstructured way (without any initial hypothesis)
- Indentify some phenomenon worthy of further study
- Establish how this phenomenon occurs in varying ways in the data
- Try to account for this variation.

Sacks (1992) also suggested that the analysis of conversation does not require exceptional skills. As he puts it, all a researcher needs to do is to:

> begin with some observations, then find the problem for which these observations could serve as ... the solution
> (Sacks, 1992, II, p xlviii)

Once each conversation is transcribed it can then be analysed by the process of open coding (Strauss and Corbin, 1990) where the text is read reflectively to identify, in this study, the participants' personal constructs (see Appendix 8.10, pp 250 - 260). This type of coding requires every line to be read and whatever might be potentially useful coded for analysis. The idea is to force analytic thinking whilst keeping close to the data. According to Charmaz (2008):

> Line-by-line coding prompts you to remain open to the data and to see nuances in it.
> (Charmaz, 2008, p 50)

One of the dangers of coding is that of importing the researcher's own motives, values and preoccupations into the codes and analytic scheme produced. This can be addressed by asking the participants to verify the analysis (respondent validity). One of the advantages of line-by-line coding is that is forces the researcher to pay close attention to what the participant is actually saying and to construct codes that reflect their experiences of the world, not the researcher's or that of any presupposition the researcher might have. It can help identify implicit concerns as well as explicit statements (Charmaz, 2008). On the other hand, line-by-line coding does not mean the researcher should simply accept the participant's views of the world. It is important that the researcher be analytical and theoretical in the coding. Also coding should remain grounded in the data in the transcript and all should be confirmed and agreed by the participant. For this study engaging in line-by-

line coding helps refocus the researcher for the post-experience conversations.

Memoing is another useful tool in this type of analysis and is essentially the researcher writing memos to oneself regarding insights one derives from coding and reflecting on the data. During this memoing stage, the researcher creates, defines and refines conceptual categories, making tentative notes about links between concepts (see Appendix 8.11, pp 261 - 280).

3.4 Methods of this study

Preliminary work

In order to identify a strategy for the research study preliminary work was carried out over 18 months and used a range of methods (Bevins, *et al.*, 2007). The analysis of the findings from this resulted in the final approach that was adopted. This work included a questionnaire, focus group discussion and individual semi-structured interviews. This work took place a year before the current study and with undergraduate students with similar backgrounds but from a different cohort.

The questionnaire

All of these students (n=70) were given a questionnaire (see Appendix 8.2, p 229 - 230) to be completed throughout their experience. By analysing the returned questionnaires it was anticipated that themes would emerge which would generate interview questions for the second phase of the preliminary study. The reason for the questionnaire as a starting point was its impersonal nature together with better critical detachment; the approach does not change according to how the replies develop being the same for each respondent. Also the person posing the questions is remote so that the respondent may feel more relaxed when answering the questions. For this study, the self-administered questionnaire was chosen as the primary research tool, principally to gain responses from a larger number of participants than interviews could attain. Of course, there are disadvantages to relying on this method of investigation,

e.g.:

- There is no opportunity to help respondents if they are having difficulty in understanding the question
- There is no opportunity to probe respondents to expand on an answer
- There is the danger that respondents get tired and/or bored of answering questions, especially if they think they are not relevant to them
- Respondents are able to read the whole document before they start answering and so the questions are not truly independent of each other as they are in an interview
- There is no opportunity to collect additional data.

However, because this approach was designed to help develop the questions for an interview schedule, the researcher decided that the advantages outweighed the disadvantages at this point. Another issue to be considered was that of response rate because a low response rate could be criticised as unrepresentative. In his examination of published studies in the field of organisational research in the years 1979 – 1983, Mitchell (1985) found a range of response rates of 30 to 94%. Although writers such as Mangione (1995) may regard response rate of 30% as unacceptable, it can be argued that if the work is based on a convenience sample, a low response rate is less significant. In this preliminary work, the students were asked to complete the questionnaires as part of their record keeping but it was not a mandatory part of their placement and so the response rate could reflect the voluntary nature of its administration.

Reliability and validity of questionnaires

A reliable questionnaire is one that would give the same or similar results if used again with the same group and its validity relies first and foremost on its reliability. According to Bryman (2004), the measurement validity of questions in interviews and questionnaires can be improved by various methods. The first, and perhaps most common method, is known as *face validity*, whereby the researcher thinks hard about whether the questions indicate the intended concept. The assessment of face validity may be helped by asking people with practical or professional knowledge of the area

to assess how well questions indicate the concept, including their judgements of how comprehensively the various aspects of the concept have been covered. The questionnaire was given to a colleague to examine and comment on, making changes as necessary. It cannot be ignored that questionnaires have been described as lacking in validity because, for example, participants may lie or give answers that they think are desired. By conducting interviews this criticism was addressed. It should be noted, however, that the main purpose of the questionnaire was to help generate interview questions for the next phase of the preliminary study.

Analysis of the questionnaires was by means of a coding system derived from the work of Lofland (1971, pp 14 – 15) who devised a classification of 'social phenomena' on which it would be possible to build a coding scheme – acts, activities, meanings, participation, relationships and settings. The process is analytical requiring review, selection, interpretation and summarising of the information without distorting it. A frequency tally of responses was generated for about 10% of the open-ended questions in the questionnaires as a preliminary to generating coding classifications. Having devised a coding frame, a further check on its validity was made by using it to code the remaining questionnaires. The analysis now required searching for patterns and themes and explanations of why and how these occurred, i.e. there was a need to pull together all the coded information into more compact and meaningful groupings. Pattern coding was used as this reduces the data into smaller analytical units such as themes, causes/explanations, relationships among people and emerging concepts to allow for the development of a more integrated understanding of the situation being studied. From this analysis an interview schedule was compiled (see Appendix 8.4, p 242) for use with a sample of students.

Five participating students volunteered from the main cohort of 70 SAS students and they represented different gender, ethnicity and socio-economic backgrounds. An inductive approach was used to gather data. The overall aim of the process was to develop an investigative strategy from the

questionnaire findings. From the results of these questions themed focus group questions were devised.

Focus group interviews

The questionnaire was followed by individual interviews which aimed at reinforcing and, eventually establishing the meaning and importance of the different sections in the questionnaires. These sections explored the students' thoughts before the school placement, during the placement and on completion of the placement. By trying to redefine these sections in a more generalised form, it was hoped to extend them from the immediate data available.

During the process, further thought was given to the interconnections between the categories and to their theoretical implications. The perceived links between categories could then be tested in hypothetical form in the field (i.e. the actual research situation). In other words, the process would consist of a continuous comparison of data and theoretical model throughout the research process.

The five participants were interviewed through a semi-structured format (see Appendix 8.4, p 242) and were engaged in reflective discussion with the interviewer. Constant comparison of the questionnaire and interview data sets enabled the development of systematic coding (line by line and focused) which illustrated the students' perceptions as well as what structures and cultural values influenced them. Analytic categories were developed to identify emerging theory. The codes produced were then reanalysed, deleted or reorganised. This allowed for constant comparison of data.

Care was taken, after transcription, to get confirmation from each interviewee that the transcript was an accurate record of the interview. Prior to each individual interview the participants took part in a group discussion. This offered them the opportunity to share their experiences and brainstorm some issues. The approach used was that of Nominal Group Technique (NGT). NGT operates in four stages:

1. Generation of ideas: each individual in the group silently generates ideas and writes them down.

2. Recording ideas: group members engage in a round-robin feedback session to concisely record each idea.

3. Discussing ideas: each recorded idea is then discussed to obtain clarification.

4. Voting on ideas: individuals vote privately on the ranking of the ideas, and the group decision is made based on these rankings (Dunham, 1998).

The developers of the technique state that it is not designed for routine meetings or for negotiating or bargaining. Rather, its focus is '*judgemental* decision making' (Delbecq, *et al.*, 1975, emphasis in original):

> The central element of this situation is the lack of agreement or incomplete state of knowledge concerning either the nature of the problem or the components which must be included in a successful solution. As a result, heterogeneous group members must pool their judgements to invent or discover a satisfactory course of action.
>
> (Delbecq, *et al.*, 1975, p. 5)

Its specific purposes have been described as follows:

- To increase creativity and participation in group meetings involving problem solving and/or fact-finding tasks
- To develop or expand participants' perceptions of critical issues within defined problem areas
- To identify priorities among selected issues within a problem area, considering the viewpoints of differently-oriented groups (Pfeiffer and Jones, 1975).

NGT is an integrative method and it is particularly useful for synthesising judgments where different types and extent of knowledge and/or a diversity of opinions exist on a problem or issue. Participants need to have a commitment to dialogue and a willingness to accept the outcomes of the group process, even if the outcomes do not match the position they initially brought to it.

NGT combines some of the advantages of the Delphi technique[5] and face-to-face interaction. Like the Delphi technique, it is structured in such a way as to give each participant an equal say, hence avoiding the differences that often impact on face-to-face group decision making processes. In addition, operating face-to-face means that participants have opportunities, through verbal and non-verbal communication better to understand the judgments expressed by other participants.

NGT is also a useful means of establishing a consensus and is a good way of prioritising issues. In this focus group situation, the participants were asked to think about their placements and then answer the following question: 'Which five actions, activities and/or influences had the most impact on your placement?' They each wrote down their five points (without any discussion). As a group then they shared their individual points and after some discussion a new and agreed list of five was compiled. That done each participant was asked to score each point in terms of priority with 5 marks being awarded to the highest priority issue and 1 mark to the lowest. The result is a consensus answer to the original question (see Appendix 8.5, p 243).

The issue that scored the highest mark and the one with the lowest was then discussed by the whole group with the students drawing on their own experiences to elaborate their comments. Each participant then had a 30 minute interview and it was during this time that the remaining three issues were discussed in a similar way by the participants left in the room (see Appendix 8.6, pp 244 - 248, for the discussion 'brainstorms' completed for each of the five agreed issues). These brainstorming sessions were recorded and transcribed for future reference.

[5] The Delphi technique has been described as 'a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem' (Linstone & Turoff, 1965, p 3)

Validity and reliability in interviews

According to Cannell and Kahn (1968), in interviews, inferences about validity are made too often on the basis of face validity i.e., whether the questions asked look as if they are measuring what they claim to measure. One way of validating interview measures is to compare the interview measure with another measure that has already been shown to be valid. This kind of comparison is known as 'convergent validity'. If the two measures agree, it can be assumed that the validity of the interview is comparable with the proven validity of the other measure. Perhaps the most practical way of achieving greater validity is to minimise the amount of bias as much as possible. The sources of bias are the characteristics of the interviewer, the characteristics of the respondent, and the more substantive content of the questions. More particularly, these will include:

- The attitudes, opinions and expectations of the interviewer
- A tendency for the interviewer to see the respondent in her/his own image
- Misperceptions on the part of the interviewer of what the respondent is saying
- Misunderstandings on the part of the respondent of what is being asked.

A way of controlling reliability is to have a highly structured interview, with the same format and sequence of words and questions for each respondent (Silverman, 1993), though Scheurich (1995) suggests that this is to misread the infinite complexity and open-endedness of social interaction (Scheurich, 1995, p 241 – 249). Controlling the wording is no guarantee of controlling the interview. Oppenheim (1992) argues that wording is a particularly important factor in attitudinal questions rather than factual questions (Oppenheim, 1992, p 147). He suggests that changes in wording, context and emphasis undermine reliability, because it ceases to be the same question for each respondent. Indeed he argues that error and bias can stem from alterations to wording, procedure, sequence, recording and rapport. Silverman (1993) suggests that it is important for each interviewee to understand each question in the same way. He suggests that the reliability of interviews can be enhanced by careful piloting of interview schedules. On

the other hand, Silverman (1993) also argues for the importance of open-ended interviews, as this enables respondents to demonstrate their unique way of looking at the world – their definition of the situation. It recognises that what is a suitable sequence of questions for one respondent might be less than suitable for another, and open-ended questions enable important but unanticipated issues to be raised.

Oppenheim (1992) suggests several causes of bias in interviewing, for example:

- Biased sampling
- Poor rapport between interviewer and interviewee
- Changes to question wording (e.g. in attitudinal and factual questions)
- Poor prompting and biased probing
- Alterations to the sequence of questions.

In his critique of the interview as a research tool, Kitwood (1977) draws attention to the conflict it generates between the traditional concepts of validity and reliability. Where increased reliability of the interview is brought about by greater control of its elements, this is achieved, he argues, at the cost of reduced validity. He goes on to suggest that a solution to the problem of validity and reliability might lie in the direction of a prudent compromise.

The analysis of the questionnaire data and the interviews resulted in the development of the tools that would form the basis of the main study. Since the present study is investigating perceptions and how these perceptions might change as a result of a practical experience the methodology chosen was that of Personal Construct Theory. By analysing the findings from the questionnaire and the interview transcripts, the first set of elements were devised and these were then piloted with two undergraduate students from the same cohort as the final five participants.

3.5 The study

The study was carried out in the academic year 2008/9.

The participants

The five participants were volunteers from a cohort of undergraduates who had enrolled to take part in the Student Associates Scheme (SAS) for the academic year 2008/9. As part of the SAS recruitment process all undergraduates volunteering were interviewed and in the course of this interview each student rated their interest in teaching as a career on a scale of 0 to 10 where 10 was *already decided to teach* and 0 was *very unsure about teaching as a career.* These ratings were used as a guide when selecting students to take part in the study. Five undergraduates agreed to take part and signed a consent document (see Appendix 8.8, p 245). Their details are summarised in Table 1:

Table 1 Summary of participant details

Name	Gender	Year of study	Area of study	Date of recruitment interview	Interest rating	Date of pre-experience conversation	Date of post-experience conversation
M	F	3rd	Psychology	03.03.09	4/5	08.05.09	24.06.09
N	F	3rd	Psychology	04.11.08	6	23.01.09	08.08.09
R	F	3rd	Food & Nutrition	04.11.08	10	21.01.09	08.07.09
C	F	4th	Food & Nutrition	04.11.08	9	27.01.09	09.07.09
W	M	4th	Mechanical & Civil Engineering	02.03 09	4	08.06.09	06.07.09

The elements

Using the findings from the questionnaire and the interviews and supported by literature in the field, elements were chosen to be used as the basis for the pre and post- experience conversations to be held with the participants. These elements were as follows:

1. A role model whom I admire
2. My worst teacher
3. Myself as I would like to be
4. Teaching as a career
5. Myself as a teacher
6. My best teacher

7. The ideal teacher
8. Myself as I am
9. The ideal career

Piloting the conversation

To test the suitability of the choice of elements two pilot conversations were carried out with two students chosen at random from the same cohort of SAS volunteers. The conversations were 30 minutes in duration and the students were asked to comment on the suitability of the elements. They both agreed that they could understand them easily without any confusion. The only change made for the final set of cards was to number them. This was not to indicate any order or hierarchy but to make it easier during the conversations for the researcher to note down participant choices without having to write out the full statements every time. Also, a simple table was devised for the researcher to complete that would not distract from involvement in the conversation (see Appendix 8.9, p 251).

Conducting the conversation

Each conversation was held in a small, private room and time was taken to ensure the participant felt comfortable with the surroundings and with the conversation being recorded.

Prior to beginning the first conversation the purpose of the study was explained to each participant and care was taken to ensure that they each understood what they were going to be asked to do. This included showing them the full set of cards and allowing them some time read the statements and ask any questions that they may have before starting. Each participant was told that the conversations would be recorded and that after transcription they would be given a copy of the transcript for comment.

1. Pre-experience conversation

The procedure used for the pre-experience conversation was identical in all five participants. The participant was asked to choose three of the cards and

arrange them such that they had placed two together that they felt were similar with the third separated from them. The researcher then asked the participant to talk about the two that had been placed together – why s/he felt they went together, what they meant to her/him. Prompt questions (laddering questions) that explored deeper into what the participant was saying were used, sometimes to the point where the participant said s/he could not think of anymore to say.

Attention was then turned to the statement that had been separated out as being different from the pair already discussed. The participant was asked to elaborate on this statement paying particular attention on why it had been separated out. When it was felt that discussion of this triad of statements had been exhausted, the participant was asked to change one of the cards and the process repeated. When each of the original three cards had been replaced and discussed the participant was asked to choose a completely new set of three and the whole process repeated. This was repeated between five and nine times depending on each participant's ability to continue. The end of the conversation was considered to be the point at which the participant felt they could make no more element combinations. On average these pre-experience conversations took 45 minutes.

2. Classroom experience

Each participant spent 15 days in a secondary school for their SAS placement. During this time they were expected to complete a number of tasks and address a range of issues within the context of being a teacher (see Appendix 8.12, pp 281 - 289). They worked under the guidance of a mentor who was an experienced teacher in the school and who had the responsibility of verifying that they had successfully completed all that was expected of them during their placement. The record of this was in the form of a Reflective Journal which was completed and signed by both the student and the mentor (not analysed for this study). For the purpose of this study the participants were asked to keep a note of any critical incidents they felt were significant.

3. Post-experience conversation

It was explained to each participant that s/he would be presented with her/his original triads of elements in turn and asked to talk about them using the same process as before. However, s/he was not to try and remember what s/he had said the first time but to draw from his/her school experience wherever possible to illustrate what s/he wanted to say. Again the conversations took around 45 minutes.

Kelly's corollaries

Part of the analysis was to examine which of Kelly's (1991) corollaries appeared to be reflected in the participants' constructs, in particular the Experience, Organisation and Construction Corollaries (see Appendix 8.7, p 249).

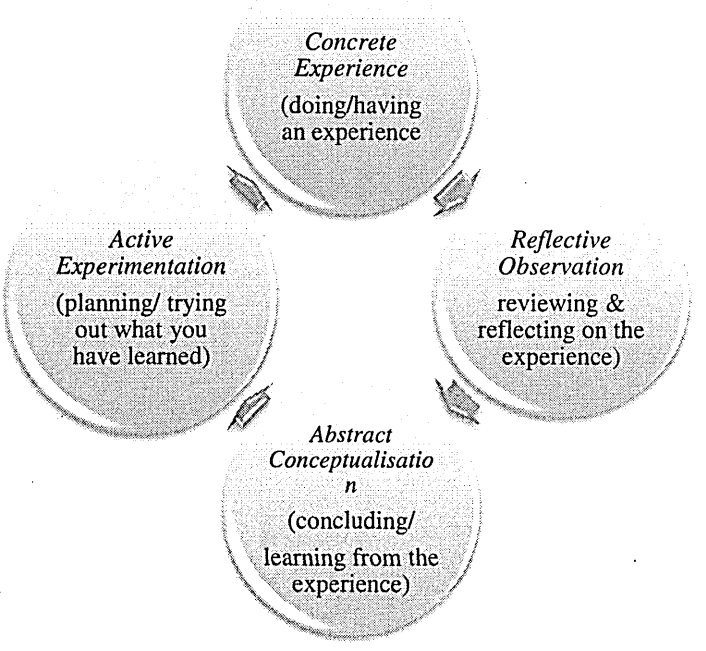
Perhaps the most relevant feature drawn from Kelly's clinical work was his emphasis on adopting what he called a *credulous approach* or uncritical observer approach towards whatever the participant mentions. This means specifically not to disregard any of the participant's discourse and rather to see through the participant's eyes. At the same time it is important not be misled by any of the participant's idiosyncrasies. In other words, the researcher must balance objectivity with not disregarding anything the participant is saying.

The credulous approach is evident in the conversation approach used in this study from the outset, i.e. prompting each participant to talk about her/his thoughts on teaching and the role of the teacher. It was maintained throughout each conversation by asking each participant for her/his thoughts and opinions on each of the triadic combinations chosen. This ensured researcher objectivity.

Particular contexts and people are the most frequently used elements in PCP research (Fransella, 2003). This is not surprising given that Kelly (1991) highlighted in the experience cycle (See Figure 4), which is based on the

experience corollary, the central role that contexts or events play in the development and modification of personal constructs.

Figure 4 Experience Cycle



This is due to the drive to make sense of human behaviour by interpreting it within the context in which it occurs. Because of the constant and continual engagement with the external there is constant encouragement to actively seek out, describe and evaluate the phenomena experienced in an attempt to anticipate and predict what will occur in the future (Kelly, 1991).

People are also another important element in PCT research and as with most things in life, there will always be individuals who are perceived as being high in a construct and those who are not, and individuals will import characteristics of these individuals from encounters with them. By using elements that require the participants to talk about such people the research attempts to reveal a deeper understanding of these characteristics. As expounded by the *construction corollary*, it is the regularities and inconsistencies of certain contexts and people that represent characteristics

that encourage the development of constructs that relate to certain phenomena (Kelly, 1991).

The *organisation corollary* also needs to be considered when trying to understand the meanings people ascribe to a psychological phenomenon. According to this corollary, constructs are organised into a hierarchical system with some constructs being more personally important (superordinate) than others (subordinate; Kelly, 1991). The purpose of this hierarchical organisation is to reduce the chaos of the external world and provide the individual with clear avenues of inference and movement. Accordingly, people do not only differ in their interpretation of events but also in the importance they place on certain constructs within their system. Essentially then, this research aimed to understand the relationships between the constructs identified as keys to understanding teaching and the role of the teacher.

By asking the participants to rank the constructs in order of importance it was possible to identify preliminary information about their superordinate and subordinate constructs.

Transcribing

Each conversation was carefully transcribed by the researcher. It was felt that this was the best approach as it gave the researcher another opportunity to experience the conversations. As these transcriptions were made as soon after the recording as possible it offered the researcher the opportunity to add any additional information such as body language, etc that had been noted /noticed during the conversation. For example, a participant might shuffle in their chair and look uncomfortable without actually saying anything and this could be missed.

Each participant was asked to read through the transcripts of both the pre and post-experience conversations and comment. All five agreed that the transcripts were true records of the conversations.

Transcript analysis

Each participant's two conversations were analysed using line-by-line coding and the resulting personal constructs developed (see Appendix 8.11, pp 261 - 280, for an example).

Critical incident records

Each participant was given a USB flash drive and asked to note down any incidents experienced or witnessed that they felt were important. Care was taken when asking the participants to do this, pointing out that a critical incident is not just a negative occurrence but could be experience of something that was positive in nature.

3.6 Ethical considerations

The study was carried out with close regard to all ethical and legal considerations. Using the guiding principles of the Declaration of Helsinki (2008) the study adopted the fundamental and widely accepted principles which are broadly categorised as:

- Beneficence ('do positive good') and non-malfeasance ('do no harm'):
  Concern for the interests of the participants always prevailed over the interests of the research. In particular, during the conversations care was taken to ensure that the participants never became distressed by the topics under discussion and each knew they could terminate the conversation at any time.
- Informed consent:
  Each participant was adequately informed of the aims and methods of the research and written consent was obtained. All the participants were volunteers chosen by a third party (the SAS project manager); there was no inducement to take part and participants were informed they could withdraw at any time. All participants were informed of the institutional affiliations of the researcher. The fact that the researcher had been the manager of the SAS project at an earlier time did not affect the impartiality of the research. By keeping a critical distance from the SAS project there was no possibility of the types of social and ethical issues

raised by, for example, Ravetz (1996) in his study, *Scientific Knowledge and its Social Problems*. However, the detailed knowledge of the project at an operational level, e.g. times of recruitment and placement of the volunteers, was helpful in planning the research. At the conclusion of the study all the participants were informed of the outcomes and offered an opportunity to comment.

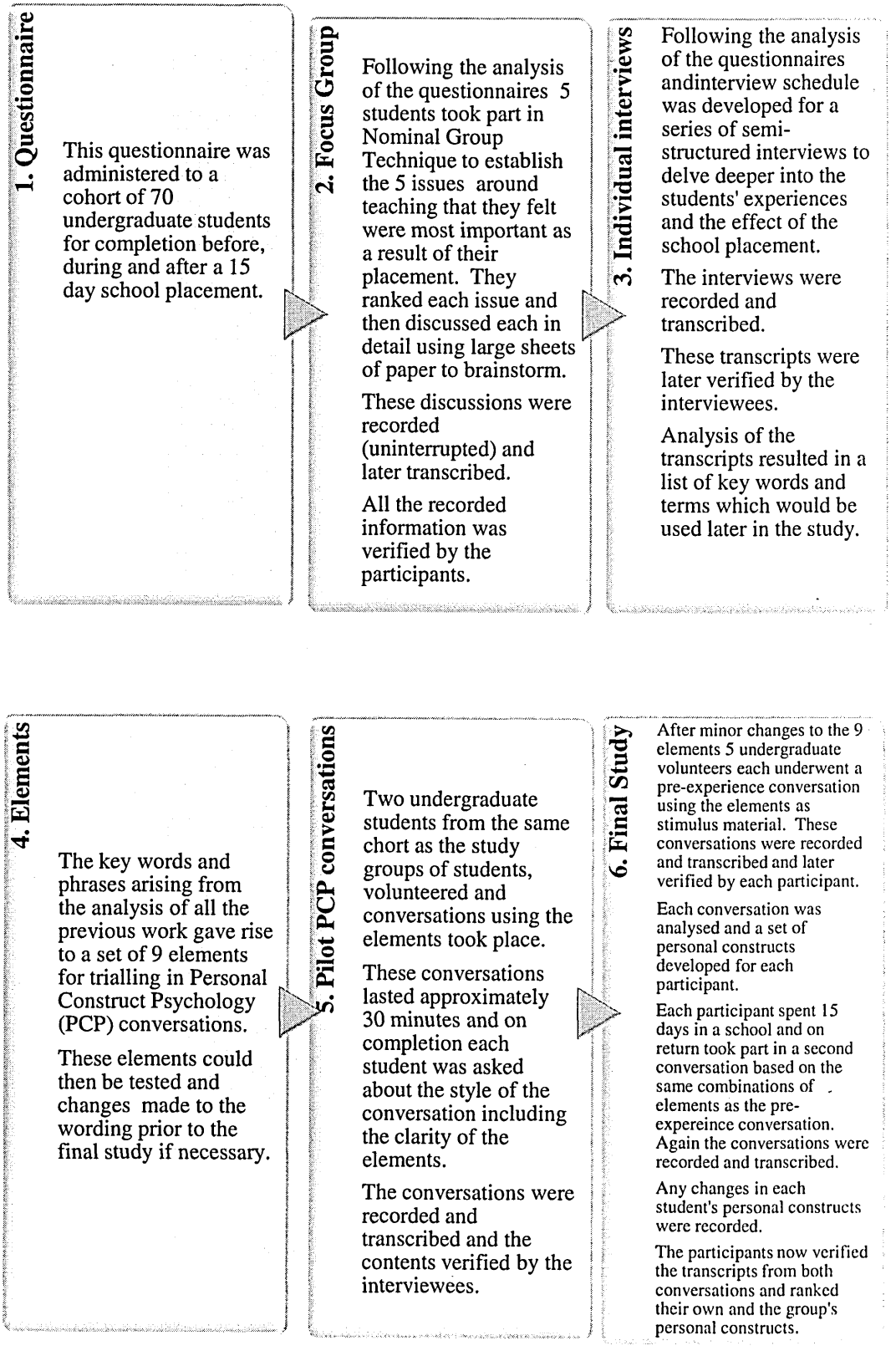
- Confidentiality/Anonymity:

  The study conformed with the legislation relating to data protection with details that would allow the participants to be identified not published in the study report and all steps were taken to ensure that all confidential details were kept in a secure location. Where email was used to share information this was on an individual participant basis or if it was across all the participants no individuals were identifiable.

Summary

It can be seen that the foregoing account of PCT has provided a theoretical and practical basis for the development of the empirical research tool which used a triadic elicitation technique. This empirical approach has been set within a broader ethical context in which the researcher's distance from the research subjects has been outlined. This was particularly important given the researcher's prior involvement with the Student Associates Scheme (SAS) project.

Figure 5 Summary of the process



4. Findings

This chapter opens by outlining the influence that the findings from the preliminary phase had on the development of the approach adopted in the final study. The following discussion indicates how these findings illustrate and support the decisions made in the development the final research instrument – the Personal Construct conversation. The chapter includes collective findings which outline the modifications to the participants' belief systems and which are then developed in the ensuing case studies.

4.1 Questionnaire – key responses.

(See Appendix 8.3, pp 231 - 241, for a summary of the questionnaire findings).

Response Rate = 37% (n = 70)

All the respondents remembered enjoying their time as pupils with 42% citing the importance of having friends around them. Very few were able to find anything they remembered disliking when they were at school. Of those who did, the dislikes fell into two categories – their teachers and the lessons.

It was clear that all the respondents liked lessons that were active but it seemed that many of the respondents' (79%) experiences as pupils were those of teacher-led/didactic lessons.

'Respect' appeared somewhere in almost all the answers to question 5 (*Personal experiences*) whether it was because of the positive relationships between teachers and pupils or because of the perceived lack of it. The decisions about what to study further were overwhelmingly those of enjoyment and interest combined, in many cases, with achievement. In a number of cases this was attributed to the personalities and teaching styles of individual subject teachers. (These findings suggested that elements labelled best and worst teachers and the ideal teacher should be included in the final study).

Half of the respondents had family members or friends who were teachers and 72% had been involved with schools in some way since leaving for university. A quarter of the respondents cited teaching as a long term ambition with only 17% of all respondents stating that, as a child, they had been unsure. The remainder had originally had other careers in mind and these included being a vet, the law, medicine and business. (These findings suggested that an element linked with the ideal career and teaching as a career should be included in the final study).

Some respondents were very sure that the teacher-pupil relationships were better than they remembered while the remainder felt they had not changed. None felt that things had got worse. There was a strong feeling that pupils' attitudes to learning were either positive (68%) or the same as when the respondents were at school (16%).

Question 5 (*During the placement*) triggered a range of responses but 37% of respondents included the issue of 'role reversal' in their answers with many seeing themselves as role models. (These responses suggested an element related to role models and how the participants saw themselves in the future should be included in the final study). Less formal (47%) and no different (37%) was how the respondents described the school environment. The respondents' answers implied that they considered change in the school environment as being a good thing.

When asked if the placement had changed their perceptions of schools, teaching and learning (*Afterthoughts*), 68% of the respondents stated that it had, with 89% affirming their commitment to teaching as a career. (These responses suggested an element related to how the participants in the final study might see themselves as teachers). They all agreed that the placement afforded them a better understanding of the work of a teacher with 94% also agreeing that this was different from the perceptions they held when they were pupils.

Only 11% thought that teaching should not be considered a profession similar to, for example, a doctor. 61% thought that it should be while 28% considered it to be different and they should not be compared.

Given the respondents' earlier observations on the importance of inspiring/motivating teaching, it is perhaps not surprising that 67% cited being able to encourage learning as a key challenge with the issue of classroom management also scoring quite highly (56%).

It may be a measure of the teachers who volunteered to work with the students but 83% of the responses indicated teacher job satisfaction and a caring attitude as important.

Finally, 83% stated that they considered teaching as something they would like to do.

4.2 Focus Group Findings

Five key themes emerged from the Nominal Group Technique (NGT) as shown in Table 2 (see Appendix 8.5, p 243), for examples of individual respondents' lists. It was agreed by the respondents, during group discussion, that these five themes represented their key perceptions, views and/or concerns about their placement experience.

Table 2 Emerging Themes from the NGT

Issue	Score	Position
"Buzz" of teaching and pupil's responses	14	1st
Teaching/helping to teach	12	2nd
Teachers - helpful and supportive	10	3rd
Teaching styles and activities	6	4th
Placement scheme in general	3	5th

4.3 Individual Interviews

The semi-structured interview schedule (see Appendix 8.4, p 242) was developed from analysis of the questionnaire and the issues that arose from

the focus group and resulted in an in-depth analysis of individual experiences. There is no space here to include a full analysis of all the interviews, but below is an example of the how the analysis was carried out. In this case, some of the points raised around the most 'popular' issue:

"Buzz" of teaching and children's responses

The respondents ranked the 'buzz' of teaching the top response of the five emerging themes. The respondents defined 'buzz' as an intrinsic satisfaction gained from successful teaching and this, in turn, was defined by pupils' responses to that teaching:

> It's that feeling you get when you know something has gone right. I actually got children asking me to stay and become a teacher in the school. For me that was the buzz.
>
> (Placement student)

Further exploration of the theme, during the focus group discussion and interviews, revealed a sense of doing 'good work' in the classroom which was immediately endorsed through positive pupil responses. This resonates with the work of Csikszentmihalyi (1997) whose concept of 'flow' examines the intrinsic motivation and satisfaction achieved by individuals when completely immersed in activity. It also supports the view that the motivation for teaching is often altruistic (e.g. Brown, 1992; Cheune, *et al.*, 1999; Kyriacou and Kobori, 1998; Kyriacou and Coulthard, 2000). The respondents felt that being able to engage in, what they termed as, 'real teaching' (classroom delivery of a topic and associated activity as opposed to simple observation of a practising teacher) enabled them to become completely involved in the classroom experience. While, for some, this was an unnerving experience at first they found that positive responses from pupils through interactions offset their fears and enabled them to become completely focused on their delivery and achieve a 'buzz':

> And it's all about the kids, if you're not going to get the buzz from teaching them, or feel happy about teaching them you're not going to teach them well. It will be really boring.
>
> (Placement student)

4.4 The conversations

The nine elements used to stimulate conversation with each participant in the main study arose from the analysis of all the previous work in the preliminary phase. These elements were trialled with two students from the same cohort as the study group before the main study commenced to ascertain their suitability.

Each participant in the main study was then engaged in conversation and the analysis of each of these conversations resulted in a number of bipolar constructs for each participant. These were used to stimulate a similar type of conversation with each participant after the school experience.

Comparisons were made between the individual pre and post-experience conversations but also patterns across all the participants' responses were analysed:

Table 3 Participant N's pre-experience conversation

1	**My best teacher** • Teaching style appealed • Encouragement • Treated everyone the same • Clarity in teaching • Respectful • Friendly	**The ideal teacher** • Uniform treatment of pupils • Approachable • Enjoyable lessons • Enjoyable & encouraging • Respectable/well-behaved	**My worst teacher** • Did not encourage • Not conscientious • Lacked personal control • Lacked physical control
2	**The best teacher** • Teaching style appealed • Encouragement • Treated everyone the same • Clarity in teaching • Respectful • Friendly	**The ideal teacher** • Uniform treatment of pupils • Approachable • Enjoyable lessons • Enjoyable & encouraging • Respectable/well-behaved	**Myself as I am** • No classroom management skills • No classroom presence • Want to be a role model & encouraging
3	**Myself as I would like to be** • 'The best that I can be' • Positive relationship with pupils • Pupils enjoy lessons & respond to encouragement • Not didactic as this equals tedious • Have boundaries & ground rules	**The ideal teacher** • Need to be adaptable • Importance of asking questions	**Myself as I am** • No classroom management skills • No classroom presence • Want to be a role model & encouraging
4	**The ideal teacher** • Supportive • Need to be adaptable • Importance of asking questions	**Teaching as a career** • Enjoyment • Fulfilling • Feeling of achievement • Rewarding • Good pay & conditions	**Myself as I am** • 'Not there yet' • Teaching only recent consideration • Lacks confidence • Not a long-term career • Lot to learn
5	**The ideal career** • NOT self-employment	**Teaching as a career** • Enjoyment • Fulfilling • Feeling of achievement • Rewarding • Good pay & conditions	**A role model whom I admire** • Father/entrepreneurial • Confident • Risk-taking • Committed • Successful/achievement • Selfless • Stressed
6	**The ideal career** • Good pay & conditions • Less financial stress • Good work environment	**Myself as I would like to be** • Have good teacher/pupil relationships • Working with children • Have aspirations	**Myself as I am** • 'Not there yet' • Teaching only recent consideration • Lacks confidence • Not a long-term career • Lot to learn

Table 4 Participant N's post-experience conversation

1	**My best teacher** • Punctuality to lessons • Whole class teaching • Good classroom management • Personal teaching style	**The ideal teacher** • No favouritism • Different teaching approaches • Enjoyable lessons • Differentiated teaching • Motivational teaching	**My worst teacher** • Could be manipulated by pupils
2	**The best teacher** • Punctuality to lessons • Whole class teaching • Good classroom management • Personal teaching style	**The ideal teacher** • No favouritism • Different teaching approaches • Enjoyable lessons • Differentiated teaching • Motivational teaching	**Myself as I am** • Low confidence • Poor classroom presence • Lack of subject knowledge • Varied teaching styles, e.g. whole class, group work • Improved classroom presence • Interesting • Improved control • Increased confidence
3	**Myself as I would like to be** • Recognition as a teacher • Subject knowledge confidence	**The ideal teacher** • No favouritism • Different teaching approaches • Enjoyable lessons • Differentiated teaching • Motivational teaching	**Myself as I am** • Classroom management concerns • Subject knowledge concerns
4	**The ideal teacher** • Teamwork • Passion for teaching • Passion for subject • Mutual support	**Teaching as a career** • Less sure that teaching is NOT a career choice • Surprised at enjoyment • Making a difference • Motivating pupils	**Myself as I am** • Aspires to improve as a teacher • Enjoyed teaching • Felt needed • Importance of 'vocation'
5	**The ideal career** • Teamwork • Passion for teaching • Passion for subject • Mutual support	**Teaching as a career** • Concept of teaching • Importance of good classroom management	**A role model whom I admire** *Not available*
6	**The ideal career** • Got to be rewarding • Not routine; always changing • Teaching = job security • One-to-one teaching	**Myself as I would like to be** • With the ideal career • Original plans to change career - not so sure • Making a difference	**Myself as I am** • Surprise at enjoyment • Surprise at confidence • Improved self-esteem • Made the right decision to try teaching

(See Appendix 8.10, pp 252 - 260, for remaining pre and post-experience data).

All the participants' emergent and contrast poles changed in some way as a result of the school experience. This was not just a change in wording but there was also evidence of a change in understanding.

The pre-experience constructs were strongly influenced by the participants' experiences as pupils. The one exception was participant W who has a number of family members who are teachers and this gave him a different perspective. All the post-experience constructs showed a much clearer and deeper understanding of teaching and the role of a teacher in the classroom.

When the participants were talking about reasons for teaching there was little difference in total numbers between the three categories of altruism, intrinsic and extrinsic reasons, with 19 altruistic comments, 19 intrinsic comments and 14 extrinsic comments. However on an individual participant level there were some significant changes (see Case Studies, pp 119 - 164).

In all pre-experience conversations there was a strong link between the participants' descriptions of their 'best teacher', often described as their favourite teacher, and their subsequent subject choice. In the case of the 'worst teacher', the opposite was found.

The conversations around best and worst teachers often provoked strong emotional responses. The school experience tempered this emotional response and resulted in more pragmatic views now based on experiences that placed the participants in the role of teacher rather than pupil.

Links were made to Kelly's 11 Corollaries (see Appendix 8.7, p 249) wherever possible and the results of this can be seen in each individual participant's case study.

4.5 Further detail

Two particular constructs emerged for 4 out of the 5 participants. These were 'Classroom Teaching' and 'Being a Teacher'. These were often generated from different combinations of elements but in both constructs the emergent and contrast poles showed some change between the pre and post-experience conversations:

Bipolar Construct - Classroom Teaching

Participant R

The emergent pole changed from *Inspirational* to *Professional* and the contrast pole changed from *Boring* to *Unprofessional* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'My best teacher'* and *'Myself as a teacher'* (emergent pole) and *'My worst teacher'* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

I want to be like my favourite teacher, she inspired me.
(Pre-experience)

Changed to

She was being professional.
(Post-experience)

Contrast pole:

I wasn't interested in his subject.
(Pre-experience)

Changed to

They've [teachers] got to keep their distance.
(Post-experience)

Participant C

The emergent pole remained the same as *Approachable* but the contrast pole changed from *Lacking confidence* to *Impatient* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'Teaching as a career'* and *'Myself as I am'* (emergent pole) and *My worst teacher* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

Approachable...
(Pre-experience)

Changed to

The ones that seemed to work well were the ones who were approachable.
(Post-experience)

Contrast pole:

I don't want to be someone that they don't like.
(Pre-experience)

Changed to

She said all the time there was no patience.
(Post-experience)

Participant N

The emergent pole changed from *Encouraging* to *Motivational* and the contrast pole changed from *Not conscientious* to *Being manipulated (by pupils)* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'My best teacher'* and *'The ideal teacher'* (emergent pole) and *'My worst teacher'* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

> She really encouraged me.
> (Pre-experience)

Changed to

> ... get to enjoy what they are doing and pay attention and not hate the lesson.
> (Post-experience)

Contrast pole:

> He didn't encourage anyone.
> (Pre-experience)

Changed to

> They knew they could push his buttons and they knew what they could get away with.
> (Post-experience)

Participant W

The emergent pole changed from *Inspirational* to *Confidence* and the contrast pole changed from *Not engaging* to *No classroom presence* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'The ideal teacher'* and *'A role model whom I admire'* (emergent pole) and *'My worst teacher'* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

> He took an interest in all of us.
> (Pre-experience)

Changed to

> He was a very confident teacher. He brought everything back to an example from real life which I thought was amazing.
> (Post-experience)

Contrast pole:

She tried her best to put me off.
(Pre-experience)

Changed to

They didn't command the class.
(Post-experience)

Bipolar Construct - Being a Teacher

Participant R

The emergent pole changed from *Approachable* to *Consistent* and the contrast pole changed from *Unhelpful* to *Inconsistent* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'The ideal teacher'* and *'Myself as a teacher'* (emergent pole) and *'My worst teacher'* (contrast pole) in the pre- experience conversation and re-presented in the post-experience conversation.

Emergent pole:

I would like to be what a student would describe as the ideal teacher.
(Pre-experience)

Changed to

I don't want to be the ideal teacher.
(Post-experience)

Contrast pole:

Doesn't isolate them.
(Pre-experience)

Changed to

The behavioural strategies were inconsistent.
(Post-experience)

Participant C

The emergent pole changed from *Being yourself* to *Confident* and the contrast pole changed from *Enthusiasm* to *Amenable* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'Teaching as a career'* and *'Myself as I am'* (emergent pole) and *'My best teacher'* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

She said I know you can do it.
(Pre-experience)

Changed to

There wasn't one day when I thought what shall I do?
(Post-experience)

Contrast pole:

She had a passion for her subject.
(Pre-experience)

Changed to

The kids thought that they could approach outside lesson.
(Post-experience)

Participant M

The emergent pole changed from *Communication* to *Skilful* and the contrast pole changed from *Still developing* to *Communication* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'Myself as a teacher'* and *'Myself as I would like to be'* (emergent pole) and *'Myself as I am'* (contrast pole) in the pre- experience conversation and re-presented in the post-experience conversation.

Emergent pole:

I am able to impart knowledge to others
(Pre-experience)

Changed to

The transferable skills you need in any occupation.
(Post-experience)

Contrast pole:

I'm willing to adapt. I'm willing to learn a lot more.
(Pre-experience)

Changed to

I know how to talk to children and how not to talk to children and I think that is very important.
(Post-experience)

Participant W

The emergent pole changed from *Apprehensive* to *Self belief* and the contrast pole changed from *Vocation* to *Clarity* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'Myself as I would like to be'* and *'Myself as a teacher'* (emergent pole)

and *'The ideal teacher'* (contrast pole) in the pre- experience conversation and re-presented in the post-experience conversation.

Emergent pole:

They didn't encourage me as much as they could have.
(Pre-experience)

Changed to

But I'm not him – I am who I am.
(Post-experience)

Contrast pole:

Those teachers who had come into it late and perhaps hadn't been sold on the idea to start with.
(Pre-experience)

Changed to

And then I think maybe I can do this.
(Post-experience)

The bipolar construct 'Myself' emerged for 3 out the 5 participants and showed change as a result of the classroom experience.

Participant R

The emergent pole changed from *Clarity* to *Reflective* and the contrast pole changed from *Uncertainty* to *Closed minded* between the pre and post-experiences conversations. These were elicited from the participant's choice of elements of *'Myself as I would like to be'* and *'A role model whom I admire'* (emergent pole) and *'Myself as I am'* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

Someone who is professional and successful.
(Pre-experience)

Changed to

I realise that there is more to it.
(Post-experience)

Contrast pole:

If I was unsuccessful at teaching.
(Pre-experience)

Changed to

She's easily frustrated ... when things don't go her way.
(Post-experience)

Participant C

The emergent pole changed from *Adaptable* to *Vocation* and the contrast pole changed from *Vocation* to *Unsure* in the pre and post-experience conversations.

These were elicited from the participant's choice of elements of *'Myself as a teacher'* and *'Myself as I am'* (emergent pole) and *'The ideal career'* (contrast pole) in the pre- experience conversation and re-presented in the post-experience conversation.

Emergent pole:

> Someone who is almost like an all-rounder.
> (Pre-experience)

Changed to

> This all I want to do.
> (Post-experience)

Contrast pole:

> I feel happy that it is the ideal career.
> (Pre-experience)

Changed to

> I'm such a worrier and anxious person.
> (Post-experience)

Participant M

The emergent pole changed from *More experience* to *Can offer more* and the contrast pole changed from *Giving not taking* to *Better that I thought* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'The ideal career'* and *'Myself as I would like to be'* (emergent pole) and *'Myself as I am'* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

> I'm in the stage where I'm still developing.
> (Pre-experience)

Changed to

> I probably didn't realise, without sounding big-headed, but, how much I have to offer.
> (Post-experience)

Contrast pole:

> I like to give … to give rather than to get something from it.
> (Pre-experience)

Changed to

> I've realised that I've got so much potential.
> (Post-experience)

Two bipolar constructs, 'Admirable Qualities' and 'Career Teaching' emerged for 2 out the 5 participants and showed change as a result of the classroom experience.

Bipolar Construct - Admirable Qualities

Participant R

The emergent pole changed from *Self belief* to *Patience* and the contrast pole changed from *Self doubt* to *Easily frustrated* between the pre and post-experience conversation. These were elicited from the participant's choice of elements of *'A role model whom I admire'* and *'Myself as a teacher'* (emergent pole) and *Myself as I am* (contrast pole) in the pre- experience conversation and re-presented in the post-experience conversation.

Emergent pole:

> A role model I admire [is one who] is teaching without being a teacher.
> (Pre-experience)

Changed to

> I would like to be like her [mentor] but a little less … a little more patient.
> (Post-experience)

Contrast pole:

> I still need to gain experience; to make myself a better teacher. I don't feel confident enough.
> (Pre-experience)

Changed to

> If she has one fault it's that she is easily frustrated.
> (Post-experience)

Participant M

The emergent pole changed from *Honesty* to *Engaging and knowledgeable* and the contrast pole changed from *Having flaws* to *Two-way interaction*

between the pre-experience conversations. These were elicited from the participant's choice of elements of *'The ideal career'* and *'Myself as I am'* (emergent pole) and *'A role model whom I admire'* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

> I think that if somebody was fully honest and open, I think that would be my ideal teacher.
> (Pre-experience)

Changed to

> They were very good at engaging pupils.
> (Post-experience)

Contrast pole:

> Everybody has flaws. I don't want to seem as if I'm something better than I am.
> (Pre-experience)

Changed to

> They were very good at engaging the pupils.
> (Post-experience)

Bipolar Construct - Career Teaching

Participant R

The emergent pole changed from *Work ethic* to *Confident* and the contrast pole changed from *Lazy* to *Unsure* between the pre and post- experience conversations. These were elicited from the participant's choice of elements of *'The ideal teacher'* and *'The ideal career'* (emergent pole) and *'Teaching as a career'* (contrast pole) in the pre-experience conversation and re-presented in the post-experience conversation.

Emergent pole:

> Balancing work and the outside.
> (Pre-experience)

Changed to

> It's still what I want to do.
> (Post-experience)

Contrast pole:

> I've learned that it's hard work.
> (Pre-experience)

Changed to

> If I was unhappy or just felt that I'd lost faith in what I was doing.
> (Post-experience)

Participant N

The emergent pole changed from *Rewarding* to *Making a difference* and the contrast pole changed from *Lacking in confidence* to *Desire to improve* between the pre and post-experience conversations. These were elicited from the participant's choice of elements of *'The ideal teacher'* and *'Teaching as a career'* (emergent pole) and *'Myself as I am'* (contrast pole) in the pre-experience conversation and represented in the post experience conversation

Emergent pole:

> Teaching because...summer holidays, hours, good pay.
> (Pre-experience)

Changed to

> I got to work with the ones who needed more help and I worked with them individually and it was good to be able to see what I was doing for them and knowing I was getting through to them.
> (Post-experience)

Contrast pole:

> I never wanted to be a teacher...I didn't think I'd be able to do it.
> (Pre-experience)

Changed to

> I'm not as bad as I thought I would be. I was quite impressed with myself, how I'd coped and how much I'd enjoyed it which I didn't think I would.
> (Post-experience)

4.6 Case Studies

4.6.1 Participant M

M was a 21 year old final year Psychology student. She chose to teach Chemistry as her placement subject as the school did not offer Psychology. Her placement school was an 11-18 coeducational secondary school with approximately 1400 students on roll. It has technology school status and in its 2008 OFSTED inspection the school was given grades ranging from 'good' to 'very good'.

At her recruitment interview when asked why she wanted to teach she stated that she was not sure if she did want to teach, but knew she wanted to work with children and she 'wanted to give back' [to society]. She had had a lot of experience of working with children and young people but not in a school environment. When asked to rate her interest in teaching on a scale of 1 to 10 where 1 is very unsure and 10 is certainty, M rated her pre-experience interest as between 4 and 5.

M's pre-experience conversation lasted 40 minutes and in that time she chose 5 triads of elements to talk about. She was very relaxed and confident and spoke freely about her feelings, concerns and ambitions. The triads of elements are summarised with a selection of words and phrases used by M can be found in Appendix 8.10.1(a), p 252.

The triads and analysis of the conversation gave rise to 5 bipolar personal constructs (Table 5).

Table 5 Participant M's bipolar personal constructs (pre-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	More experience	Myself	Giving not taking
2	Communication	Being a teacher	Still developing
3	Will listen	Teaching quality	Emotionally detached
4	Honesty	Admirable qualities	Have flaws
5	Feel appreciated	The future 'me'	Egocentric

The 5 sets of triads were re-presented to M after her school experience for a second conversation of another 40 minutes. She had to be reminded that she was not trying to remember/repeat what she had said prior to going into school but to talk about the triads on the basis of her school experience. This time the triads were supported by some different thoughts (see Appendix 8.10.1(b), p 253) and, together with the analysis of the conversation, gave rise to some changes in the interpretation of the bipolar constructs (Table 6).

Table 6 Participant M's bipolar personal constructs (post-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Can offer more	Myself	Better than I thought
2	Skilful	Being a teacher	Communication
3	Passionate	Teaching quality	Just a job
4	Engaging & knowledgeable	Admirable qualities	Two-way interaction
5	Got potential	The future 'me'	Teaching possible

After agreeing that the transcripts of the conversations were accurate and that the bipolar constructs were appropriate, M was asked to prioritise the bipolar constructs and her ranking can be seen in Table 7 and Table 8.

Participant M's construct ranking

Table 7 Pre-experience

Emergent Pole	Construct		Contrast Pole
		Order	
Can offer more	Myself	3	Giving not taking
Skilful	Being a teacher	2	Still developing
Passionate	Teaching quality	2	Emotionally detached
Engaging & knowledgeable	Admirable qualities	1	Have flaws
Got potential	The future 'me'	4	Egocentric

Table 8 Post-experience

Emergent Pole	Construct		Contrast Pole
		Order	
Can offer more	Myself	3	Better than I thought
Skilful	Being a teacher	2	Communication
Passionate	Teaching quality	2	Just a job
Engaging & knowledgeable	Admirable qualities	1	Two-way interaction
Got potential	The future 'me'	4	Teaching possible

She was further asked to examine and prioritise a compilation of all the bipolar constructs from all five participants. She devised her own way of prioritising by first placing the bipolar constructs into one of three categories. Her responses can be seen in Table 9 together with her explanation for why she adopted this approach:

> 'I decided to group together the list exercise 2. I have put the words into 3 different categories.'

Table 9 Participant M's ranking of all the bipolar constructs

See the following below:

Category 1	Category 2	Category 3
Myself	Teaching quality	Admirable qualities
My teaching	Being a teacher	Being confident
The future me	A good teacher	Confidence
My Career	A poor teacher	Career aspirations
My future	Teaching as a vocation	
	Classroom teaching	
	Teaching aspirations	
	Successful teaching	
	Career teaching	

She then added:

> The separate categories explain my own self, things to do with teaching and qualities I think you will need to be successful in a career. If I was to put these 3 categories in a specific order it would be 3, 2, and 1.

> In my opinion it is necessary to build on these specific skills for teaching. Having such skills is important to work in a teaching environment in order to manage the classroom and be successful at delivering part of an education. These qualities can affect the teaching style one has and can determine the response from pupils. Maintaining a specific teaching style can have an impact on my own self, inside and outside of the work. The future me can be shaped by such a process.
>
> (Participant M)

M's rankings were placed into the categories of personal, teaching and career constructs and organised as seen in Table 10 according to the order she suggested. It was assumed that within each category she had placed them in a rank order. The graphical representation of this ranking can be seen on p 166.

Table 10 Participant M's rankings organised in categories

Construct	Ranking*
Personal	
Myself	1
Being confident	16
My future	5
Admirable qualities	15
My teaching	2
The future 'me'	3
Confidence	17
Teaching	
Classroom teaching	11
Being a teacher	7
A good teacher	8
Teaching quality	6
A poor teacher	9
Successful teaching	13
Teaching as a vocation	10
Teaching aspirations	12
Career	
My career	4
Career teaching	14
Career aspirations	18

* The lower the number, the higher the ranking.

M considered the Personal the most important of the three categories and within that *Myself*, *My teaching*, *The future 'me'* and *My future*, in that order, scored the lowest meaning they were most important to her. In fact *Myself*, *My teaching* and *The future 'me'* scored first, second and third overall. M frequently spoke of how she saw herself and what she felt about her future but it was only after her placement did the idea of teaching become part of these thoughts. In the category that M designated Teaching, her highest rated constructs were *Teaching quality*, *Being a teacher* and *A good teacher*. Her experience in school, again, seemed to have prompted her to examine the concept of teaching as a career and in particular her own ability to be a teacher. Her career was something that she felt very strongly about and in her third category, Career, she ranked *My career* as 4 overall. While she was on her placement she was actually offered a job working with pupils with special educational needs and this clearly changed her attitude. This was coupled with her discovery that not only could she teach successfully but that she enjoyed it seems to have had an effect because when asked to rate her thoughts about being a teacher on the 1 to 10 scale she now scored it at 8.

M made some notes about her time in school together with some of her thoughts and experiences. The placement did have an effect on her but she finished her notes by saying:

> My ending thoughts are that I don't think I want to become a teacher, but I could see it as a backup plan if necessary. I see less of the conveyor belt and more of a caring role. Experience was great, but in all honesty, not for me! I want more of a challenge for children to benefit, and for my work to feel more intrinsically rewarding.

This was written as M's placement was coming to an end and clearly reflects her immediate thoughts. What makes this interesting is that on being asked to validate the transcript of her post experience conversation and rank the bipolar constructs, something had clearly happened because M went on the say that the placement has opened a lot of doors for her:

I valued the experience a lot and felt that I achieved and progressed very quickly during the process. I am now in Buenos Aires teaching English as a foreign language. I am thinking about coming back to the UK next year to complete a learning-on-the-job teaching programme. I really enjoy my job and feel valued as a member of staff.

Bipolar construct analysis

During the pre-experience conversation 5 bipolar constructs were elicited from triads of elements chosen by M. These 5 triads of elements were then re-presented to M after her time in school. The changes were analysed and the two sets of supporting poles compared.[6]

Triad	Pre-experience	Construct	Post-experience
1	Need more experience *vs* Giving rather than taking	Myself	Can offer more *vs* Better than I thought I would be

Here the poles changed as a result of 15 days in school. M went into the placement feeling very inexperienced. She had strong feelings about being a giving person and although confident in herself, she was unsure about how she would be in a school but she was ready to learn 'I'm willing to adapt. I'm willing to learn a lot more.' After her time in school she realised that she had a lot to offer and she was a better teacher than she had imagined herself to be. This contrasted strongly with her pre-experience feelings. Clearly she had become much more confident in her abilities 'I probably didn't realise, without sounding big headed, but, how much I have to offer.'

[6] For reference the tables are laid out with the emergent and contrast constructs for pre and post-conversations as follows:

Triad	Pre-experience	Construct	Post-experience
	Emergent *vs* Contrast		Emergent *vs* Contrast

Triad	Pre-experience	Construct	Post-experience
2	Communication *vs* Still developing	Being a Teacher	Skilful *vs* Communication

M's feelings about what it means to be a teacher were based almost entirely on her time as a pupil in school. She felt that the key to being a good teacher was good communication. She openly admitted that she considered herself as having a lot of work to do to improve her communication skills, 'I'm quite confident in my capability and I'm willing to adapt .... I'm willing to learn a lot more.' After her placement the emergent and contrast poles changed being more all encompassing of a range of skills. She offered a number of examples to illustrate this and interestingly communication moved to the contrast pole as she explained how she discovered that she could communicate with pupils far better than she had anticipated, 'My mentor helped me see that I knew how to talk to children.'

Triad	Pre-experience	Construct	Post-experience
3	Someone who listens *vs* Emotionally detached	Teaching quality	Passionate *vs* Just a job

These poles show a significant change as a result of the placement. At first M's thoughts revolved around a teacher's empathy with her/his pupils. This was important to her and something she had experienced as a pupil. She also expressed an understanding of what a lack of empathy feels like, 'He [teacher] wasn't a child-friendly person.' After the placement M now considered passion for both subject and teaching as very important when addressing teaching quality. She discussed in depth her thoughts about teachers who do not have that passion, 'They were doing it for financial gain rather than actually having a passion for the subject.'

Triad	Pre-experience	Construct	Post-experience
4	Honesty *vs* Everyone has flaws	Admirable Qualities	Engaging & knowledgeable *vs* Two-way interaction

Here again the result of the placement in school changed M's views. As a pupil she felt that honesty was an important quality for a teacher, 'I think that if somebody is fully honest and open, I think that would be my ideal teacher.' While still feeling that this is important, after her school experience she began to value the ability of a teacher to engage with pupils. She also acknowledged the importance of a two-way interaction between teacher and pupil, 'Just the fact that they [teachers] were very good an engaging pupils.

Triad	Pre-experience	Construct	Post-experience
5	Feel appreciated *vs* Egocentric	The future 'me'	Got potential *vs* Possible career

M's attitude towards teaching and a possible career as a teacher was radically changed as a result of her time in school. Before the placement she knew that she wanted to feel appreciated and she did not like people who she described as egocentric, 'When people appreciate what I do.' After her time in school she was able to admit that she had enjoyed herself and that the idea of becoming a teacher had potential and it was now a definite possible career for her, 'I could see myself as being an ideal teacher.'

M single out two elements for further discussion in her post-experience conversation -

Myself as I am when she said that she had not realised how much she had to offer and having been offered a job by her placement school she was tempted, 'I'm not completely writing it [teaching] off.'

The ideal teacher where she said that in a career she was looking for warmth, excitement and fulfilment, not for herself but for the people around her. She was looking for the rapport that comes with one-to-one interaction.

She now has much more respect for teaching as a profession and is more open-minded about it as a career choice.

In conclusion

M clearly embarked on her placement with high expectations of being able to do something worthwhile judging by the large number of altruistic comments (See Table 11) in her pre-experience conversation, e.g. 'I've always ...to pursue a career in helping vulnerable children.' Comments like 'I'd like to give rather than get back' peppered her pre-experience conversation but were less obvious after her time in school. In her post-experience conversation she talked a lot about the fact that she began to realise that her ambition to work with children and help them was something that she could pursue within the teaching profession, 'I probably didn't realise how much I have to offer.' There was little difference between her pre and post-experience intrinsic comments. She frequently mentioned the importance of imparting knowledge and helping with understanding and how she considered this to be crucial to good teaching, '...to explore their understanding and to better their understanding and knowledge' (post-experience conversation).

Because she had had no experience of working in a school it was, perhaps, not surprising that she made no extrinsic comments in her pre-experience conversation. However, after her placement she made some significant comments that were of an extrinsic nature. For example, when talking about teachers she had seen that she considered *poor* teachers she said 'They were treating it to get some money basically. They were doing it for financial gain.' Later in the conversation she made reference to long hours, holidays and paperwork and this was something that was new to her understanding of the teaching profession.

Table 11 Participant M's comments

	Pre-experience conversation	Post-experience conversation
Altruistic comments	9	3
Intrinsic comments	4	5
Extrinsic comments	0	7

M's experiences and her thoughts on all that happened and how it might affect her future can also be linked with some of Kelly's corollaries (1991) (see Appendix 8.7, p 249) as seen in Table 12.

Table 12 Participant M's links with Kelly's corollaries

Construct	Corollary	Comments
Myself	Individuality	Since everyone has different experiences, everyone's construction of reality is different and M's experiences in school have allowed her to construe those events in her own individual way. She has used this to help her decide about teaching as a career.
Being a teacher	Construction	Kelly (1991) talks about constructing anticipations using past experience. Here M is using her own experience as a pupil and then as a 'teacher' to look for the patterns, the consistencies in her experiences. She is taking the step from theory to hypothesis, i.e. from knowledge and understanding to anticipation.
Teaching qualities	Construction	
Admirable qualities	Organisation	M is using this corollary to organise her constructs into a hierarchy of, in this case, teaching qualities.
The future 'me'	Experience	This is the step from experiment and observation to validation and reconstruction. Based on the results of her experiment (school placement) M's experience can alter her future.

4.6.2 Participant W

W was a 22 year old final year Mechanical and Civil Engineering student. He chose to offer Physics as his placement subject. His placement school was an 11-19 coeducational faith (Roman Catholic) school with around 1250 students on roll and technology school status. In its 2008 OFSTED inspection the school was given 'outstanding' grades.

At his recruitment interview when asked why he wanted to teach he talked about wanting to inspire in the way he was inspired at school and also that he was not sure about a career in civil engineering. His only experience of working with children and young people was voluntary work, e.g. at a youth club. When asked to rate his interest in teaching on a scale of 1 to 10 where 1 is very unsure and 10 is certainty, W rated his current interest as 4.

W's pre-experience conversation lasted 35 minutes and in that time he chose 5 triads of elements to talk about. He was very confident and spoke freely about his experiences and ambitions. The triads of elements are summarised with a selection of words and phrases used by W and can be found in Appendix 8.10.2 (a), p 254.
These gave rise to 5 bipolar personal constructs (Table 13).

Table 13 Participant W's bipolar personal constructs (pre-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Inspirational	Classroom teaching	Not engaging
2	Sharing knowledge	Successful teaching	Not inspirational
3	Encouraging	Confidence	Frustration
4	Influential	My career	Sacrifice
5	Apprehensive	Being a teacher	Vocation

The 5 sets of triads were re-presented to W after his school experience for a second conversation which this time lasted 40 minutes. In this conversation the triads were supported by some different thoughts (see Appendix 8.10.2(b), p 255) and these gave rise to some changes in the interpretation of the bipolar constructs (Table 14).

Table 14 Participant W's bipolar personal constructs (post-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Confidence	Classroom teaching	No classroom presence
2	Good classroom management	Successful teaching	No control
3	More confident	Confidence	Self belief
4	Working with children	My career	Less unsure
5	Self belief	Being a teacher	Clarity

After reviewing the transcripts and agreeing they were correct W was also asked to review the bipolar constructs and make any comments or changes. He did not make any changes and so was asked to prioritise the bipolar constructs and his ranking can be seen in Table 15 and Table 16.

Participant W's construct ranking

Table 15 Pre-experience

Emergent Pole	Construct		Contrast Pole
		Order	
Inspirational	Classroom teaching	1	Not engaging
Sharing knowledge	Successful teaching	3	Not inspirational
Encouraging	Confidence	2	Frustration
Influential	My career	4	Sacrifice
Apprehensive	Being a teacher	5	Vocation

Table 16 Post-experience

Emergent Pole	Construct	Order	Contrast Pole
Confidence	Classroom teaching	2	No classroom presence
Good classroom management	Successful teaching	1	No control
More confident	Confidence	5	Self belief
Working with children	My career	4	Less unsure
Self belief	Being a teacher	3	Clarity

He was further asked to rank all of the constructs from all five of the participants. W's rankings were then placed into the categories of personal, teaching and career constructs and organised as seen in Table 17. The graphical representation of this ranking can be seen on p 166.

Table 17 Participant W's rankings organised in categories

Construct	Ranking
Personal	
Myself	8
Being confident	3
My future	6
Admirable qualities	2
My teaching	5
The future 'me'	4
Confidence	15
Teaching	
Classroom teaching	9
Being a teacher	10
A good teacher	7
Teaching quality	16
A poor teacher	18
Successful teaching	14
Teaching as a vocation	11
Teaching aspirations	13
Career	
My career	12
Career teaching	17
Career aspirations	1

For W the Personal category had the highest number of low numbered rankings of 2, 3, 4, 5 and 6 (*Admirable qualities*; *Being confident*; *The future 'me'*; *My teaching* and *My future*, respectively). The construct he considered to the most important with a ranking of 1 was that of *Career aspirations*. W talked a lot about his career and what he thought he wanted to do. It is interesting to note that he ranked *Being confident* highly (3) but when talking about his own *Confidence* he ranked it 15. He talked a lot in his post-experience conversation of how much his confidence had grown but he clearly felt that he had some way to go before he was completely sure of himself in a classroom. His background of a number of family members being teachers while making him aware of the life of a teacher also made him unsure about his own aspirations and this can be seen through the category of Teaching which contains the highest number of constructs with numbers that place them much lower in the ranking. At no point did he dismiss teaching as a career for himself and in fact seemed to imply that he would eventually move into teaching because when asked to rate his thoughts about being a teacher on the 1 to 10 scale after spending 15 days in a school, he now scored it at 8.

W had some highs and lows in his placement seeing some motivational teaching and some serious classroom management issues and this gave rise to some interesting thoughts from him. On the one hand:

> The experiences of these lessons really put me off teaching, as it seemed to me that in the 'real world' when people don't do the right thing you can reason it out with them. However, with teenagers that sometimes looks impossible and I'm not sure that's something I can be bothered to put effort into if it is just stupid remarks coming back.

But then:

> This really gave me a taste of teaching and I loved it, essentially it is a performance and if you know what you are talking about then it is easy as well. Even taught I was put off by seeing some poorly managed classes on the whole the experience was a positive one and delivering a lesson persuaded me that it is something I would like to go into.

Bipolar construct analysis

During the pre-experience conversation 5 bipolar constructs were elicited from the triads of elements he chose. These were then re-presented to him after his school placement. There were a number of changes in his views and the two sets of poles were analysed and compared.

Triad	Pre-experience	Construct	Post-experience
1	Inspirational *vs* Not engaging	Classroom teaching	Confidence *vs* No classroom presence

The pre-experience poles were clearly based on W's experiences as a pupil when he appears to have had a very inspirational teacher. W found it difficult to find anyone who could compare to this teacher, 'He was a very enthusiastic teacher. The way he taught definitely stuck in my mind.' After his time in school, while being inspirational was still an important feature, W now felt that it was equally important to be confident in the classroom and to have no classroom presence was a serious disadvantage, 'They [teachers] commanded the class well and kind of were very clear about what they were trying to teach.'

Triad	Pre-experience	Construct	Post-experience
2	Sharing knowledge *vs* Not inspirational	Successful teaching	Good classroom management *vs* No control

W's time in school showed him the importance of good classroom management. He felt that to be a good classroom teacher you had to share your knowledge in a controlled atmosphere. What he discovered was that if there is no control this sharing cannot happen, 'She couldn't control these year 10s.'

Triad	Pre-experience	Construct	Post-experience
3	Encouraging *vs* Frustration	Confidence	More confidence *vs* Self belief

What W discovered was that if there was no self belief then there was no way to appear confident in the classroom. That confidence allows you to capture the imagination of the pupils, 'He was a very confident teacher and he brought everything back to an example from real life which I thought was amazing.'

Triad	Pre-experience	Construct	Post-experience
4	Influential vs Sacrifice	My career	Working with children *vs* Less unsure

W had a lot of experience of teachers and their lifestyle because of his family and while he acknowledged from his own experience as a pupil how influential and inspirational a teacher can be, he also saw the sacrifices that teachers often have to make, 'I hear a lot of frustration and that casts a negative on it [teaching].'

His time in school confirmed a desire to work with children and he has now changed his position from being unsure about teaching to talking about becoming a teacher in the not too distant future, 'On a the scale of 1 to 10 it was 4 but secretly I do want it to be changed towards being a teacher.'

Triad	Pre-experience	Construct	Post-experience
5	Apprehensive *vs* Vocation	Being a teacher	Self belief *vs* Clarity

Before his placement W was unsure about being a teacher himself but he was sure that to be a teacher requires dedication and genuine desire to teach, 'Some of my teachers, who weren't ideal, had gone into it with the wrong motives.' After his time in school he was much clearer about what it meant

to be a teacher and really began to believe that it was something he could do, 'Now I definitely think I want to do this [teach]. I just don't know when.'

In conclusion

W approached the placement differently from other participants because he has family members who are teachers. He was aware of some of the stresses involved in being a teacher and so it was not surprising that he had a few negative extrinsic comments before his placement, '...it's a hard job, like you don't get a lot of rewards for doing it,' and none at all after his placement (See Table 18).

Both before and after the placement W had some clear ideas about the intrinsic nature of teaching, e.g. before the placement he was making comments such as '...sharing knowledge and influencing people and having to get people to understand things.' After his placement he was able to enhance these types of comments with clear examples of practice he had seen:

> they were kind of like tearaways, they had like quite a bit of respect for him just because he was, I guess, erm, he kind of treated them, well like respected them, sort of thing.

W's altruistic comments before his placement centred on his favourite teacher whom he described as 'encouraged me by challenging me' but also, '...took an interest in all of us.' After the placement his comments became much more personal 'I do wanna do something like youth work sort of thing' and when talking about a lesson he taught 'Oh wow, if I can do that, then perhaps there's something in it!'

Since his time in school W now believes that he could teach. He has changed position from being unsure about teaching at all to talking about becoming a teacher, 'I hope I've been clear about my change of position.'

Table 18 Participant W's comments

	Pre-experience conversation	Post-experience conversation
Altruistic comments	6	4
Intrinsic comments	13	10
Extrinsic comments	4	0

W's experiences and his thoughts on all that happened and how these might affect his future can also be linked with some of Kelly's corollaries (1991) (see Appendix 8.7, p 249) as seen in Table 19.

Table 19 Participant W's links with Kelly's corollaries

Construct	Corollary	Comments
Classroom teaching	Individuality	According to Kelly since everyone has different experiences, everyone's construction of reality is different. Here W has used both his past experiences as a pupil, family links and placement experience to reach his own conclusions about teaching as a career.
Being a teacher	Individuality	
Successful teaching	Construction	By asking W about his experiences of different teachers it was hoped that he would distinguish between different types of teaching. According to this corollary it is these distinctions that encourage construct development.
Confidence	Experience	According to Kelly contexts or events in life are central to the development and modification of personal constructs. In this case the time spent I in school not only resulted in W's confidence growing but also in his attitude to teaching changing for very unsure to much more positive.
My career	Experience	

4.6.3 Participant C

C was a 22 year old final year Food and Nutrition undergraduate student. She chose to offer Food Technology as her placement school subject. Her placement school was an 11-18 coeducational community school with around 1650 students on roll and technology school status. In its 2009 OFSTED inspection the school was described as satisfactory which is 'transforming and improving at a rapid rate'.

At her recruitment interview when asked why she wanted to teach she talked a lot about 'wanting to give something back' and wanting to be involved in a career that was practical and allowed her to 'get involved'. She had no experience of working with children and young people. When asked to rate his interest in teaching on a scale of 1 to 10 where 1 is very unsure and 10 is certainty, C rated her current interest as 9.

C's pre-experience conversation lasted 55 minutes and in that time she chose 5 triads of elements to talk about. She spoke confidently and openly about her own school experiences and future plans and ambitions. The triads of elements are summarised with a selection of words and phrases used by C can be found in Appendix 8.10.3(a), p 256.

These gave rise to 5 bipolar personal constructs (Table 20).

Table 20 Participant C's bipolar personal constructs (pre-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Working with children	My career	Business
2	Being yourself	Being a teacher	Enthusiasm
3	Approachable	Classroom teaching	Lacking confidence
4	Adaptable	Myself	Vocation
5	Self belief	Being confident	Self doubt

The 5 sets of triads were re-presented to C after her school experience for a second conversation of 50 minutes. In this conversation the triads were supported by some different thoughts (see Appendix 8.10.3(b), p 257) and these gave rise to some changes in the interpretation of the bipolar constructs (Table 21).

Table 21 Participant C's bipolar personal constructs (post-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Sense of vocation	My career	Just a job
2	Confident	Being a teacher	Amenable
3	Approachable	Classroom teaching	Impatient
4	Vocation	Myself	Unsure
5	Self belief	Being confident	Self doubt

After reading the transcripts and agreeing their accuracy C was asked to do two things. She was asked to look at the bipolar constructs that emerged from her conversations both pre and post-experience and comment on their accuracy and then prioritise them. She agreed with her bipolar constructs and her ranking can be seen in Table 22 and Table 23.

Participant C's construct ranking

Table 22 Pre-experience

Emergent Pole	Construct		Contrast Pole
		Order	
Working with children	My career	3	Business
Being yourself	Being a teacher	1	Enthusiasm
Approachable	Classroom teaching	4	Lacking confidence
Adaptable	Myself	2	Vocation
Self belief	Being confident	5	Self doubt

Table 23 Post-experience

Emergent Pole	Construct		Contrast Pole
		Order	
Sense of vocation	My career	5	Just a job
Confident	Being a teacher	2	Amenable
Approachable	Classroom teaching	3	Impatient
Vocation	Myself	1	Unsure
Self belief	Being confident	4	Self doubt

C was further asked to prioritise a list of the constructs for all the participants. C's rankings were placed into the categories of personal, teaching and career constructs and organised as seen in Table 24. The graphical representation of this ranking can be seen on p 167.

Table 24 Participant C's rankings organised in categories

Construct	Ranking
Personal	
Myself	6
Being confident	7
My future	16
Admirable qualities	17
My teaching	8
The future 'me'	14
Confidence	12
Teaching	
Classroom teaching	13
Being a teacher	11
A good teacher	1
Teaching quality	10
A poor teacher	18
Successful teaching	5
Teaching as a vocation	2
Teaching aspirations	3
Career	
My career	4
Career teaching	9
Career aspirations	15

Throughout both conversations C highlighted the qualities she attributed to good teaching so it is not surprising to see *A good teacher* ranked 1 and *A poor teacher* ranked 18 in her rankings. C was committed to teaching before she embarked on the placement scheme and she made a point of explaining that she had never really wanted to do anything else as a career so to find *Teaching as a vocation* and *Teaching aspirations* as second and third respectively in her rankings was probably to be expected. This would also account for *Career aspirations* being ranked as low as 15 because she knew she wanted to teach.

In some of her final thoughts she reiterated her commitment to teaching and when asked to rate her thoughts about being a teacher on the 1 to 10 scale she now scored it at 10:

> Teaching is hard work and the pupils are demanding which is draining but at the same time when they do something well or an individual stands out for having achieved something then you do feel a sense of pride. For me, I think that my perception hasn't changed on teaching it only widened my perception and viewpoint.

Bipolar construct analysis

During the pre-experience conversation 5 bipolar constructs were elicited from the triads of elements chosen by C. At the post-experience conversation these triads of elements were represented to C and the ensuing conversation showed a number of differences in the poles for some of the constructs. The two sets of poles were then analysed and compared.

Triad	Pre-experience	Construct	Post-experience
1	Involvement with children *vs* Business	My Career	Sense of vocation *vs* Just a job

The poles changed a little after the 15 day placement. C went into her placement knowing that she wanted to work with children but came out with a deep sense of vocation. She had found little interest or fulfilment in working in industry and she wanted something that was not just a job to her. Teaching filled that requirement, 'I think I kind of went in thinking still that I was going to enjoy it no matter what but I think I probably exceeded that.'

Triad	Pre-experience	Construct	Post-experience
2	Being yourself *vs* Enthusiasm	Being a Teacher	Confident *vs* Amenable

C felt strongly about not compromising her identity prior to her placement. After her classroom experience she felt much more confident about who she was and what sort of teacher she would become. She recognised the importance of enthusiasm but also now saw the potential problems associated with being too amenable, 'You have got to get to know them [pupils] and they have to get to know you and you come to an understanding.'

Triad	Pre-experience	Construct	Post-experience
3	Approachable *vs* Lacks confidence	Classroom Teaching	Approachable *vs* Impatient

The emergent pole of this bipolar construct remained the same in both conversations. Being approachable is a trait that is very important to C. She experienced teachers like this when she was a pupil and began to see how it was seen from a teacher's point of view. What did change as a result of her classroom experience was the contrast pole where her concern about a lack of confidence became the issue of impatience, 'I think it blew up out of perspective a little bit .... She thought he was being disobedient and I wasn't sure if I agreed.'

Triad	Pre-experience	Construct	Post-experience
4	Adaptable *vs* Vocation	Myself	Vocation *vs* Aspiration

C always knew she wanted to teach but she was surprised at what she saw and the variety of things she found herself doing on placement even though she knew she would have to be adaptable. After her 15 days in school she was confirmed in her vocation but now realised she was a long way from being the teacher she wanted to be. However, she was more than ready for

the challenge, 'I know what I enjoyed but maybe I didn't always definitely know in a sense I could probably be good at it, but until I was put in a situation it just proved to me that this is what I want to do.'

Triad	Pre-experience	Construct	Post-experience
5	Self belief *vs* Self doubt	Being Confident	Self belief *vs* Self doubt

This is the one set of poles that did not change. C went on placement knowing that she wanted to teach. She came back from her placement unchanged in her view, 'I've always wanted to be a teacher and probably thought I'd be a good teacher, but now I definitely know!'

In conclusion

C has always known that she wanted to teach and so it was not surprising to note a number of intrinsic comments such as, 'Her passion for the subject that came across and made you passionate about the subject' when talking about a particular teacher she had as a pupil before she went into school (See Table 25). After her placement the number of intrinsic comments remained around the same number but her comments had become much more pragmatic, '...that was the beginning that was the middle, that was the assessment at the end and she had the structure and the timings...'

The change in the number of extrinsic comments is probably a reflection of her lack of classroom experience when she embarked on her placement. Before going into school she wanted a career that would give her 'Enjoyment and maybe stability, I think, if it fits around family life'. As a result of her time in school she became much more aware of the demands made on a teacher that are not always either visible or obvious, 'It's hard work. I went without lunch.' She made no further reference to fitting the job around family life.

There was a huge increase in the number of altruistic comments after the school experience from 4 to 10. She witnessed a range of teaching styles but

for those she admired she had no doubt that they had the pupils' well-being at the forefront of what they did:

> I observed that the 3 teachers had very different yet appropriate styles and this filled me with the reassurance at the prospect of experiencing very different techniques in the forthcoming 3 weeks. First impressions: one slightly 'scatty' yet well loved teacher by pupils and members of staff alike. The second lesson and teacher portrayed a stern persona; the atmosphere of the classroom was less enjoyable. However, the pupils were responding well to the task in hand and when I conversed with them all seemed happy enough and was inspiring with their aspirations. Finally, one completely mad, lively, bubbly personality who inspired she gave a great sense of passion for the subject and teaching.

Table 25 Participant C's comments

	Pre-experience conversation	**Post-experience conversation**
Altruistic comments	4	10
Intrinsic comments	8	9
Extrinsic comments	1	4

Finally, C's thoughts and experiences can be linked to Kelly's corollaries (1991) (see Appendix 8.7, p 249) as seen in Table 26.

Table 26 Participant C's links with Kelly's corollaries

Construct	Corollary	Comments
My career	Construction	C constructs her anticipations using her experiences. She uses her time as a pupil and then on placement to think about her future as a teacher.
Being a teacher	Choice	Kelly (1955) explains that a person will try to improve her/his understanding; her/his ability to anticipate but that reality can place limits on what a person can experience or do but s/he can choose how to construes or interpret that reality. C chooses to interpret that reality - teaching and classroom - in a way that helps her most make the decision about teaching.
Classroom teaching	Experience	This corollary is stating that when things do not happen the way they have in the past a person has to adapt or reconstruct and this new experience alters future anticipation, i.e. s/he learns. Here C is reconstructing her understanding of the teaching and the role of a teacher as she moves from being a pupil to becoming a teacher.
Myself	Individuality	Everyone has different experiences and everyone's constructions of reality are different. C begins to see during her placement that not only what she wants to do, i.e. teach, is something she can do.
Being confident	Construction	C's confidence grew as she experienced teaching and so began to replicate the behaviours associated with successful teaching.

4.6.4 Participant R

R was a 22 year old final year Food and Nutrition undergraduate student. She chose to offer Food Technology as her placement school subject. Her placement school was an 11-18 coeducational community school with around 1250 students on roll. In its 2008 OFSTED inspection the school was 'given notice to improve'. It should be noted this was also R's former school.

At her recruitment interview when asked why she wanted to teach she talked a lot about 'wanting to give something back' and there was no doubt in her mind that she was going to become a teacher. She had limited experience of working with children and young people. When asked to rate her interest in teaching on a scale of 1 to 10 where 1 is very unsure and 10 is certainty, R rated her current interest as 10.

R's pre-experience conversation lasted 55 minutes and in that time she chose 8 triads of elements to talk about. She spoke confidently and openly about her own school experiences and future plans and ambitions. The triads of elements are summarised with a selection of words and phrases used by R can be found in Appendix 8.10.4(a), pp 258 - 259.
These gave rise to 8 bipolar personal constructs (Table 27).

Table 27 Participant R's bipolar personal constructs (pre-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Inspirational	Classroom teaching	Boring
2	Approachable	Being a teacher	Unhelpful
3	Mutual respect	A good teacher	Disrespectful (of pupils)
4	Work ethic	Career teaching	Lazy
5	Clarity	Myself	Uncertainty
6	Self belief	Admirable qualities	Self doubt
7	Not open-minded	A poor teacher	Reflective
8	Personal values	Teaching as a vocation	Poor personal philosophy

The 8 sets of triads were re-presented to R after her school experience for a second 50 minute conversation. In this conversation the triads were supported by some different thoughts (see Appendix 8.10.4(b), p 260) and these gave rise to some changes in the interpretation of the bipolar constructs (Table 28).

Table 28 Participant R's bipolar personal constructs (post-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Professional	Classroom teaching	Unprofessional
2	Consistent	Being a teacher	Not consistent
3	Approachable	A good teacher	Not interested in pupils
4	Confident	Career teaching	Unsure
5	Reflective	Myself	Closed-minded
6	Patience	Admirable qualities	Easily frustrated
7	Appears uninterested	A poor teacher	Enthusiastic (about teaching)
8	Personal values	Teaching as a vocation	Poor personal philosophy

R was asked to read through the conversation transcripts to verify their accuracy and also to make any changes to the bipolar constructs that emerged from the analysis of the conversations. She made no changes. Finally, she was asked to prioritise the bipolar constructs and her ranking can be seen in Table 29 and Table 30.

Participant R's construct ranking

Table 29 Pre-experience

Emergent Pole	Construct		Contrast Pole
		Order	
Inspirational	Classroom teaching	3	Boring
Approachable	Being a teacher	1	Unhelpful
Mutual respect	A good teacher	2	Disrespectful (of pupils)
Work ethic	Career teaching	4	Lazy
Clarity	Myself	6	Uncertainty
Self belief	Admirable qualities	7	Self doubt
Not open minded	A poor teacher	8	Reflective
Personal values	Teaching as a vocation	5	Poor personal philosophy

Table 30 Post-experience:

Emergent Pole	Construct		Contrast Pole
		Order	
Professional	Classroom teaching	5	Unprofessional
Consistent	Being a teacher	3	Not consistent
Approachable	A good teacher	4	Not interested in pupils
Confident	Career teaching	2	Unsure
Reflective	Myself	6	Closed-minded
Patience	Admirable qualities	7	Easily frustrated
Appears uninterested	A poor teacher	8	Enthusiastic (about teaching)
Personal values	Teaching as a vocation	1	Poor personal philosophy

R was also asked to rank all of the constructs from all the participants. R's rankings were placed into the categories of personal, teaching and career constructs and organised as seen in Table 31. The graphical representation of this ranking can be seen on p 167.

Table 31 Participant R's rankings organised in categories

Construct	Ranking
Personal	
Myself	6
Being confident	17
My future	11
Admirable qualities	9
My teaching	7
The future 'me'	16
Confidence	13
Teaching	
Classroom teaching	4
Being a teacher	2
A good teacher	5
Teaching quality	10
A poor teacher	18
Successful teaching	12
Teaching as a vocation	1
Teaching aspirations	15
Career	
My career	8
Career teaching	3
Career aspirations	14

Given the content of both conversations and her initial score of 10 for her thoughts around becoming a teacher, it is not surprising to find her highest score of 1 is given to *Teaching as a vocation.* Or in fact, that her scores of 2 and 3 went to *Being a teacher* and *Career teaching*, respectively. She was committed to the idea of teaching from the very beginning and nothing in her placement shook that commitment. Linked to this she rated *Poor teaching* at the bottom (score 18) and she was clearly confident in all aspects of the work as she rated *Being confident* at 17 and *Confidence* at 13. She further emphasised her dedication to the prospect of becoming a teacher by having no doubts and ranking *Teaching aspirations* at 15 and *The future 'me'* and *My future* at 16 and 11 respectively. This is a person who seemingly has no doubt about what she wants to do and her ability to do it. So much so that when asked to rate her thoughts about being a teacher again after her placement on the 1 to 10 scale she scored it again at 10.

Even though R had a definite idea about teaching as a career and her initial and final ratings never wavered from 10, she was able to chart her journey from beginning to end and show how she developed. The following provide a flavour of that journey:

Day 1:

> I must improve upon my confidence levels within a classroom and gain behavioural management strategies. I realised this as I did not feel confident enough to ask a student to put her mobile away or silence a classroom making excessive noise and disruption and prevent students from leaving minutes before they were allowed to.

Day 9:

> This is a key stage of my journey as it has highlighted one of the reasons I would like to become a teacher. I want to give something back and I know I would find it stimulating to see a student develop due to me sharing my knowledge with them.

Day 15:

I have developed from initially being nervous to becoming quite confident within the classroom setting.

Bipolar construct analysis

During the pre-experience conversation 8 bipolar constructs were elicited from triads of elements chosen by R. These 8 triads of elements were then re-presented to R after her time in school. Comparisons were made between the two sets of poles to analyse the changes.

Triad	**Pre-experience**	**Construct**	**Post-experience**
1	Inspirational *vs* Boring	Classroom Teacher	Professional *vs* Unprofessional

The poles supporting this construct changed as a result of 15 days in school. While R essentially felt the same about what it means to be a classroom teacher, she moved from her experience of being a pupil and how she felt about her teachers, to a different level of understanding having experienced being a teacher. Prior to going into a school she remembered what she liked

about her favourite teacher and a teacher she considered to be not as good. She made quite emotive statements such as 'I want to be like my favourite teacher. She inspired me.' Whereas after her time in school as a 'teacher' she had a much more detached view of what it means to be a teacher. She talked about professional behaviour, 'They've [teachers] got to keep their distance.'

Triad	Pre-experience	Construct	Post-experience
2	Approachable vs Unhelpful	Being a Teacher	Consistent *vs* Inconsistent

From the point of view of a pupil, R emphasised the importance of her teacher(s) being approachable, 'She treated us as an equal ... not as a friend but we still had conversations outside of the subject.' Whereas after her placement R places much more emphasis on the importance of consistency, particularly with regard to pupils' behaviour, 'Their [teachers] behavioural strategies were consistent'.

Triad	Pre-experience	Construct	Post-experience
3	Mutual respect *vs* Disrespectful (of pupils)	A Good Teacher	Approachable *vs* Not interested in the pupils

R's experience as a pupil resulted in a discussion about respect between teacher and pupils. She felt that this was of great importance using examples of her experiences with two different teachers, 'She treated us as equals' and 'He had his favourites.' After spending time in a school and now speaking from the point of view of a teacher, she raised the issue of approachability but linked this with the concept of job satisfaction, 'I don't believe you should be doing something you don't enjoy.'

Triad	Pre-experience	Construct	Post-experience
4	Work ethic *vs* Lazy	Teaching as a Career	Confident *vs* Unsure

R embarked on this placement knowing that she wanted to teach and she felt she had a good idea what to expect. She returned to her former school and worked with her favourite teacher when she was a pupil, who became her mentor. She viewed this teacher as hardworking and dedicated and she felt that any teacher not like that was obviously lazy and uncaring. After spending 15 days in her old school as a pre-training teacher she changed her view of teaching as a career in a number of ways. While still confirmed in her ambition to teach, her explanation construct changed as she became more aware of flaws in her favourite teacher. She now had no illusions about the areas she needed to develop and she saw confidence as vital to the role of teaching. This was something she had not considered before, 'It's a lot more daunting standing up there in front of a class than I ever thought it would be.'

Triad	Pre-experience	Construct	Post-experience
5	Clarity vs Uncertainty	Myself	Reflective vs Closed-minded

Before going into school, R's bipolar construct was based on her own personal values such as the importance of success, 'Somebody who is a professional and successful.' After her school placement she was much more reflective commenting on areas she had not realised might be an issue for her, 'I realise that there's more to it [teaching] definitely. Although I kind of knew it was there but now I've seen it.' She still wants to teach but she is much more aware of the qualities needed.

Triad	Pre-experience	Construct	Post-experience
6	Self belief *vs* Self doubt	Admirable Qualities	Patience *vs* Easily frustrated

R has a high level of self-belief. She wanted to teach, she felt that she could teach and she firmly believed that this self-belief was an important quality for a successful teacher. Her opinion did not really change as a result of her placement but she was able to pinpoint those areas of her practice, such as patience, she acknowledged she needed to improve.

Triad	Pre-experience	Construct	Post-experience
7	Not open-minded vs Reflective	A Poor Teacher	Appears uninterested *vs* Enthusiastic

R has very strong feelings about teachers who exhibit favouritism and teach in a 'set way' and are not open to change. Her construct changed from a poor teacher not being open-minded to one who is not really interested in teaching, 'They [pupils] seemed to get on with things anyway.' The contrast pole prior to placement put great value on reflection whereas after her classroom experience R felt very strongly about the importance of enthusiasm and consistency in both subject teaching and classroom management, 'My mentor was consistent even in the way .... the worksheets.'

Triad	Pre-experience	Construct	Post-experience
8	Personal values vs Poor personal philosophy	Teaching as a Vocation	Personal values *vs* Poor personal philosophy

The poles supporting this bipolar construct did not change much at as a result of the placement. R felt both before and after her classroom experience that teaching was a vocation. That a teacher must want to teach; that a teacher should be enthusiastic about their subject; that a teacher should want to give something back, 'Nothing surprised me and I think that teaching as a career will be my ideal career if I manage to develop.'

In conclusion

R was committed to becoming a teacher from the outset. Her pre and post-experience ratings were both 10. There was a degree of consistency in her intrinsic comments before and after her placement (See Table 32). This was, perhaps, because of all the participants, she had returned to her former school. In both conversations, the *My best teacher* element was her favourite teacher when she was a pupil and also acted as her mentor during her placement. This meant that almost all of her intrinsic comments around the 'act' of teaching were generally about this person. However, what was interesting was the fact that before her placement she felt that her favourite teacher's approach could not be faulted and the style of her least favourite teacher was at fault, this changed in the course of the placement, e.g. when speaking about her worst teacher before the placement she said '[She] made me feel a bit isolated at times and I had to do things myself.' After her placement, her attitude had changed:

> I think I probably said that my worst teacher was my PE teacher because I didn't have the relationship I did with my best teacher. That's because she was being professional.

Not only did the number of altruistic comments change pre and post-experience, the nature of these comments also changed. Whereas before her placement, R comments focussed on her favourite teacher, e.g. 'I want to be like her because she inspired me,' and 'She does something she really enjoys and she's also giving something back teaching us', her focus changed to herself and what she had been doing, after her placement, '...she [pupil] did develop, which I'm proud of.'

And:

> If we got them to work and she [teacher] got them to the end of the lesson plan that always felt good.

Perhaps, not surprisingly, R's extrinsic views, while not changing in number, changed in emphasis from a hopeful to a more realistic nature.

Pre- experience:

> A teaching career, being selfish, is good money, good holidays and I also want to build a family, so on the outside of work, building a family around a teaching career fits better than it does the other way around.

Post- experience:

> I was surprised a little bit about how much more work they [teachers] have to go home and do. I know that it took me some time on a night and when I'd come in from school and I were really tired. Erm, so I know how they feel, and towards the end of the week you see teachers getting tireder and tireder and they start complaining. So, yeah, I realise that there's more to it, definitely.

Table 32 Participant R's comments

	Pre-experience conversation	**Post-experience conversation**
Altruistic comments	8	4
Intrinsic comments	10	12
Extrinsic comments	2	2

R's bipolar constructs can be linked to some of Kelly's corollaries (1991) (see Appendix 8.7, p 249) as seen in Table 33.

Table 33 Participant R's links with Kelly's corollaries

Construct	Corollary	Comments
Classroom Teaching	Experience	R's change in attitude towards her favourite teacher is a good example of the fact when things did not happen as she had experienced them in the past, she had to adapt or reconstruct and this new experience altered her consequent anticipations, i.e. she learned.
Being a teacher	Construction	R's commitment to teaching was an example of her using her past and present experiences and trying to replicate them as she developed as a teacher.
A good teacher	Construction	
Career teaching	Individuality	R's experiences as a pupil and then as a teacher in the same school allow her to see that what she always wanted to do, i.e. teach, was not only grounded in her experiences as a pupil, but also on her growing realisation that it was something she could do.
Myself	Individuality	
Admirable qualities	Organisation	According to the corollary, constructs are organised in a hierarchical system with some constructs being more personally important (superordinate) than others (subordinate). R considered the qualities that made a good teacher as very important to her and organised them in a way that reflects this.
A poor teacher	Construction	R used her time as a pupil and then on her placement to help her understand the qualities that make good and poor teaching and began to avoid the behaviours associated with poor teaching.
Teaching as a vocation	Individuality	Everyone has different experiences and consequently everyone's constructions of reality differ. R's placement reinforced her commitment to teaching as she realised that she could do it.

4.6.5 Participant N

N was a 22 year old final year Psychology undergraduate student. She chose to offer Mathematics as her placement school subject as Psychology was not taught at this school. Her placement school was an 11-18 coeducational community school with around 1350 students on roll and specialist Sport status. In its 2008 OFSTED inspection the school was described as a 'good and improving school'.

At her recruitment interview when asked why she wanted to teach she explained that her ultimate aim was to become an educational psychologist and this would be valuable experience. She had limited experience of working with children and young people. When asked to rate her interest in teaching on a scale of 1 to 10 where 1 is very unsure and 10 is certainty, N rated her current interest as 6.

N's pre-experience conversation lasted 45 minutes and in that time she chose 6 triads of elements to talk about. She spoke very openly about her own school experiences and future plans and ambitions including her doubts and concerns about teaching as a career for her. The triads of elements have been summarised with a selection of words and phrases used by N on pp 107 – 108.

These gave rise to 6 bipolar personal constructs (Table 34).

Table 34 Participant N's bipolar personal constructs (pre-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Encouraging	Classroom teaching	Not conscientious
2	Enjoyable (lessons)	My teaching	Lacking class control
3	Positive relationships (with pupils)	Teaching aspirations	Lacking class control
4	Rewarding	Career teaching	Lacking confidence
5	Fulfilling	Career aspirations	Stressed
6	Working with children	My future	Lacking confidence

The 6 sets of triads were re-presented to N after her school experience for a second 45 minute conversation. In this conversation the triads were supported by some different thoughts and these gave rise to some changes in the interpretation of the bipolar constructs (Table 35).

Table 35 Participant N's bipolar personal constructs (post-experience).

Triad	Emergent Pole	Construct	Contrast Pole
1	Motivational	Classroom teaching	Being manipulated (by pupils)
2	Enjoyment	My teaching	Poor classroom presence
3	Recognition	Teaching aspirations	Low confidence
4	Making a difference	Career teaching	Desire to improve
5	*	Career aspirations	*
6	Rewarding	My future	Could be teaching

* The data for the post-experience conversation was corrupted on the recording.

After asking N to agree the content of the conversation transcripts and the bipolar constructs (she made no changes), she was asked to prioritise the bipolar constructs derived from the conversations' analyses and her ranking can be seen in Table 36 and Table 37.

Participant N's construct ranking

Table 36 Pre-experience

Emergent Pole	Construct		Contrast Pole
		Order	
Encouraging	Classroom teaching	2	Not conscientious
Enjoyable (lessons)	My teaching	4	Lacking class control
Positive relationships (with pupils)	Teaching aspirations	5	Lacking class control
Rewarding	Career teaching	6	Lacking confidence
Fulfilling	Career aspirations	1	Stressed
Working with children	My future	3	Lacking confidence

Table 37 Post-experience

Emergent Pole	Construct	Order	Contrast Pole
Motivational	Classroom teaching	5	Being manipulated (by pupils)
Enjoyment	My teaching	3	Poor classroom presence
Recognition	Teaching aspirations	4	Low confidence
Making a difference	Career teaching	6	Desire to improve
NOT AVAILABLE	Career aspirations	1	NOT AVAILABLE
Rewarding	My future	2	Could be teaching

N was also asked to rank all of the constructs from all the participants. N's rankings were placed into the categories of personal, teaching and career constructs and organised as seen in Table 38. The graphical representation of this ranking was shown on p 163.

Table 38 Participant N's rankings organised in categories

Construct	Ranking
Personal	
Myself	8
Being confident	10
My future	2
Admirable qualities	5
My teaching	7
The future 'me'	4
Confidence	9
Teaching	
Classroom teaching	18
Being a teacher	13
A good teacher	14
Teaching quality	11
A poor teacher	15
Successful teaching	6
Teaching as a vocation	16
Teaching aspirations	17
Career	
My career	1
Career teaching	12
Career aspirations	3

It is clear that her future career was very important to N as she ranked *My career*, *My future*, *Career aspirations* and *The future 'me'* as 1, 2, 3 and 4 respectively in her ranking of the constructs. Before going into school N was very sure about a career in educational psychology but after her placement she was much less certain. Her attitude towards teaching as a career before her placement was very tentative in that she viewed it as a 'fall-back' career. This can be seen clearly in her scoring of all but one of the constructs in the Teaching category - they are ranked low in her priorities. This is with the exception of *Successful teaching* which she scored as 6 and can be accounted for by the new-found recognition of her own ability to teach.

N's changing attitude to teaching can be illustrated by her own account of her placement which begins to show how her experience influenced her thinking about teaching and, in particular, her own future as a teacher which seemed to begin with her very first experiences and grew from there.

Day 1:

> I started the day quite nervous and did not really know what to expect. The day went quite well and I was quite surprised at how much I enjoyed it. I felt respected by the pupils and felt that they had the confidence in me to ask me for help rather than to wait for their teacher to become available.

Day 15:

> I was surprisingly quite sad to see my final day in school come as I had enjoyed the placement much more than I thought I would. I bonded with the pupils and understood them in a way that I did not think I would. I learnt that not every teacher has foolproof methods of how to do things, and each day is different. I finished my placement with the confidence that I would be able to teach in a classroom of any ability and be able to do it to a standard that I think is acceptable.

All of this resulted N rating her thoughts about being a teacher, after her placement, on the 1 to 10 scale, at 8.

Bipolar construct analysis

During the pre-experience conversation 6 bipolar constructs were elicited from the triad of elements chosen by N. These 6 triads were then re-presented to N after her time in school and there were a number of changes. The two sets of supporting poles were then compared.

Triad	Pre-experience	Construct	Post-experience
1	Encouraging *vs* Not conscientious	Classroom Teaching	Motivational *vs* Pupils could manipulate

The initial poles supporting this construct were based on N's experience as a pupil in school and it highlighted her very strong feeling as about what it means to be a good teacher. Her own experiences were very vivid and she discussed them in some detail especially her feeling about a teacher she considered to be less than good, 'A teacher should be able to make everyone feel like they can do it.' Having been in school for 15 days N's description shifted from encouraging to motivational teaching and she was clear that a teacher should not be able to be manipulated by the pupils, 'They [pupils] knew they could push his buttons and they knew what they could get away with.'

Triad	Pre-experience	Construct	Post-experience
2	Enjoyable lessons vs Lacks class control	My teaching	Enjoyment *vs* Classroom presence

It was clear that N lacked confidence but she wanted lessons to be enjoyable because that was what she remembered from being a pupil. She was very worried about not being able to control a class of pupils. There was a degree of change as a result of her placement – enjoyment was still a concern but it now included her enjoyment as a teacher. This is something she had not considered before and she was genuinely shocked that she had enjoyed the placement experience. She was equally shocked at her ability to demonstrate classroom presence and control a group of pupils, 'I was

worried that I wouldn't be able to control the class and I would forget everything that I needed to teach them. I'm not as bad as I thought I would be.'

Triad	Pre-experience	Construct	Post-experience
3	Positive relationships vs Lacking class control	Teaching aspirations	Recognition *vs* Low confidence

Prior to going into school it was important to N that she would be able to develop good relationships with the pupils. This was something that she remembered as being important when she was a pupil. Her concern was that in trying to build up relationships with pupils she would lose the ability to control them – something she had also seen as a pupil. Although she was still worried about her confidence level she felt that in her time in school she had been recognised as a teacher, 'I could tell that I had them all interested in what I was saying.'

Triad	Pre-experience	Construct	Post-experience
4	Rewarding *vs* Lacking confidence	Career Teaching	Making a difference *vs* Wanting to improve

N's low self-esteem and confidence was always present when she was on placement but it had improved a lot by the time she completed her time in school. What did change, however, was the emergent pole of her construct – it went from teaching being rewarding to her wanting to make a difference, 'I enjoyed working with the pupils and knowing that I was getting through to them.'

Triad	Pre-experience	Construct	Post-experience
5	Fulfilling *vs* Stressed	Career aspirations	*

* The data for the post-experience conversation was corrupted on the recording so this triad has been omitted for both pre and post-conversation analysis.

Triad	Pre-experience	Construct	Post-experience
6	Working with children *vs* Lacking confidence	My Future	Rewarding *vs* Could be teaching

N has completely changed her attitude to teaching. Where it had been a 'stepping stone' to something else, it was now a definite possibility as a longer term career, 'I was surprised at how I changed and how I've become confident with them [pupils] and being able to teach a lesson which I didn't think I would be able to do. I think I'll teach for a while.'

In conclusion

N's altruistic and intrinsic comments changed very little as a result of her placement (See Table 39). However, her extrinsic comments were considerably fewer after her time in school. Before going into school she commented on the holiday associated with teaching and the working condition, 'I wouldn't want a career where you're working ridiculous hours; I think just during the day and not at weekends...' Her own experience of school was as a pupil at a private school and this was clearly very different from her placement school of which she said 'I wouldn't have the hours that I'd like to have.' At one point she described becoming a teacher as a 'backward step'. However she did go on to say that, because she had discovered that she could teach, she was not dismissing teaching as something she would now do not just as a stepping stone to becoming an educational psychologist. In fact her initial estimate of only teaching for a couple of years was extended, '...if I did it [teaching] for, say, ten years, I don't think I'd hate it that much and I'd enjoy it'.

By the end of her school experience N was starting to see what teaching could mean:

> ...teaching is something, er, being able to make a difference ...you can get something through to them in a way that they understand it and make them feel better and be more confident in what they're doing.

N's extrinsic comments before her placement were all about working conditions, '...you get summer holidays,' but she was also realistic, '...you've got a lot of marking to do,' and 'I wouldn't want a career where you're working ridiculous hours. I just think during the day and not at weekends.' After her placement her extrinsic comments had been reduced to only two and were linked to job security and further comment about working hours, 'I think there'll always be a job for me,' and 'I kind of think maybe I wouldn't have the hours that I'd like to have. Erm ... it's be more work'.

Table 39 Participant N's comments

	Pre-experience conversation	**Post-experience conversation**
Altruistic comments	11	10
Intrinsic comments	10	13
Extrinsic comments	11	2

Finally, N's bipolar constructs can be linked to some of Kelly's corollaries (1991) (see Appendix 8.7, p 249) as seen in Table 46.

Table 40 Participant N's links with Kelly's corollaries

Construct	Corollary	Comments
Classroom Teaching	Construction	N clearly constructed her anticipations based on her experiences as a pupil and expected to see the same type of teaching in placement school. When it was different and, in some cases, better she was pleasantly surprised. This resulted in a change in her construct.
My teaching	Individuality	Her construction of the reality of teaching was based on her life as a pupil but this reality changed in her placement and so her construct changed.
Teaching aspirations	Experience	Her career choices were based on her experiences, in particular as a pupil. This resulted in her seeing teaching merely as a stepping stone to the career she really wanted. The realisation that teaching was actually a serious career option came as a surprise to her.
Career teaching	Experience	
Career aspirations	Experience	
My future	Organisation	N's plans for the future were changed by the school experience and whereas classroom teaching had been a subordinate construct it began to rise in her estimation and she began to change her plans for her future.

4.7 Participants' Personal Constructs: summary rankings

Each participant was asked to rank their interest in teaching as a career on a scale of 1 to 10 where 1 was not interested at all and 10 was fully committed to teaching as a career. They were asked to do this before and after their placement. With exception of one participant all changed their ranking (Table 41):

Table 41 Teaching as a career.

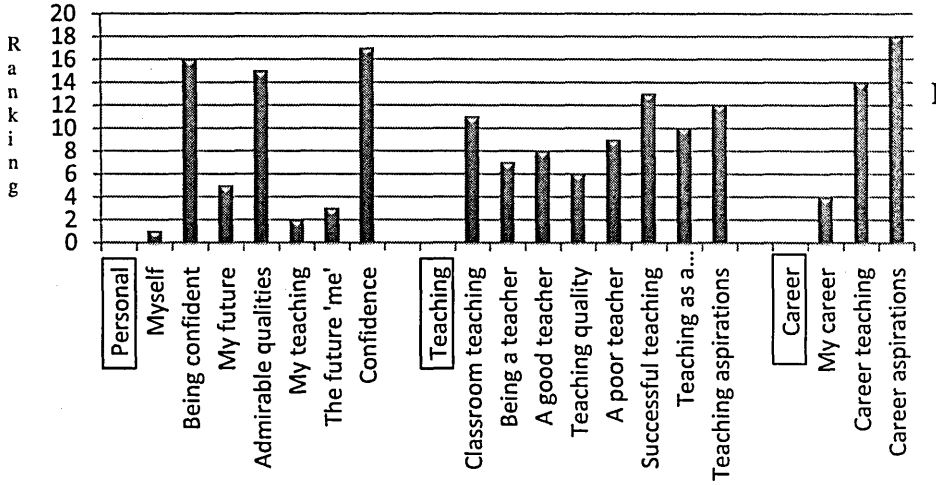
Name	Pre-experience score	Post-experience score	Change
M	4/5	8	+ 4/3
W	4	8	+4
C	9	10	+1
R	10	10	0
N	6	8	+2

With exception of participant R who was committed to teaching as a career at the outset all of the other participants ranked teaching as a career higher after they had completed their placements. In fact, participants C, R and N will have completed a PGCE course by the end of the academic year 2009/10 and participant M who vowed never to teach is teaching English as a foreign language in Brazil. Participant W has committed to train as a teacher when he has completed his current contract with the Environment Agency.

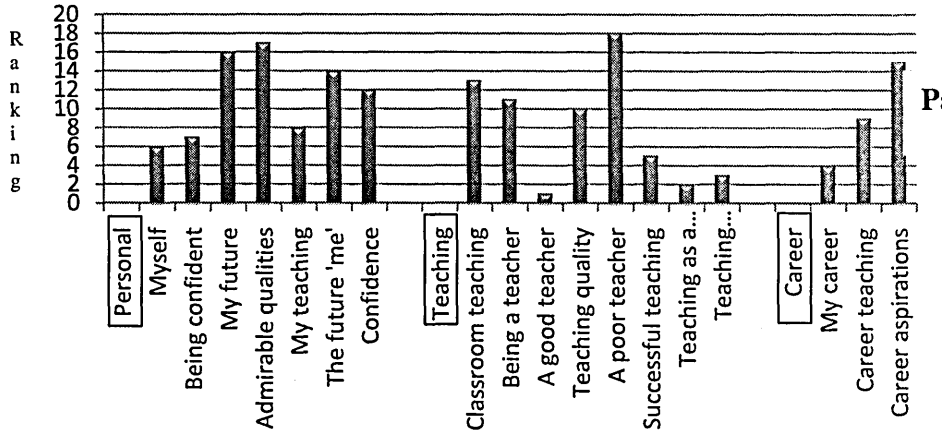
Each participant was asked to rank their personal constructs in an order of importance to them (individual rankings can be found in the Case Studies, pp 119 - 164). They were also asked to rank the personal constructs from all the participants (the lower the number the higher the importance). These were then placed in the categories *Personal*, *Teaching* and *Career* and the findings from each participant compared (Figure 6):

Figure 6 Individual Personal Construct rankings*

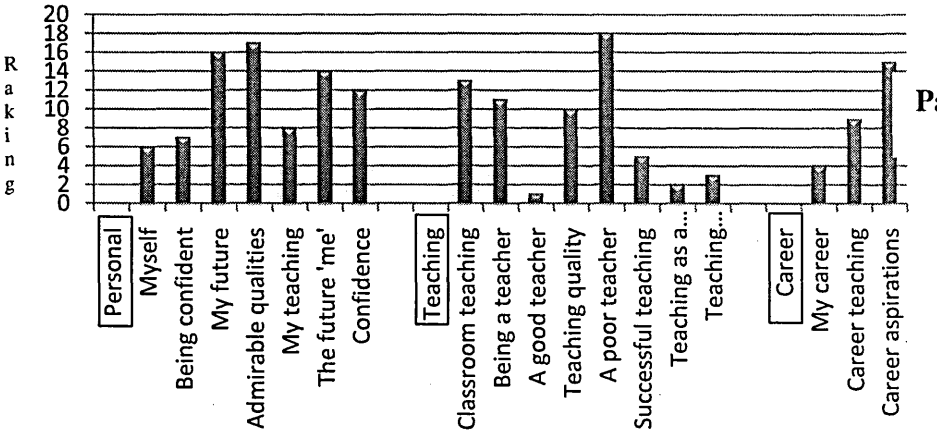
* The lower the number, the higher the ranking



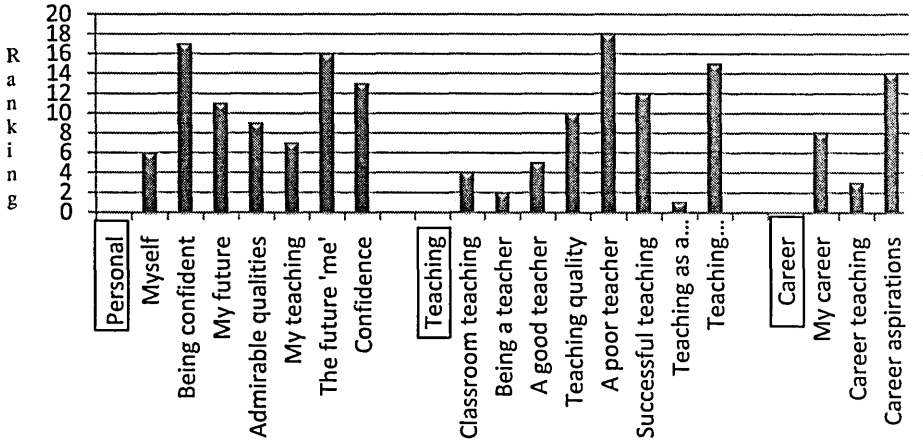
Participant M



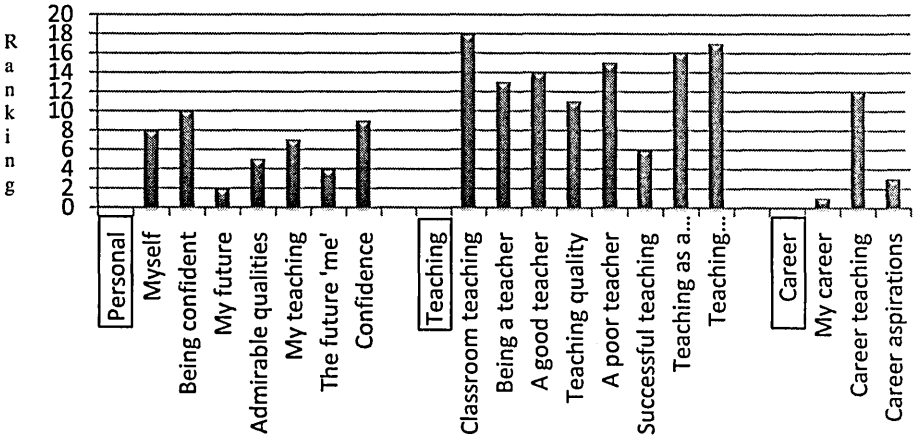
Participant W



Participant C



Participant R



Participant N

The rankings of each participant's bipolar constructs were then averaged (see Table 42) and these scores were compared with the individual participants' rankings to give an indication of where each participant's scores were placed in comparison with each other and the average for the group. Also compared were the averages for each category (*Personal, Teaching and Career*). Although the sample of 5 participants is small the researcher decided to investigate if this comparison would produce any findings of interest.

Table 42 Average bipolar construct rankings

Construct	Average	
Personal		
Myself	8.4	
Being confident	7.8	
My future	7.6	
Admirable qualities	6.8	8.6
My teaching	8.4	
The future 'me'	10.8	
Confidence	10.4	
Teaching		
Classroom teaching	10.8	
Being a teacher	8.4	
A good teacher	6.8	
Teaching quality	10.4	10.0
A poor teacher	15.4	
Successful teaching	9.8	
Teaching as a vocation	7.8	
Teaching aspirations	11.8	
Career		
My career	8.4	
Career teaching	10.8	8.9
Career aspirations	7.4	

Comparisons within the *Personal* category

Participant M's average for this category was 8.4 compared with the overall average of 8.6. Within this, however, Participant M did have rankings that were significantly higher than the average. In fact, her highest ranking constructs were in this category. She ranked *Myself* at 1 (average 8.4), *My*

teaching at 2 (average 8.4) and *The future 'me'* at 3 (average 10.8). These were balanced against three of her highest rankings which were above the average – *Admirable qualities* at 15 (average 6.8), *Being confident* (average 7.8) and *Confidence* at 17 (average 10.4).

Participant W showed an average in this category of 6.1 which was below the overall average of 8.6. This reflects the fact that within this category Participant W had six of the seven construct rankings below 10 and with the exception of *Confidence* which he ranked at 15 when the average was 10.8, he was consistently below the average rankings.

An average of 11.4 for this category for Participant C was considerably higher than the overall average of 8.6. The major discrepancies are seen in the constructs of *My future* which she ranked at 16 (average 7.6) and *Admirable qualities* which she ranked *at 17 (average 6.8).* She also ranked *The future 'me'* at 14 (average 10.8) and *Confidence* at 12 (average 10.4) and these have also contributed to the higher than average score.

Participant R had an average ranking for this category of 11.3 which was higher than the average of 8.6. With exception of *Myself* which she ranked at 6 (average 8.4) and *My teaching* which she ranked at 7 (average 8.4) all the remaining construct rankings were higher than the average. Some significantly so, e.g. *Being confident* at 17 (average 7.8), *My future* at 11 (average 7.6), *The future 'me'* at 16 (average 10.8) and *Confidence* at 13 (average 10.4).

The average ranking for this category for Participant N of 6.3 is lower than the average. This reflects that all N's construct rankings carried lower than the average scores. *My future* at 2 (average 7.6) and *The future 'me'* at 4 (average 10.8) were the most significant.

Comparisons within the *Teaching* category

In this category Participant M's average ranking of 9.5 was very close to the overall average of 10 which is a reflection of her individual construct

ranking scores that were often very close to the average, e.g. she ranked *Classroom teaching* at 11 (average 10.8) and *Teaching aspirations* at 12 (average 11.8). These were balanced by some larger discrepancies such as her ranking of *A poor teacher* at 9 (average 15.4) and *Successful teaching* at 13 (average 9.8).

The average ranking of Participant W in this category was 12 compared with the overall average ranking of 10. This reflected some significantly different rankings for the individual constructs of *Teaching quality* at 16 (average 10.4), *Successful teaching* at 14 (average 9.8) and *Teaching as a vocation* at 11 (average 7.8).

Participant C's average ranking for this category was 7.9 compared with overall average of 10. This reflects the fact that this category contained her three highest ranking scores of *A good teacher* at 1 (average 6.8), *Teaching as a vocation* at 2 (average 7.8) and *Teaching aspirations* at 3 (average 11.8). There was also a difference in her ranking of *Successful teaching* at 5 compared with the average of 9.8, *Classroom teaching* at 13 (average 10.8) and *Being a teacher* at 11 (average 8.4).

An average of 8.4 for this category compared with the overall average of 10 for Participant R reflects her significantly different rankings for some of the individual constructs. These were *Teaching as a vocation* at 1 (average 7.8), *Being a teacher* at 2 (average 8.4) and *Classroom teaching* at 4 (average 10.8). Some other constructs also showed differences, e.g., *Successful teaching* at 12 (average 9.8), *A poor teacher* at 18 (average 15.4) and *Teaching aspirations* at 15 (average 11.8).

There is a very big difference between Participant N's average ranking of 17.8 for this category and the overall average of 10. With the exception of *Successful teaching* at 6 (average 9.8), all of the other construct rankings were higher than the average. In some cases there were significant differences, e.g. *Classroom teaching* at 18 (average 10.8), *Being a teacher* at

13 (average 8.4), *A good teacher* at 14 (average 6.8), *Teaching as a vocation* at 16 (average 7.8) and *Teaching aspirations* at 17 (average 11.8).

Comparisons within the *Career* category

Participant M's average for this category was 12 and this is higher than the overall average of 8.8. Although her ranking of *My career* was lower at 4 (average 8.4), the remaining two constructs were considerably higher than the average with *Career teaching* at 14 (average 10.4) and *Career aspirations* at 18 (average 7.4).

Participant W had an average of ranking of 10 compared with the overall average for this category of 8.8. While his ranking of *Career aspirations* was 1 (average 7.4), this was more than balanced by his rankings of the other two constructs with *My career* at 12 (average 8.4) and *Career teaching* at 17 (average 10.8).

An average ranking of 9.3 for Participant C in this category was only marginally higher than the overall average of 8.8. However, the distribution of her rankings was different from the average. She ranked *My career* at 4 (average 8.4), *Career teaching* at 9 (average 10.8) and *Career aspirations* at 15 (average 7.4).

Participant R's average ranking for this category was 8.3 compared with the overall average of 8.8. While the construct of *My career* at 8 (average 8.4) was very similar in ranking, the other two were not. She ranked *Career teaching* at 3 (average 10.8) and *Career aspirations* at 14 (average 7.4).

Participant N had a significantly different average of 5.3 for this category compared with the overall average of 8.8. While the construct of *Career teaching* at 12 (average 10.8) was not too different the remaining two constructs showed very different rankings from the average. She ranked *My career* at 1 (average 8.4) and *Career aspirations* at 3 (average 7.4).

Frequencies of element choices

A simple analysis was carried out on the frequency of element choice by the participants. This included the frequency of element choice (Table 43), the combined two-element frequency (Table 44) and the contrast element frequency (Table 45).

Table 43 Frequency of Element Choices

Element	Frequency
1. A role model whom I admire	9
2. My worst teacher	11
3. Myself as I would like to be	10
4. Teaching as a career	8
5. Myself as a teacher	10
6. My best teacher	5
7. The ideal teacher	9
8. Myself as I am	17
9. The ideal career	9
	Total = 88 choices

Of the 88 choices the most used was *Myself as I am* (17) with *My worst teacher* (11), *Myself as I would like to be* (10) and *Myself as a teacher* (10) the only others to reach double figures. It is interesting that the emphasis is clearly on the personal, i.e. *Myself.* These elements feature again as popular when examining the combined two-element frequency as shown in Table 44. *Myself as I am* appeared most often as a part of the emergent combination of elements (See Table 43) and also as a contrast element (See Table 42) with *My best teacher* appearing only twice as a contrast (See Table 42) and as part of an emergent pair of elements (See Table 44).

Table 44 Combined Two-Element Frequencies

Combination	Frequency	Combination	Frequency
7 & 1	1	6 & 5	1
3 & 1	3	7 & 5	1
8 & 9	1	7 & 9	2
3 & 5	3	1 & 5	1
9 & 3	2	2 & 8	1
7 & 8	1	4 & 8	1
6 & 7	2	6 & 4	1
3 & 7	1	5 & 8	1
9 & 4	3	1 & 8	1

Combinations of teaching, career and the personal proved the most used. What is interesting is that element 3 (*Myself as I would like to be*) was never used as the contrast pole by any of the participants (See Table 45).

Table 45 Contrast Element Frequency

Contrast element	Frequency
1. A role model whom I admire	2
2. My worst teacher	8
3. Myself as I would like to be	0
4. Teaching as a career	2
5. Myself as a teacher	2
6. My best teacher	2
7. The ideal teacher	1
8. Myself as I am	9
9. The ideal career	1

Summary

The findings clearly show a change in each participant's belief system pertaining to the issue of teaching and the role of a teacher. No two participants were the same and the changes varied in emphasis but the findings clearly indicate that the PCT pre and post-experience conversation technique can identify the changes in belief systems and their consequences particularly when addressing views on teaching as a career.

5. Discussion

This chapter centres on how the Personal Construct conversations prior to the classroom experiences were able to elicit the participants' bipolar constructs (pre-experience conversation) and how these belief systems ultimately changed (post-experience conversation). There is an examination of how the methods employed and the findings are firmly located in the literature; how this informed the modified approach taken in the study and the possible consequences of the findings for Initial Teacher Training and Continuing Professional Development for in-service teachers.

5.1 Preliminary Phase

The questionnaire used was an extensive one but this did not seem to deter over a third of the students from responding. It was developed in four sections and can be regarded as a pre and post-experience questionnaire. The questionnaire was important as it was a means of gathering initial data and carrying out an initial analysis; it from this that the interview schedule was developed. It was also a means of sampling the opinions of a larger group of students. As a tool it proved very valuable and the findings resonated very closely with the more specific results of the main study.

The interviews carried out in the preliminary phase were very informative and although they involved only five students, this proved to be enough for early analysis. The decision to interview a small sample of the cohort was taken as a means of investigating further their motivations, perceptions and interests in teaching and the role of the teacher. This was also done with a view to developing the elements for use in the main study conversations. It also allowed for a more in-depth look at if/how any attitudes had changed as a result of the placement. These attitudes had begun to emerge in the questionnaire responses but only by interviewing could these be teased out.

By using Nominal Group Technique with all five students before the individual interviews took place it meant that those students not being interviewed had agreed issues they could discuss. The resulting brainstorms

they produced and the recordings of the discussions were also very informative by adding both clarity and more elaborate data. (see Appendix 8.6, pp 244- 248).

5.2 The study

The main study focused on a group of undergraduates' constructs of both teaching and the role of the teacher and if a short school-based work experience placement affected these personal constructs in any way. The PCT conversation technique illuminated each individual participant's construct development or, in the case of two of the participants (Participants C and R), the strengthening of these constructs. Although some of the literature on teacher education suggests that the beliefs held by pre-service teachers can be resistant to change (Kagan, 1992) and that teacher education programmes are 'not very powerful interventions' (Zeichner, *et al.*, 1987, p 28), Carabaroglu and Denicolo (2008) suggest that there is a continuum of belief stability from very stable to radically changed in the case of pre-service teachers during their training course. The participants at the time of this research had not made any sort of commitment to training as teachers, but there are significant similarities in the findings that show some agreement with Carabaroglu and Denicolo's (2008) work particularly with those participants (e.g. Participant M) whose attitude to teaching did change radically.

In contrast to the findings of Bird, *et al.*, (1993), Doolittle, *et al.*, (1993), Doyle (1997) and Lerman (1997), who contest that teacher education courses do little to alter the perceptions developed during 12 or 13 years as pupils, this study has found that 15 days on a school placement can, in fact, have an effect on some of these perceptions and it seems that this is important when forming or changing constructs. This resonates with the work of researchers such as Lave and Wenger (1991) who suggested that concepts are continually evolving.

According to Chapman (1984) and Chapman and Green (1986) the factors with the strongest impact on the decision of graduates not to enter the teaching profession or to leave within 5 years were career satisfaction, initial commitment to teaching, availability of other jobs and the quality of the first teaching experience. This study addresses all of these issues to differing degrees. For the two participants (Participants R and C) already certain that they wanted to teach, the placement reinforced that commitment. For the other participants (Participants M, W and N), it was the quality of the experiences that influenced their decisions to pursue teaching even though one (Participant W) already had a job to go to on graduation and the other two only ever viewed teaching as a stepping stone to their chosen careers. This suggests that a placement experience of this type prior to any commitment to teacher training could be useful in the decision making process but could also be of value to teacher educators who could use the practical experiences of their pre-service teachers in their training programmes. Instead of acknowledging that pre-service teachers may have had some practical experience and then dismissing it on the grounds that only the 'official' teaching practice (under their supervision) is of any value, they should draw on these experiences as examples that all could learn from. There is also the suggestion that if pre-service teachers have already experienced some time in a school prior to training not only will they have made an informed career decision but it could also be that they remain in teaching. The issue raised by Haydn, *et al.*, (2001) around the concerns of classroom management and paperwork might be less likely to be used as reasons for leaving training or teaching because it had come as a complete surprise to all concerned. A pre-training experience allows individuals to experience firsthand this aspect of being a teacher.

Feiman-Nemser and Remillard (1996) highlighted the importance of recognising the preconceptions and beliefs held by pre-service teachers around teaching and learning, so that pre-service teachers can construct meaningful knowledge and understanding of teaching and learning. In 2008 Cochran-Smith, *et al.*, developed four themes around learning to teach and while these were developed for pre-service teachers, this study shows that

they also apply to pre-training teachers and could have a significant influence on the recruitment of students to teacher training courses:

1. Learning to think like a teacher. The findings of this study show the participants were able to move beyond their own experiences as pupils and see that there is more to teaching than just the transfer of information.

2. Learning to know like a teacher. All of the participants recognised the importance of being confident in their subject knowledge, while also showing concern about their own abilities in this area.

3. Learning to feel like a teacher. All of the participants commented that they felt like 'real' teachers and they had found this very satisfying and it was a very strong influence on their decision making.

4. Learning to act like a teacher. Although the participants only taught one lesson themselves, they were all involved in numerous other lessons. They all commented on the fact that a teacher in the classroom has to be able to perform lots of different tasks at once while being able to change direction at a moment's notice if circumstances change.

All of the participants in this study decided that teaching was a career they were going to actively pursue either immediately or in the near future. The affect of the placement had given the 'undecided' participants a taste of teaching and the role of a teacher and so allowed them to make informed decisions that were not based on preconceived notions but on actual experience. It may be that a different 'undecided' participant would choose not to pursue teaching as a result of the placement. This must be viewed as an equally valuable decision in the same way as a positive decision to teach. By not embarking on a path that they may never complete, or a career that they leave after a short time using 'I didn't know it was going to like this' is equally as valuable as a career choice. By embarking on a short classroom experience the participants of this study were given the opportunity to

explore what Raffo and Hall (2006) described as 'their own dispositions' (p 64) and Haritos (2004) argued was important before any student embarks on a course in ITT.

A number of researchers (Kagan, 1992; Mewborn, 1999; Nesbitt Vacc & Bright, 1999) have advocated the need for pre-service teachers to reflect critically on their school experiences. This was also the case in this study with the participants reflecting on their experiences in their post-experience conversations. In this case, it was also used as a means of discovering the participants' decisions about teaching as a career. As Grootenboer's (2005) work has shown those who have had good experiences during a practical placement generally continued to hold positive views about teaching. The findings of this study would concur with Grootenboer's (2005) work, with all of the participants holding very positive views about teaching. This suggests that if this kind of experience were a mandatory pre-requisite for teacher training courses, then teacher educators can acknowledge the experience (perhaps offering some course credits) but also feel a degree of security in the knowledge that these pre-service teachers had not embarked on their course completely ignorant of teaching and the role of a teacher.

5.3 The conversations

The data from the pre-experience conversations showed the participants holding rather optimistic, indeed in some cases (Participants R and C) idealistic beliefs about the persona of a teacher and what should constitute effective subject teaching. This supports other studies that found which the first teaching experience was not what novice teachers expected so that previous beliefs and optimism were changed when confronted with reality, and were sometimes replaced by disillusionment (O'Connell Rust, 1994; Weinstein, 1989; 1990). Whilst there were changes observed in this study, there was no serious disillusionment with any of the participants when considering teaching as a career. Since all of the participants were pre-training, their school placements were not full teaching practice experiences but they did encounter many of the same activities a pre-service student on

teaching practice would experience, including preparing and delivering a lesson. At the same time they had not yet committed themselves to teacher training. In all cases, the classroom experiences resulted in a shift from the idealistic memory of their favourite teachers and lessons while pupils, to life in school in the real world of being a teacher. Participant R, for example, changed from an almost 'hero-worship' of her favourite teacher, 'She inspired me', to a much more pragmatic view, 'They've [teachers] got to keep their distance'.

Another shift was that of not feeling fully confident about the possibility of teaching to the realisation that, in the case of Participant N, it was, in fact, something she could do and be successful, 'I've become confident with them [pupils] and being able to teach them which I didn't think I would be able to do. I think I'll teach for a while'.

In other literature on student teaching and belief development, various patterns arise in the way pre-service teachers initially construe teaching (Kagan 1992). They usually emphasise the humanistic qualities of teachers (Mahlios & Moxon, 1995), and they tend to place emphasis on the importance of positive personality traits (Sugrue, 2002; Virta, 2002). This was clearly observed in the initial thoughts of the participants in this study with a lot of emphasis in all their conversations on the altruistic nature of teaching. This notion changed for all the participants as result of their placements, being tempered by the reality of 'life in the classroom'. Because of his family links to teaching Participant W had some sense of the role of a teacher (Hobson, 2002; 2003) but he was prepared to admit that he had only witnessed a small part of the whole teaching experience and it was only after he had tried it for himself could he fully appreciate the full picture. This also reflects the findings of various researchers who, when studying the motivation of those considering teaching as a career, cited altruism as one of the three motivations (e.g. Brown, 1992; Cheune, *et al.*, 1999; Kyriacou & Kobori, 1998; Kyriacou & Coulthard, 2000). When talking, the participants echoed many of the issues raised by Lortie (1975) around individuals who want to make a contribution to society and work with children. What is

different here, however, is that these participants had not yet made that commitment to following teaching as a career.

All the participants were challenged by the differences between their own experiences as pupils and their placement experiences. They all found mismatches between these experiences but it was particularly strong for Participant C who returned to her former school for her placement. It was only then, as a result of engaging in teaching herself that she was able to be more subjective about her favourite teacher who now exhibited flaws she had not seen when she was a pupil but now began to notice. Her classroom experience had raised her awareness of teaching and the role of a teacher to a level where she felt she was in a position to be critical of her favourite teacher.

This study has illustrated how a short, practical experience in a classroom can have an influence on the constructs the participants held about teaching and the role of the teacher. It also demonstrated that structured and facilitative interventions in the form of the conversations helped the participants to articulate their constructs before and after their placements, including any changes to the views and beliefs underpinning those constructs.

This echoes the following from Fransella (2003):

> Contradictory as it may seem, the anticipatory power of constructs lies in the past. In order to come to an understanding of the present we need to compare and contrast it with experiences we have had previously and use these to predict the future....Thus biography has an important influence on the constructs we bring to bear on any situation in which we find ourselves. The ones that predominate while engaged in a particular activity are likely to be the ones that have served us well in what appear to have been similar circumstances in the past. Since much life is hectic, encouraging action rather than reflection, we are often unaware of constructs guiding that action and from whence, in our pasts, these are derived. This means that, although well-established, some of our personal constructs may now be redundant, or even counter-productive. However, unless we become

> consciously aware of them, they cannot be challenged, and they remain influential in orientating our being.
> (Fransella, 2003, p.129)

Hargreaves (1994, p 4) suggests that 'it is the struggle between and within modernity and postmodernity that the challenge of change for teachers...is to be found'. Those competing and conflicting forces act on the teaching identities that pre-service teachers construct with significant consequences for their attitudes and approaches to teaching and the same can be said for the participants in this study who had yet to decide on teaching as a career. According to Holt-Reynolds (1992):

> ... beliefs developed naturally over time without the influence of instruction. Pre-service teachers do not consciously learn them at an announced, recognised moment from a formal teaching/learning episode. Rather, lay theories represent tacit knowledge lying dormant and unexamined by the student. Developed over long years of participation in and observation of classrooms (Lortie, 1975) and teaching/learning incidents occurring in schools, homes or larger community, lay theories are based on untutored interpretations of personal, lived experiences.
>
> (Holt-Reynolds, 1992, p 326)

Sugrue (1997) suggests that the personal experiences of pre-service teachers, their apprenticeship of observation and the embedded cultural models of teaching collectively yield both *form* (socio-historical situatedness) and the *content* (beliefs, attitudes, dispositions and behaviours) of their teaching identities. By deconstructing these, insights are gained into the formative personal and social influences of the professional identities, i.e. their constructs of teaching and the role of the teacher. Coming to terms with the content of these constructs and the principal forces that interact in their formation, together with their tacit nature is critical to the development of the individuals as teachers or in the decision to become teachers.

Sugrue (2002) went on to propose three themes against which pre-service teachers' beliefs and teaching identities can be analysed. Applying these

themes to the personal constructs of the pre-training teachers used and reported on in this study results in significant similarities with Sugrue's work and the work of others in the field:

Theme One: Personal identity and teaching archetypes

This theme explores the motivations of individuals to become teachers and how their personal identities are shaped by a combination of apprenticeship of observation, as described by researchers such as Brown, *et al.*, 1989 and Lave and Wenger, 1991, and the comments of others who suggest they are personally suited to teaching (Hobson, 2002; 2003; Cockburn and Haydn, 2004).

Identification with teaching as a profession is an important first step for those intending to pursue teaching as a career according to the work of Smethern (2007) and the findings of this study support that suggestion. In her post-experience conversation Participant C remarked 'I've always wanted to be a teacher and probably thought I'd be a good teacher, but now I definitely know'. Also, Participant R's comments, post-experience, included 'I realise there's more to it [teaching]', while Participant M stated that she 'didn't really want to be a teacher' in the sense that she 'never thought of it', and she had doubts that she would but 'I've always wanted to pursue a career helping vulnerable children'.

Participant W, though not committed to teaching himself, found that his family was a major influence on his thinking. A more subtle and less obvious influence on the identification of self with teaching for him was provided by atypical teaching episodes he had experienced such as youth work. This resonates with the work of Hammond (2002) who investigated the role played by 'teacher-like' activities on the motivation to teach. Participant W's experiences helping at a summer camp in the USA and Participant M's summer school work bear testament to this theory that their experiences have perhaps given them the confidence to pursue the possibility of teaching as a career. Hammond described this as 'rehearsing' the role of a teacher (Hammond, 2002, p 145). It is interesting to note that both of these participants went into school stating that they were not going to teach and

both emerged seriously considering teaching as a career. In fact, Participant M is already teaching overseas and plans on training on her return to the UK. Hammond's 'teacher-like' activity and the short school placement involved in this study, reflect work such as that done by Stewart (1990) which regarded the placing of individuals in an actual teaching environment as extremely powerful.

There was a degree of altruism and idealism in the pre-experience comments such as from participant R, 'I would like to be ... the ideal teacher'. Interestingly after her placement she no longer wanted to be an ideal teacher, she now wanted to be a 'professional'. It was as if the 'hero-worship' based on pupil experiences had given way to the real world of the classroom. There was also a definite shift to more confidence and personal identity, 'But I'm not him – I am who I am', was Participant W's comment when talking about himself as a teacher and comparing himself to the teacher who had been so influential when he was a pupil.

Sugrue (2002) proposed that this is a socially constructed identity and that there may be a particular kind of personality which may be ideally suited to teaching. This was also Lortie's (1975) contention.

Theme Two: Pre-service teachers' archetypal metaphors for teaching

These metaphors are derived from observation as pupils and more broadly-based cultural influences as exemplified by the work of, for example, Doolittle, *et al.*, 1993; Bird, *et al.*, 2009; Haritos, 2004 and Raffo and Hall, 2006. This was particularly explored in the pre-experience conversations. Emergent poles were almost always altruistic in nature, e.g. 'She inspired me', 'She really encouraged me' and 'He took an interest in all of us' (Participants R, N and W respectively). These comments resonate particularly closely with the findings of Younger *et al.*, (2004) on the motivations and preconceptions of PGCE trainees. The participants' comments became much more extrinsic in nature for some participants after the placement, e.g. 'He brought everything back to an example from real life which I thought was amazing' (Participant W). It was clear that the classroom experience brought them all down to earth about what it means to

be a teacher. In their work investigating undergraduates' reasons for finding teaching attractive, Spear, *et al.*, (2000) summarised findings that are clearly reflected in this study as exemplified by statements such as those cited above.

For Participant W teaching was actually concerned with 'sharing knowledge', for Participant M it was 'imparting knowledge'. This portrays a transmission mode of teaching with Participant M's understanding of teaching being centrally concerned with 'getting across information to children'.

Participant N's comments suggested that classroom control was important while teachers, who resorted to overt aggressive behaviour such as verbal abuse and shouting, were not the most successful in maintaining discipline. In her pre-experience conversation Participant N talked a lot about a particular teacher she encountered as a pupil finding his approach unacceptable, 'He'd really take it to extremes ... pushed desks over' and this clearly worried her when it came to her own ability to control a class of pupils. In a tacit way, by attempting to distance herself from overt control of pupils by what she regards as unacceptable behaviour, she was seeking to resist aspects of the cultural archetype while searching for her own voice, 'I was worried that I wouldn't be able to control the class' (Pre-experience conversation). All of this changed as a result of her placement, 'I was quite impressed with myself, how I coped and how much I'd enjoyed it' (Post-experience conversation).

Theme Three: Pre-service teachers' perceptions of 'good' teaching.

What pre-service teachers characterise as good teaching, according to Sugrue (2002) and Younger, *et al.*, (2004), is informed significantly, though not exclusively, by teachers with whom they come into contact. In all cases, the characteristics of good teaching which were identified were attributed to the influence of teachers whom they encountered as pupils.

All the participants of this study describe a good teacher as someone with 'discipline' and 'control', is 'strict' but 'fair' and while such teachers do not

have 'favourites' neither do they 'ever let anyone away without doing the work' (various participants' comments).

According to the participants, good teachers get the work done. Beyond these issues of control, domination and the creation of a business-like atmosphere in the classroom, the personal traits of 'good' teachers assumed particular significance. Phrases such as 'child-friendly', 'engaging, and 'approachable' were commonplace and were definitely seen as admirable qualities and something to which the participants wished to aspire.

There were also suggestions that good teachers are those who are *unpredictable*, e.g. for Participant W, 'He even took us out of the classroom ... and I think that stuck in my mind'.

The good teaching that the participants described may well perpetuate pedagogies in their own teaching but alternative styles of teaching and learning may be precluded or excluded as a result. This may hinder their abilities and willingness to expand their own constructs of teaching, and strive to reconstruct more elaborate and inclusive teaching activities. The findings from this study indicate that the school experience allowed the participants to re-examine their original constructs around the issues of teaching and the role of the teacher as a result of their classroom experiences. For some, such as Participant C, it reinforced a commitment to teaching already made but for others such as Participant N there was a significant change, 'I never wanted to be a teacher ... I didn't think I'd be able to do it' (Pre-experience conversation); 'I'm not as bad as I thought I would be. I was quite impressed with myself' (Post-experience conversation).

Deviation from the prescribed curriculum in ways that generate excitement and enthusiasm among pupils or facilitating pursuit of their own interests is mentioned such as the extra activities that a number of participants involved themselves with, such as the evening event discussed by Participant C and the work with younger pupils mentioned by Participant W. The examples of good teaching seem to be embodied by those who teach what is prescribed but do so in interesting ways.

What is clear from all of the findings is that the participants did not just change their words when they were discussing their constructs, there is a clear change in understanding of teaching and the role of the teacher as a result of being in school.

The bipolar constructs of the participants can be divided into the two categories of superordinate and subordinate constructs (see Appendix 8.1, p 228) as derived from the participants' priorities (see Tables 16, 23, 30, 37 and 44). Taking anything that scored between one and five as superordinate, *My career*, was very important to all but one of the participants. Since all the participants were in the final year of their undergraduate studies and considering their futures, this is, perhaps, not surprising. The participant who did not rank *My career* as superordinate, did, however, rank *My future* as superordinate. This was participant N who underwent a significant change in attitude towards teaching during her placement. Also in her superordinate category was *Career aspirations* perhaps reflecting this change. The two participants (Participants C and R) who knew already that they wanted to teach both had as superordinate constructs, *Teaching as a career*, as did Participant W who, in a similar way to participant N, changed his mind about teaching while in school.

With the exception of *A poor teacher*, which four out of the five participants agreed was a subordinate construct, the remaining subordinate constructs were different for each participant.

Analysis of the frequency of use of each of the elements showed that *Myself* in some form appears most often. This conforms to Kelly's (1991, p 91) views on the importance of *self* when examining bipolar constructs. According to Kelly (1991) when a person begins to use her/himself when forming constructs, the constructs formed operate as rigorous controls on her/his behaviour. Her/his behaviour in comparison with other people is particularly affected. It is actually the comparison s/he sees or construes which affects her/his behaviour. It is not surprising, therefore, that all of the participants used the elements that referred to *Myself* in some form most frequently.

5.4 The participants

All the participants exhibited changes as a result of their placements with some interesting consequences for their decisions about their futures.

Participant M embarked on the exercise very self confident, knowing what she did and did not want to do. She thought she had a clear picture of what a teacher should be and not be and she had no doubt about her abilities although she admitted she was willing to learn. She did not want to teach, but she did want to work with children preferring a one-to-one approach which she felt was more effective. Her time in school did not dent her self confidence but now it was redirected having discovered that she could not only teach successfully but that she enjoyed it. Her opinion of teachers and teaching changed in a positive way. As a result she took up a post to teach English as a foreign language in Buenos Aires and has decided on her return to the UK will enrol on the Graduate Teaching Programme to train as a teacher.

Participant W began with a view of teachers and teaching based on his family links to the profession and a good experience as a pupil, and he had already secured a non-teaching job. He had clear ideas about what constituted good teaching and was apprehensive about his own ability and desire to teach. As a result of his time on placement he has discovered that teaching is something he could enjoy. This came as a surprise to him. As did his confidence in the classroom – something he was not expecting. He has decided to fulfil his contractual obligations to his current job but he has no doubts that he is then going to train to be a teacher.

Participant C was sure that she wanted to teach even though she had limited experience of working with young people. She felt strongly about what makes a good teacher and was hopeful that she could achieve it herself. Because of her placement she now felt that teaching was the only career for her after discovering not only that she enjoyed it but that she was good at it. Since this study she has gone on to complete a PGCE and is now teaching secondary school pupils.

Participant R considered teaching her vocation although she had some concerns about her ability to manage in a classroom. Before her placement she wanted to emulate her favourite teacher from when she was a pupil. As a result of her placement she still considered teaching her vocation but she was much more pragmatic and less 'starry-eyed' about her favourite teacher, being able to identify flaws she had not seen before. She discovered an unexpected confidence in the classroom and after completing her PGCE the year after taking part in this study, she is now a qualified secondary school teacher.

Participant N was extremely nervous about going into a school but was prepared to do it as a stepping stone to her ultimate goal of becoming an educational psychologist. Her own experience as a pupil made her very nervous about classroom management and she was very unsure about her own ability to discipline unruly pupils. Her placement showed her that not only can she discipline pupils but that she can teach effectively and enjoy it. She has decided that teaching is no longer a means to an end but a career she wishes to pursue. She is currently a PGCE student.

From the analysis of the literature and the PCT conversations held with the participants in this study a number of 'teacher characteristics' emerge and the most commonly occurring of these as indicated by the participants include:

- A 'teaching' personality
- A disposition to care and nurture
- A capacity to control learners
- Able to deliver curriculum content; transmit information.

According to the participants these are shaped significantly by, in no particular order:

- Immediate family
- Significant others or extended family
- Apprenticeship of observation
- Atypical teaching episodes
- Teaching traditions and cultural archetypes

- Tacitly acquired understandings.

It is necessary to recognise also that these constructs and identities may be formed at a young and, therefore, impressionable age. This may, in part, account for the tenacity and embedded nature, and their relative inaccessibility, as well as a strong emotional dimension. By spending 15 days in a school experiencing all aspects of teaching, the participants of this study were confronted by the constructs they identified prior to placement and were in a position to challenge and in all cases change a number of their views based on that experience. In particular the pre and post-experience conversation approach proved useful when searching for these changes.

Summary

This chapter has examined in detail the value of the approach used in the study. In particular, the pre and post- experience conversation approach. The PCT conversation approach is important and valuable because it allowed each participant to identify her/his own agenda, i.e. what s/he wanted to talk about with the element statements stimulating each participant to explore that agenda in more depth. The pre-experience conversation, in particular, provided useful illustrative background information that proved helpful in the analysis and interpretation of data. Such data were helpful in understanding and explaining the differences of the constructs of the participants. The PCT conversation also had a methodological advantage over traditional interviews and laddering in that the conversations allowed in-depth probing and also helped the participants to express themselves. Finally, it required little researcher intervention.

Developments and what contributed to them were provided by the participants themselves as they reflected and elaborated. This is particularly useful for ensuring that the data more accurately reflect the participants' own understanding of their worlds rather than reflecting any researcher agenda.

6. Conclusions

This chapter draws together the literature and the study and makes a number of significant suggestions for further work. There are also a series of recommendations from the findings reported for changes in Initial Teacher Training and Continuing Professional Development for in-service teachers.

For the participants, going back into school had an interesting effect. It was clear, from their conversations many of their own school experiences were brought to mind particularly in the pre-experience conversation, but, interestingly, after their time in school even when talking about their time as pupils, they now put their experiences into the context of being a teacher and not a pupil. They remembered 'good' teachers and motivating lessons and wanted to be teachers who would teach like that themselves. They also remembered 'bad' teachers but their attitude towards them was much more sympathetic after their time in school as they had gained an understanding of the nuances and pressures of teaching.

They all appreciated the dedication of many teachers and this made two of them (Participants C and R) even more determined to teach. They experienced, first hand, the satisfaction of teaching a successful lesson and wanted to do more. They also saw how hard teachers work and suddenly realised that this must have been the case with their own teachers. Again this did not deter them. In fact, in some cases (Participants C and R) they were even more determined to teach seeing the satisfaction as outweighing any less positive aspects of the profession.

What was surprising was the level of passion and commitment that came through from the participants. For two of the participants (Participants C and R), the altruistic and intrinsic reasons dominated their motives for wanting to teach with extrinsic (and financial) motivations not significant factors. This raises again the question of how the responses and the experience would have been different (if they would have been different) if the participants were not considering a career in teaching at all.

Enthusiasm and the charisma of teachers seemed to work as motivating factors in the process of teaching and learning. Often it was a passion found in childhood that had motivated these participants in the first place, and the role models that they had were typically strong and charismatic personalities. In the pre-experience conversations they expressed very idealistic goals for their placements and wanted to be enthusiastic, encouraging and popular teachers. Their idealism should not be criticised as such, but it had the potential to be a burden when any of them encountered difficult groups and pupils with little motivation and they discovered that charisma is only one of a wide range of skills possessed by a good teacher. This was particularly evident for Participant W who had experienced a very charismatic teacher as a pupil. His school placement showed him that a teacher can be both charismatic and authoritative.

O'Loughlin (1991) suggested that pre-service training courses prepare students to be beginners and O'Connell Rust (1994) has suggested that this has not been carried out very well. Pre-service teachers are prepared for what Ryan (1986) called the *front stage behaviours* of teaching: those observable teaching behaviours that teacher educators have observed and that pre-service teachers have witnessed and internalised during what Lortie (1975) calls the *apprenticeship of observation.*

Very often pre-service teachers are not fully prepared in the *backstage behaviours of teaching*: the delicate balancing of competing demands that beset teachers daily, even hourly; the hours of planning and thinking about teaching that are required to make interactive learning possible; the networking that is necessary to develop a support system in the school and in the profession; the subtleties of classroom management; and the political sensibilities that are essential for survival and change in schools. Yet often the first time they become aware of any of this is when in school on their first teaching practice. By spending a short time in a school prior to embarking on an ITT course, a pre-training teacher can begin to grasp some of these subtleties so that they do not come as something completely new to tackle while trying to learn how to teach.

Teacher educators must address the critical issues of beliefs and change and they must find ways of using pre-service teaching and other field experiences to help those pre-service teachers develop deeper understandings of themselves as well as the contexts of schooling. Rather than ignore these beliefs teacher educators should carry out a short *audit* with each pre-service teacher, similar to the pre-experience conversation in this study. This would then mean that both educator and pre-service teacher would be clear about these beliefs and how they could be used in training.

The study illustrates how a short, practical experience in a classroom had an influence on the constructs the participants held about teaching and the role of the teacher. It also demonstrates that structured, facilitated interventions in the form of the pre and post-experience conversations helped the participants to articulate the constructs they applied to the school situation.

Sugrue (2002) suggests that ITT, in too many instances, seeks to supplant tacit images of teaching by favouring what are regarded as more scientific, and more adequately grounded detailed versions. This assumes that pre-service teachers arrive in education institutions as *tabula rasa*, with empty *disc space* ready and passively awaiting the received wisdom and orthodoxies of current educational thinking often packaged in terms of discipline, curriculum and pedagogies.

An immediate challenge to teacher education is to acknowledge existing teaching identities and their epistemology legitimacy and the differences between PCT and some research based approaches to teaching. However, positioning pre-service teachers within a framework which acknowledges tacit knowledge and teaching identity can be understood 'as a shifting set of answers to conventions of representation [that] is never completed' (Britzman, 1992, p 42). In such circumstances ITT cannot persist with a deficit view of the student rather than acknowledging the understandings that the learner brings to the situation.

This study supports Holt-Reynolds (1992) conclusion that teacher educators must explore pre-service teachers' underlying principles rather than simply

assess their abilities to apply their [teacher educators] principles. Consequently, she specifies the agenda for teacher educators as follows:

> Acknowledge the power of personal history-based beliefs and conceptualisations about teaching and accepting these as coherent, cohesive, and therefore legitimate premises from which pre-service teachers begin their formal, professional studies means assuming that our role as teacher educators centres more around fostering the professionalization of those existing rationales rather than around generating professional rationales and behaviours from scratch.
>
> (Holt-Reynolds, 1992, p 345)

It is necessary to recognise pre-service and pre-training teachers' embodied knowledge as an indispensable dimension of how they construct their teaching identities: a prerequisite to continuous reconstruction of these professional identities.

PCT and teacher education

In the PCT literature, there has been a tendency to become reliant on the traditional procedures of repertory grid analysis. The power of PCT in guiding the format of the conversation analysis protocol used in this study has featured strongly and the researcher employed several tenets of PCT to inform the design of that conversation protocol for identifying and understanding the affect of practical experience can have on an individual's construct system. The conversation methodology can be conceptualised as a 'bottom-up' process whereby the participants were encouraged to explore the whole issue of teaching and the role of the teacher.

SAS evaluation

In May 2009 an independent evaluation of the SAS scheme was reported (TDA, 2009). Part of its brief was to evaluate the impact of the scheme on increasing the number and quality of new recruits into the teaching profession by enabling students in Higher Education to make a more informed career decision and to be better prepared for ITT and its demands.

The evaluation took the form of a survey of 1025 students, in-depth interviews with 30 students and some management information analysis.

There are findings from the surveys and interviews that resonate with the findings of this study - the evaluation confirmed an increased interest in teaching, as did this study. The evaluation highlighted the importance of informed decision-making, as did this study. The students in the evaluation and the participants in this study reported a better understanding of teaching, developed a new skills based and improved confidence levels.

In contrast to the evaluation, this study used a much smaller sample but investigated much more deeply the meanings and beliefs held by the participants whereas the larger evaluation study was looking for more generalised findings.

However, both agree that it is clear that SAS provides its participants with a realistic experience of teaching and so allows them to make more informed decisions about teaching as a career. This is certainly true from this study with all the participants going on to teach either immediately or sometime in the near future.

It seems clear that an experience such as this gives potential pre-service teachers the opportunity to 'try teaching' without obligation and then decide what they wish to do next in a much more informed way. This suggests that it should be a pre-requisite to applying for a teacher training course that 15 days in school is mandatory together with some form of personal audit. If these 15 days were subsequently acknowledged by the teacher training course it would be seen to be of even more value.

Added to this is the possibility that by exposing undergraduates to the experience of teaching before they commit to training, they may be less likely to leave during training or early in their teaching career citing a lack of knowledge of what to expect as part of their reasoning. This would require a long term in-depth study that could include periodic PCT-conversations that would not only discover current attitudes to teaching but would also highlight if and how the participants' constructs changed as a result of their work.

This, again, would provide invaluable information about how a teacher's views and beliefs change during their teaching careers (See Recommendations and further study).

Recommendations and further study

Despite the consistencies of the findings with other studies, one needs to be cautious in their interpretation. It should be noted that this in-depth study is limited in its sample size and future study would benefit from a larger sample from a number of different HEIs with a longitudinal study over a longer period of time.

For example:

A longitudinal study could examine making the SAS placement mandatory for all undergraduates considering teacher training in a number of HEIs, and as part of their Training Entry Profile they would have the records of their placement including an audit of their views and beliefs about teaching and the role of a teacher. This would be based on a conversation similar to ones used in this study. Done by the SAS provider, it would be a part of the paperwork at the end of the placement that is then made available to the ITT provider. This document, a *Personal Construct Audit (PCA)*, would be the first of a potential career-long record of an individual teacher's views. The scheduling of these audits would be for example:

- PCA1 - Pre-service
- PCA 2 - End of training/start of NQT year (First teaching post)
- PCA 3 - End of NQT year
- End of each teaching year (5-8 years for the study).

By comparing each new conversation with previous ones it may be possible to see patterns emerging that could point to 'critical' times that could be linked to attrition in later-career teachers. If this were the case a remedial professional development strategy could be developed that would prevent the loss of extremely valuable and experienced teachers from the profession. In any event the information would give feedback on early career attrition

The study would also analyse these documents for each teacher involved and across the whole sample together with each teacher's career progress perhaps in the form of a journal, and it should be possible to identify links between changes in views and, in particular, any issues around career and/or attrition. This would help shape CPD issues for teachers and ITT providers and suggest strategies for incorporating new knowledge about pre-service teachers' views into the ITT providers training.

For those individuals not entering teacher training directly from their undergraduate studies, e.g. changing careers such as those taking part in the *Teach Next* scheme (DfE, 2010) the study would commence with a training entry PCA but this time this would not follow a school placement, rather the individual's life and former career experiences would form the initial PCA document.

Added to this, further investigation could also include classroom observation and interviews with teachers in the placement schools. It should be noted that the participants of this study kept a Placement Journal as a requirement of the SAS programme and while it was not part of this study to analyse these documents, future investigation should include analysis of these Journals. This will add depth to the findings by using specific experiences noted on a daily basis by the participants.

Also, further longitudinal studies on the participants' development (including those who do not immediately go into teaching) would provide additional information about the affect of the pre-training practicum on the recruitment and retention of the next generation of teachers. Whilst it would be very interesting to investigate the effect of a school placement on anyone who has stated categorically they are not interested in teaching, it would be impractical to place such an individual in a school knowing that they did not wish to be there!

A critical review of the study

A criticism often levelled at phenomenologically based studies is that the comparability of the recorded experiences, the *qualia* (Chalmers, 1995), expressed by one subject may be inconsistent with those expressed by another. The PCT approach used in this study addresses this issue through the process of *laddering* (Hinkle, 1965) in which successively deeper expressions of personal experience are developed with each participant. Clearly the present study aims to be non-prescriptive and so constructs are not expressed within fixed paradigms and it can be seen that patterns of behaviour begin to emerge even with a small sample such as this. As has been noted, a larger sample size would elicit more generalisable themes (Myers, 2000) that may be applicable more broadly to, for example, teacher education. This would clearly form the basis for further study.

Subjectivity and Objectivity in the present study

Qualitative methodology recognises that the personal involvement and experience of the researcher is intimately involved in the research. Researcher subjectivity has a strong influence upon everything from the choice of topic studied, to the hypotheses formulated, to the selection of methodologies and the interpretation of data. As a consequence in qualitative methodology, the researcher must reflect on the values and objectives s/he brings to her/his research and how these affect the research project (Ratner, 2002).

A key issue that arises from the recognition of researcher subjectivity is its influence on the objectivity of the study. Objectivity is said to negate subjectivity since it renders the observer a passive recipient of external information, devoid of agency and the researcher's subjectivity is said to negate the possibility of objectively knowing a social psychological world. The investigator's values are said to define the world that is studies.

> "Subjectivism is often regarded as the *sine qua non* of qualitative methodology. However, this is untrue."
>
> (Ratner, 2002, p 2)

Personal standpoints and experiences affect the way in which researchers make observations so absolute objectivity is impossible. However, critical self awareness acts to modify purely subjective judgements to give a greater sense of objectivity to observations. Of course, subjectivity can bias the researcher and preclude objectively understanding a subject's psychological reality. However, this is not inevitable. In fact, one of the advantages of recognising subjectivity is to reflect on whether it facilitates or impedes objective comprehension. Objectivism integrates subjectivity and objectivity because it argues that objective knowledge requires active, sophisticated subjective processes – such as perception, analytical reasoning, synthetic reasoning, logical deduction and the distinction of essences of appearances. Conversely, subjective processes can enhance objective comprehension of the world.

The possibility of producing objective, reliable knowledge within the social sciences has been questioned (e.g. Danziger, 1990; Sherrard, 1998) and alternative, qualitative approaches advocated as relevant methods of investigation in the field (e.g. Rennie, 1995). Triangulation improves the reliability of qualitative analysis. This means, as in this study, the use of multiple research methods in order to assess the consistency of findings (Flick, 1991; Tindall, 1994). In this study the range of methods used to achieve reliability included questionnaires, focus groups, individual interviews and, ultimately, the PCT conversations. The implication of this provides evidence of accuracy and objectivity (Knafl & Breitmayer, 1991).

The methodology chosen for this study – the PCT conversation – is very personal (to the participant) and the researcher, while inevitably having views about the subject under investigation, i.e. teaching and the role of the teacher, has little influence on the conversation itself because it is controlled by the participant. Of course, the interpretation of the conversation into personal constructs is carried out by the researcher and is, therefore, subject to a degree of researcher subjectivity. Every effort was made to overcome this by participant validation of the both the conversation transcripts and derived constructs. I think the approach is rigorous but the addition of these

things gives a means of objective validity. A further approach might have been to use an accompanied discussion – but all these are difficult to achieve within the constraints imposed by the EdD. They are refinements that with more time and resources could enhance the study. However, as the PCT conversation is a very personal approach, extra people or equipment in the room may have affected the participants' responses and made them feel uncomfortable. The researcher did take notes as well as recording the conversations to ensure that the records of the conversations were more than just the transcripts and included participant behaviour:

> In order to prevent our research from being a narrative of our own opinions, we can record detailed field notes, and admit our subjectivity.
>
> (Mehra, 2002, p 8)

Contextualisation is particularly concerned with the relationship between accounts and the situations in which they are produced (Madill, *et al.,* 2000). Findings are considered context specific and hence applicable to a narrow constituency which may be difficult to define with precision (McGuire, 1983). As Wilkinson (1988) has indicated there is a strong rationale for requiring researchers to articulate the perspectives from which they approached their material (e.g. Wilkinson, 1988). This includes such details as gender, ethnicity, age and other factors which conceivably inform the audience of the positions from which the researcher writes. As has been stated earlier every effort was made to include a varied group of participants. What is required to avoid error and bias is for a researcher to strive, through self-critical awareness, for objectivity; in other words s/he must pursue the research in a way that 'anyone' would pursue it who is committed to discovering the truth, whatever their personal characteristics or social position (Hammersley & Gomm, 1997). On reflection, the researcher has to concede that the sample of five participants is small and as has been stated earlier this inevitably introduces questions around the issue of generalisability (Myers, 2000). However, the nature of this approach is not one in which the *findings* were ever going to generalisable but the approach developed – the PCT pre and post-conversation – is transferable to many

different situations and further study will demonstrate this. As such it is a novel addition to knowledge and practice.

Bias and the study

A term drawn from quantitative research, *bias* means a systematic error, where a particular research finding deviates from a 'true' finding. This might come about through errors in the manner of interviewing, or by errors in sampling. In qualitative research this is problematic concept, since by definition the qualitative researcher is part of the process, and all researchers are different. The human factor has been said to be both the greatest strength and the greatest weakness of the qualitative method.

> Bias comes not from having ethical and political positions – this is inevitable – but from not acknowledging them. Not only does such acknowledgement help to unmask any bias that is implicit in those views, but it helps to provide a way of responding critically and sensitively to the research.
>
> (Griffiths, 1998, p 133)

Whatever their differences, almost all commentators agree that reflexivity is significant and that it is an explicit self consciousness about the researcher's social, political and value positions in relation to how these might have influenced the design, execution and interpretation of the theory, data and conclusions (Griffiths, 1998; Greenbank, 2003).

> A researcher's background and position will affect what they choose to investigate, the angle of the investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions.
>
> (Malterud, 2001, p 483 – 484)

Such self consciousness needs to acknowledge that the self is not fully transparent to itself, so enough description of the researcher needs to be given for others to make judgements about her/his social and political positionality. In this study the fact that the researcher was both a classroom teacher and then a teacher educator cannot be ignored and was viewed as an influence that offered an insight that other researchers may not have on the research, i.e. the researcher could use an intimate knowledge of the field as a

means of understanding the experiences that the participants had in the classroom. Also, the position of the researcher as a former manager of the SAS meant an in-depth understanding of what would be expected of the participants when on their placements. It could be suggested that this former position might mean that the researcher would consciously influence, for example, the choice of participants. This was avoided by the current manager carrying out the recruitment interviews and supplying the researcher with all possible research participants. The final group were chosen using objective criteria to reflect a range of subject specialism, gender, ethnicity and interest in teaching. The ages of the participants were very similar but that was not under the control of the researcher and it would have been interesting if there had been a greater age range within the study sample.

'Interpretive research begins and ends with the biography and self of the researcher' (Denzin, 1989). This notion of how one's self influences one's research interests is an important issue in the debate around bias in research.

> A researcher's personal beliefs and values are reflected not only in the choice of methodology and interpretation of findings, but also in the choice of the research topic. In other words, what we believe in determines what we want to study. Traditional positivist research paradigm has taught us to believe that what we are studying often has no personal significance. Or, that the only reason driving our research is intellectual curiosity (which is a valid reason on its own). But more often than not, we have our own personal beliefs and views about a topic – either in support of one side of the argument, or on the social, cultural, political sub-texts that seem to guide the development of the argument.
>
> (Mehra, 2002, p 5)

Final personal thoughts

Scheurich (1994) remarks that one's historical position, one's class (which may or may not include changes over the course of a lifetime), one's race, one's gender, one's religion, and so on – all of these interact and influence, limit and constrain production of knowledge. In other words, who I am determines, to a large extent, what I want to study. Mehra (2001) further

believes that in addition to social and historical position, a researcher's evolving self in terms of her/his deliberate educational and professional choices that s/he makes throughout her/his academic career also influence selection of a research topic. My background in education inevitably influenced my choice of research area. I feel very strongly about the teacher shortage and in particular about the continuing attrition of teachers from the profession at around five years into their teaching career. I was interested in finding out if anything could be done to address this both before training and ultimately during those early years. This curiosity resulted in the development of an investigative tool – the PCT pre and post-experience conversation – which could be used, as has been suggested, as a way of tracking a pre-service teacher through the early years of their career.

Clifford Geertz (1973) suggested:

> If you want to understand what a science is you should look in the first instance not at its theories or findings and certainly not at what its apologists say about it; you should look at what the practitioners of it do.
>
> (Geertz, 1973, p 5)

This perspective reflects a common phenomenological value and research strategy that Eger (1993) describes as one 'which tries to stay close to the phenomenon... and by relating always the object of the study to the experiences of the subject who does the studying.' The PCT conversation was developed for this study to address this issue of relating the research to the experiences of the participants.

According to Doheny-Farina (1993), in the case of bias when reporting, researchers will be relating stories from their perspectives - 'our results are, in a large part, what we, as researchers, bring to the research event' (p 254). Doheny-Farina also argues that authority and credibility rests on the researcher's ability to be ethical about the role of the researcher, the manipulation and/or interpretation of data, and the construction of the final report. She concludes with the suggestion that an ethical study is also a

valid study in that the research claims refer to what the researcher set out the measure. This study conforms to what Doheny-Farina is saying in that it did report on what it set out to measure and has formed the basis for the possibility of much more work in the field.

Summary

In summary, the reported study has shown that a PCT pre and post-conversation approach can both establish an individual's bipolar constructs about teaching and the role of a teacher and highlight any changes in the underpinning belief systems as a result of practical classroom experience. The changes can have a profound effect on attitudes to teaching as a career and, as such, have implications for teacher training and the CPD of in-service teachers. The PCT conversation approach has shown its validity in providing rich evidence for the change in belief of a small sample. The application of PCT to a larger sample size drawn from a broader constituency of potential teachers would further enhance the reliability of the PCT conversation as an approach for assessing the change of beliefs in aspiring and practicing teachers.

7. References

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Appendix 8.1 Glossary

- Altruism is selfless concern for the welfare of others and it focuses on a motivation to help others or a want to do good without reward.
- Bipolar construct. Kelly chose the word 'construct' to differentiate it from 'concept'. The crucial difference being that a construct has a specific opposite whereas a concept does not. Kelly argued that good only has meaning when related to bad. Thus, all constructs are bipolar.
- Contrast pole. The pole where the element that is different from the emergent pole is found.
- Element. Phenomena such as people, events, objects, ideas, etc that constitute a person's world.
- Emergent pole. Sometimes known as the similarity pole, this is the pole of the construct where two elements are considered to be similar.
- Extrinsic motivation comes from outside of the individual. Common extrinsic motivations are rewards like money.
- Intrinsic motivation refers to motivation that is driven by an interest or enjoyment in the task itself, and exists within the individual rather than relying on any external pressure.
- Practicum. A school or college course, especially one in a specialized field of study that is designed to give students supervised practical application of previously studied theory.
- Pre-service teacher. A teacher in training who has not yet become fully qualified.
- Pre-training teacher. A student who has not begun training to become a teacher.
- Subordinate construct. Constructs of lesser importance that are subsumed by the 'big' or superordinate constructs.
- Superordinate construct. Kelly saw constructs as having a hierarchical structure, the most important and over-arching ones being at the top or superordinate.

Appendix 8.2 Experiences Questionnaire

Personal experiences

1. In what ways was school enjoyable when you were a pupil?
2. What did you dislike about school?
3. What did you find interesting/motivating when you were at school?
4. What style(s) of teaching did you experience?
5. What were the relationships between pupils and teachers like?
6. What subjects did you choose to study further?
7. How did you decide on those subjects?
8. Do you have any family members and/or friends who are teachers?
9. Have you had any interactions with schools since leaving?
10. When you were young, what were your career ambitions?

The Scheme

1. Why did you apply to take part in the scheme?
2. What are your current perceptions about the job of a teacher?
3. What are your current perceptions about life in schools?
4. Do you think it is different being a pupil now compared with when you were at school? Explain your answer.
5. What are your thoughts and feelings about going into school on this scheme?

During your placement

1. In what ways do you feel that school has changed since you were a pupil?
2. How would you describe the school as an environment in which to learn and work?
3. Have pupil-teacher relationships changed? Explain.
4. What are pupils' attitudes to learning?
5. How is it different going into school as an adult?
6. Do schools seem more or less formal environments now than you remember?

Afterthoughts

1. Has the experience changed your perceptions of schools, teaching and learning? Explain.
2. Has the experience made you more apprehensive about or more committed to teaching as a career? Explain.
3. Do you feel that you have a better understanding of the work of a teacher and the job of teaching as a result of your placement? Explain.
4. Does this understanding differ from what you had perceived from your experiences as a pupil? Explain.
5. Do you think teaching should be seen as a profession similar to that of a doctor, accountant, architect, etc? Explain your answer.
6. How do you think you can improve and learn as a teacher?
7. What do you see as the key challenges of teaching?
8. Do you think that the teachers you have met and interacted with get a good deal of satisfaction from teaching? Explain.
9. Do the teachers you have met have a good awareness of their pupils' needs, do they talk enthusiastically about their pupils and do they genuinely care about them and their learning. Use examples to illustrate your answer.
10. How would you describe the atmosphere/environment in lessons?
11. Are pupils mostly on task and learning or more often off task and time wasting? Use examples to illustrate your answer.
12. Based on what you have observed and experience, is teaching something you feel you would like to do? If so, why? If not, why not?

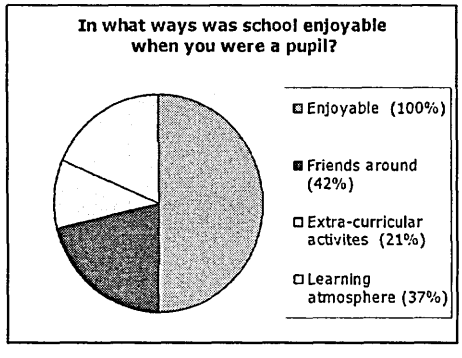
Appendix 8.3 Questionnaire findings

There was a 37% return of the 70 questionnaires issued.
Some of the questions were straightforward closed questions and for these simple percentages were calculated. For the open-ended questions themes were identified and quantified for graphical display. Some respondents provided multiple answers which were counted separately and this accounts for some findings appearing to be more than 100%.

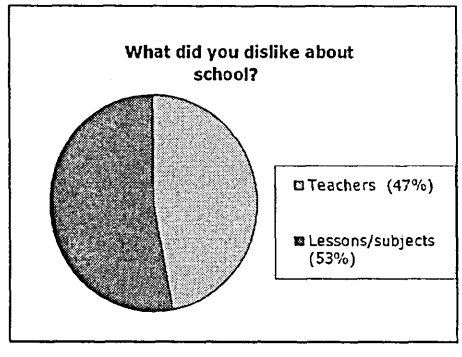
The sections analysed were those of Personal Experience, During Placement and Afterthoughts.

Personal Experience

Question 1



Question 2



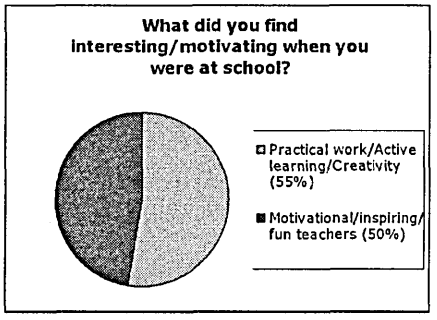
All the students remembered enjoying their time at school with 42% citing the importance of having their friends around them. Only a few were unable to find anything they remembered disliking when they were at school. Of those that did, the dislikes fell into two categories – their teachers and the lessons:

> I enjoyed the social side of school, seeing friends on a daily basis.
> (SAS student)

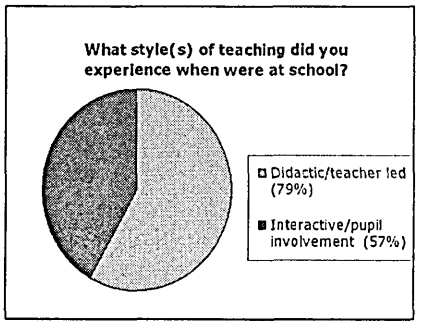
> I disliked school when the teachers were unenthusiastic about the lessons they taught and were unorganised.
> (SAS student)

I disliked having to do tedious work and also having to do subjects I didn't like.
(SAS student)

Question 3



Question 4

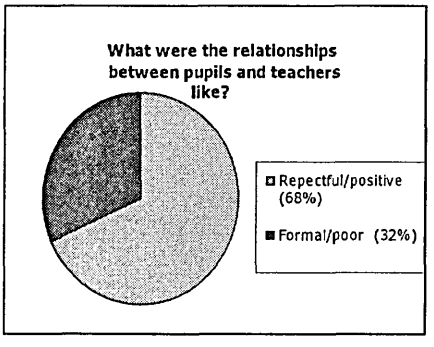


It was clear that all the students liked lessons to be active but it seemed that many of the students' experiences as pupils were those of teacher-led/didactic teaching (79%):

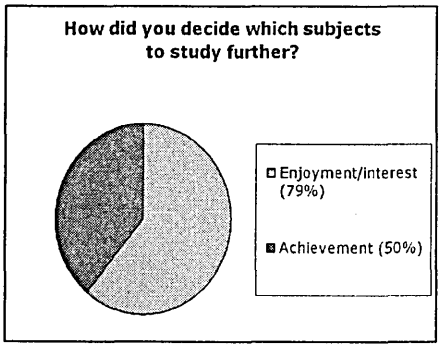
Teachers that tried to incorporate different teaching resources into their lessons to make them fun and practicals were always fun.
(SAS student)

I was mostly exposed to a disciplined style of teaching. A pupil was to remain quiet and had to respect the teacher and do as they were told.
(SAS student)

Question 5



Question 7



'Respect' appeared somewhere in almost all the answers to question 5 whether it be because of the positive relationships between teachers and

pupils or because of the perceived lack of it. The decisions about what to study further were overwhelmingly because of enjoyment/interest combined, in many cases, with achievement. In a number of cases this was attributed to the subject teachers:

> Relationships between pupils and teachers were excellent and extremely positive.
> (SAS student)

> Mostly teacher-pupil relationships at the high school I attended were poor.
> (SAS student)

> They were all subjects I enjoyed as was good at.
> (SAS student)

Questions 8 & 9

8. Do you have any family members and/or friends who are teachers?

Yes – 50%; No – 50%

> Both my auntie and uncle are in the teaching profession.
> (SAS student)

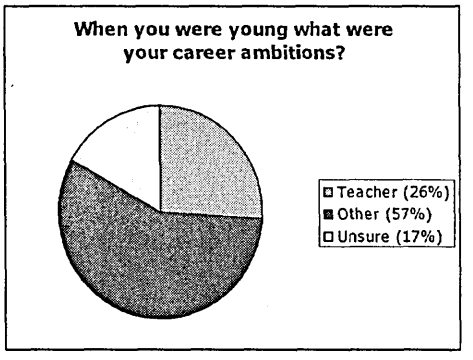
9. Have you had any interactions with a school since leaving?

Yes – 72%; No - 28%

> Yes, I visit to occasionally see my teachers and my classmates and we are invited by the school to attend exhibitions and other events.
> (SAS student)

> I have done a lot of volunteer work in schools.
> (SAS student)

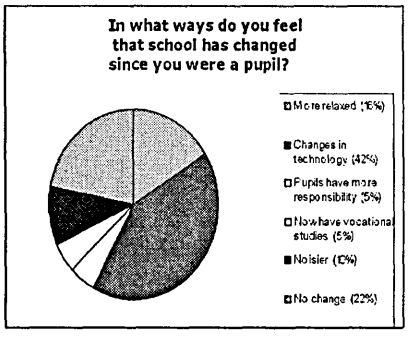
Question 10



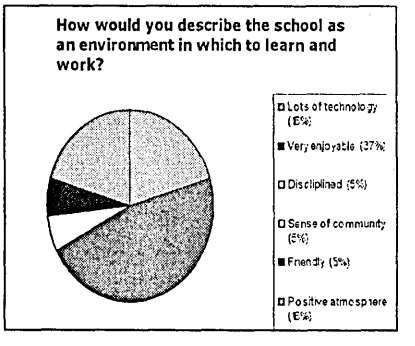
A quarter of the students cited teaching as a long term ambition with only 17% stating as a child they had been unsure. 57% had originally had other careers in mind and these included, e.g. Vet (3 students), the Law (4 students), Medical (3 students), Business (3 students).

During Placement

Question 1



Question 2



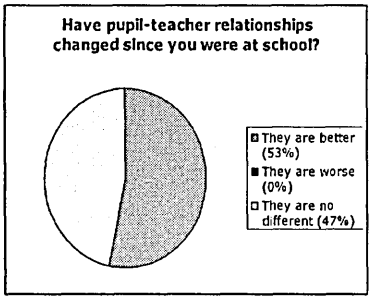
42% respondents commented on how schools have changed the use of Information Technology in the classroom. This included the increased use of computers by pupils to the introduction of interactive whiteboards. For many this was a surprise from when they were at school. However, this seemed to contribute to the opinion that school was an enjoyable (37%) and positive (16%) place to be:

> ICT plays a much larger role in school life now that it did when I was at school. All the children are computer literate and the interactive whiteboard in the classroom is used all the time to accompany lessons.
> (SAS student)

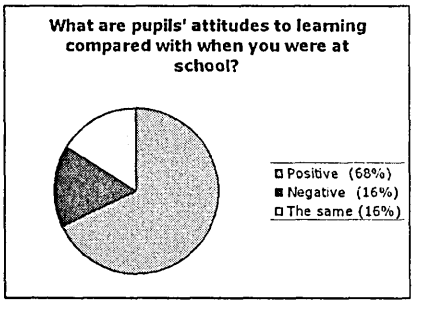
There are a lot of techniques used to stimulate learning such as ICT and many other media devices. Pupils also learn inside and outside the classroom, going on school trips.
(SAS student)

The school does not seem to represent a place of discipline, but enjoyment also for the pupils which is an important combination.
(SAS student)

Question 3



Question 4



Some students were very sure that the teacher-pupil relationships were better than they remembered (53%) while the remainder felt they had not changed (47%) with none feeling that things had got worse.

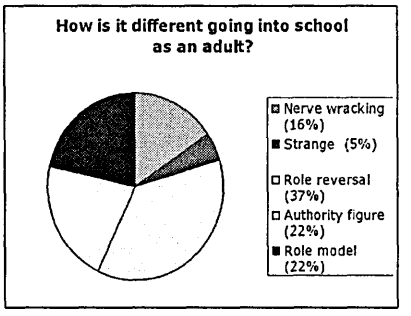
The overwhelming feeling was that pupils' attitudes to learning were either positive (68%) or the same as when they were at school (16%). There were some exceptions (16%):

Yes, pupils are a lot more mature especially at Key Stage 4 where I have been teaching. There is more of an understanding nowadays.
(SAS student)

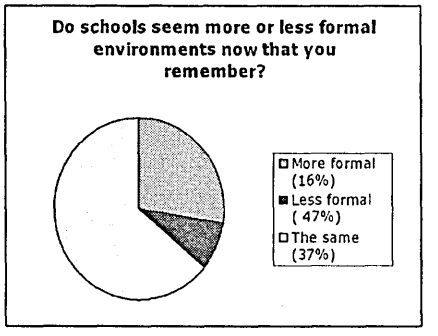
The majority of students seemed willing and eager to learn.
(SAS student)

A majority of students have low morale towards learning; a general 'Can't do it' attitude exists especially in the more written and academic subjects.
(SAS student)

Question 5



Question 6



Question 5 triggered a range of responses but many students included the issue of 'role reversal' in their answers (37%) with many seeing themselves as role models. Less formal (47%) and no different (37%) was how the students described the school environment. Their answers implied that they considered this change in the school environment as being a good thing:

> The relationships that you form with pupils is very different and you have to recognise that you are a role model for young people, which is important. You are also treated differently by teachers who are now your colleagues and not your teachers!
> (SAS student)

> The school I attended did not appear to be any more or less formal than my old school. Possibly a little less formal in order to create better relationships between pupils and teachers.
> (SAS student)

Afterthoughts

Questions 1- 4

1. Has the experience changed your perceptions of schools, teaching and learning?

2.

Yes – 68%; No – 11%; No (but) – 21%

> The experience has reinforced many of my prior perceptions of teaching. However, it has shown me the variety of learning methods required to ensure each student has the same chance as their peers of understanding work.
> (SAS student)

I suppose in all honesty at first I felt a little more apprehensive about becoming a teacher due to the excess workload but my experience has shown me the benefits outweigh the costs.
(SAS student)

3. Has the experience made you more apprehensive or more committed to teaching?

4.

More committed – 89%; Less committed - 11%

A little more apprehensive because of the behaviour of some of the pupils, but am still committed.
(SAS student)

5. Do you feel that you have a better understanding of the work of a teacher and the job of a teacher as a result of your placement?

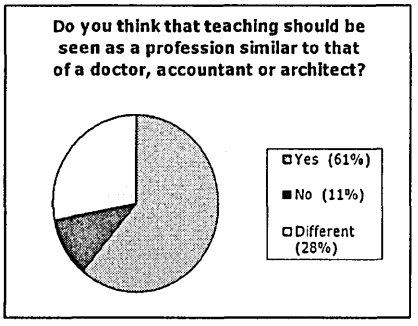
Better – 100

6. Does this understanding differ from what you had perceived from your experiences as a pupil?

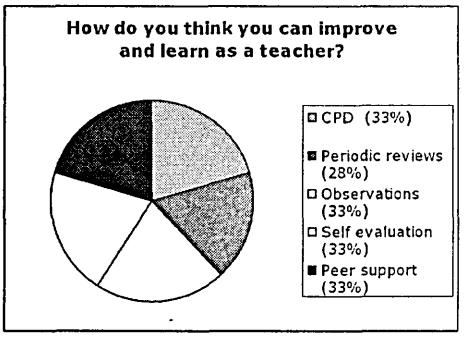
Different from being a pupil – 94%; The same as from being a pupil – 6%

Yes, I think it is very hard work but incredibly rewarding.
(SAS student)

Question 5



Question 6



Only 11% thought that teaching should not be considered a profession similar to a doctor, etc with 61% thinking that it should be while 28% considered it to be different and should not be compared.

There was a mixed response from the students when asked about how they could improve their teaching with no one suggestion outweighing any of the others by a significant margin:

> No, as teachers come home and prepare and plan their lessons after school in their own time. However, doctors and accountants leave their profession once they finish a day at work.
> (SAS student)

> Yes, I think the profession should be highly respected as the knowledge, commitment and dedication is intrinsic as it is for a doctor or an architect.
> (SAS student)

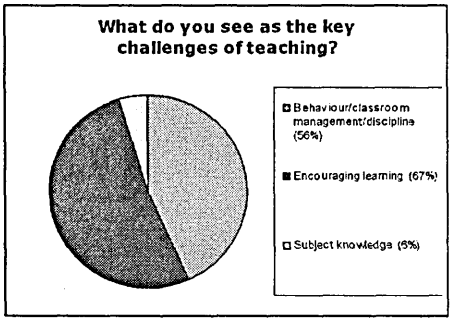
> It has always been my opinion that teaching is a vocation rather than a profession.
> (SAS student)

> Through professional development and having regular reviews I feel improvements for me as a teacher can be made.
> (SAS student)

> The more observation of other teachers I get, the more I think I think I improve in terms of both giving a lesson and helping one-to-one.
> (SAS student)

> I think having a mentor is vital to improvement and learning as a teacher, as well as interacting with other more experienced members of staff.
> (SAS student)

Question 7



Given the students' earlier observations on the importance of inspiring/motivating teaching, it is perhaps not surprising that 67% cited being able to encourage learning as a key challenge with the issue of classroom management also scoring 56%:

> I think that one huge challenge is keeping pupils' interest. If you can get their attention then they can learn without even knowing it.
> (SAS student)

> Managing behaviour is another key challenge, and one which I am working on.
> (SAS student)

Questions 8 & 9

8. Do you think that the teachers you have met and interacted with get a good deal of satisfaction from teaching?

Yes – 83%; Sometimes – 17%; No – 0%.

9. Do the teachers you have met have a good awareness of their pupils' needs, do they talk enthusiastically about their pupils and do they genuinely care about their learning?

Yes – 94%; No – 0%; Not clear – 6%

It may be a measure of the teachers who volunteered to work with the students but the majority of responses (83%) indicated teacher job satisfaction and a caring attitude:

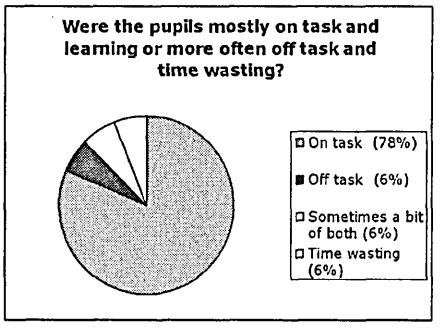
Yes, definitely. They all express some dissatisfaction with elements of their role but the rewards far outweigh the grievances.
(SAS student)

The teachers I have talked to go out of their way to provide lessons that are interesting and motivating to all students as they genuinely want them to get a lot from the lessons.
(SAS student)

Question 10 - How would you describe the atmosphere/environment in lessons?

Stimulating	Calm
Interesting	Positive
Enjoyable	Enthusiastic
Occasionally manic	Cooperating
Good	Challenging
Proactive	Structured
Friendly	Happy
Fun	Caring
Exciting	Relaxed

Question 11



Question 12

have observed
teaching
you would like to

%;

Pupils are on task for the majority of the time.
(SAS student)

The students in the class were mostly time wasting.
(SAS student)

Pupils seemed to be off task quite often on a Friday afternoon!
(SAS student)

On task and learning when they felt involved.
(SAS student)

It is something I have chosen to do, but I do not anticipate it being a long term career.
(SAS student)

Based upon the scheme I cannot wait to embark on a teaching career.
(SAS student)

Yes – definitely!!
(SAS student)

Appendix 8.4 Student Associates Scheme Interview Schedule

July 11, 2007

1. Why did you apply to take part in the scheme?

2. What were your expectations of the school and classroom environment before you started on the scheme?

3. What do you think the main differences are between learning in school now and when you were a pupil?

4. What are your current perceptions of teaching and how do they differ from before you took part in the scheme?

5. What are the main dynamics of the classroom that you witnessed?

6. Did the teachers you worked with seem to have a good understanding of their pupils' needs? Explain and give examples.

7. Thinking about the pupils you work with, describe their attitudes to learning. Give examples.

8. What do you see as the key challenges to teaching?

9. How do you think teachers could improve their teaching?

10. Do you feel that the teachers you worked with experienced satisfaction from their job? Explain.

Appendix 8.5 Nominal Group Technique answers

Examples of students' individual NGT answers:

Student A

1. All the teachers constantly giving information and being friendly.
2. Working in a subject class.
3. Working on a one-to-one basis.
4. Shadowing a pupil with behavioural difficulties.
5. Being treated as an equal by teachers.

Student B

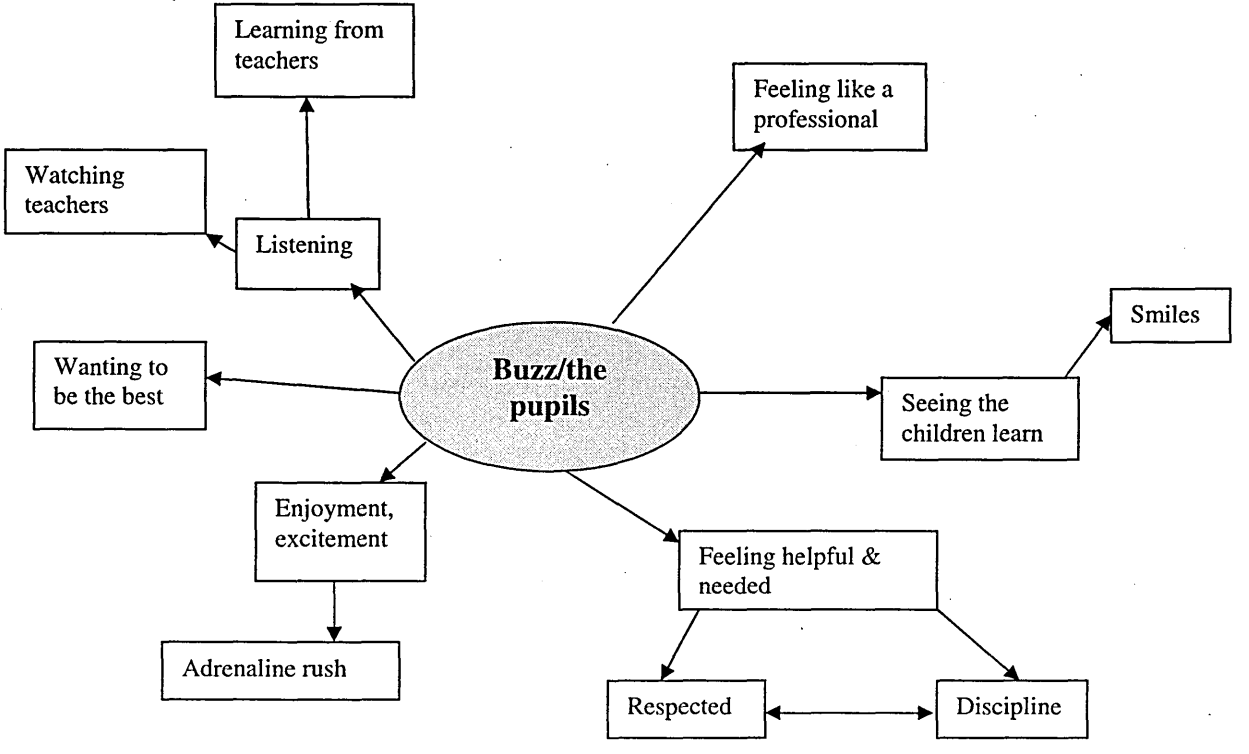
1. Methods of teaching.
2. School environment – how close everyone was.
3. Carrying out my own activities.
4. Working with children who needed support.
5. Using ICT in the classroom.

Student C

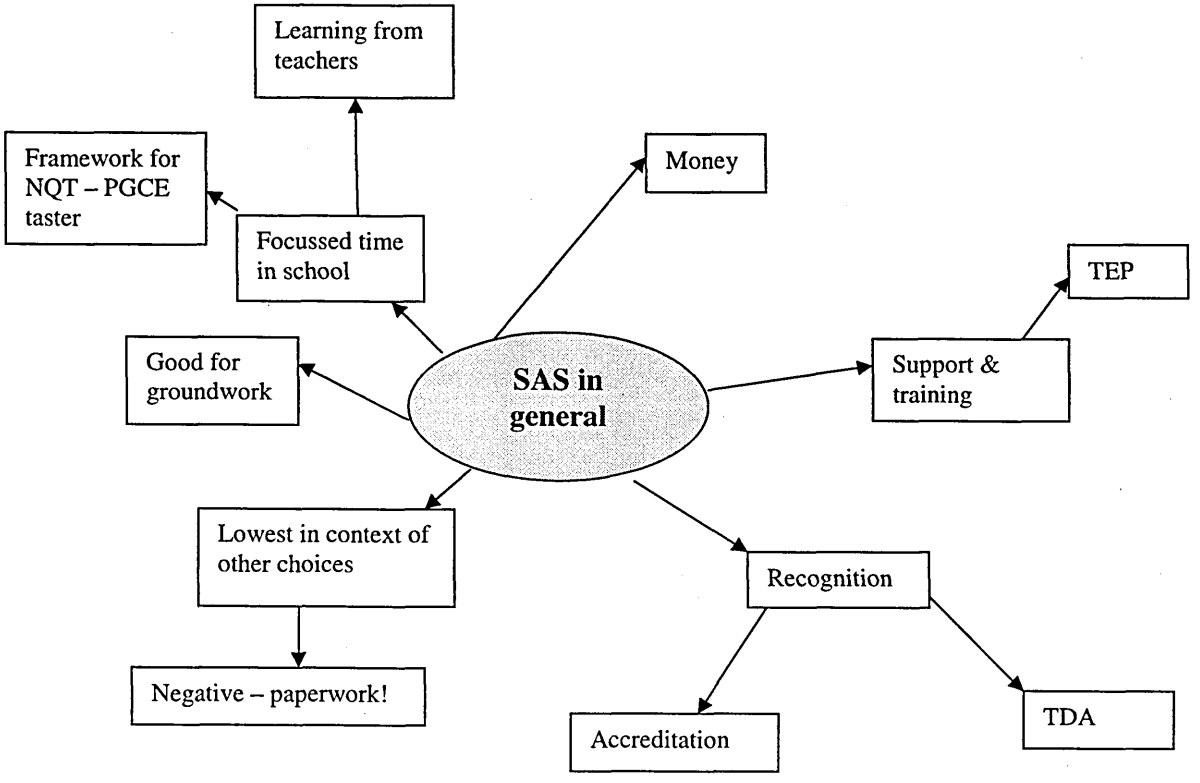
1. Actually teaching a series of lessons myself.
2. Shadowing a class for a day.
3. Seeing a group of children turn from poor behaviour to sitting and doing work.
4. The children asking me to stay!
5. Teachers were helpful and supportive.

Appendix 8.6 Brainstorming Discussions:

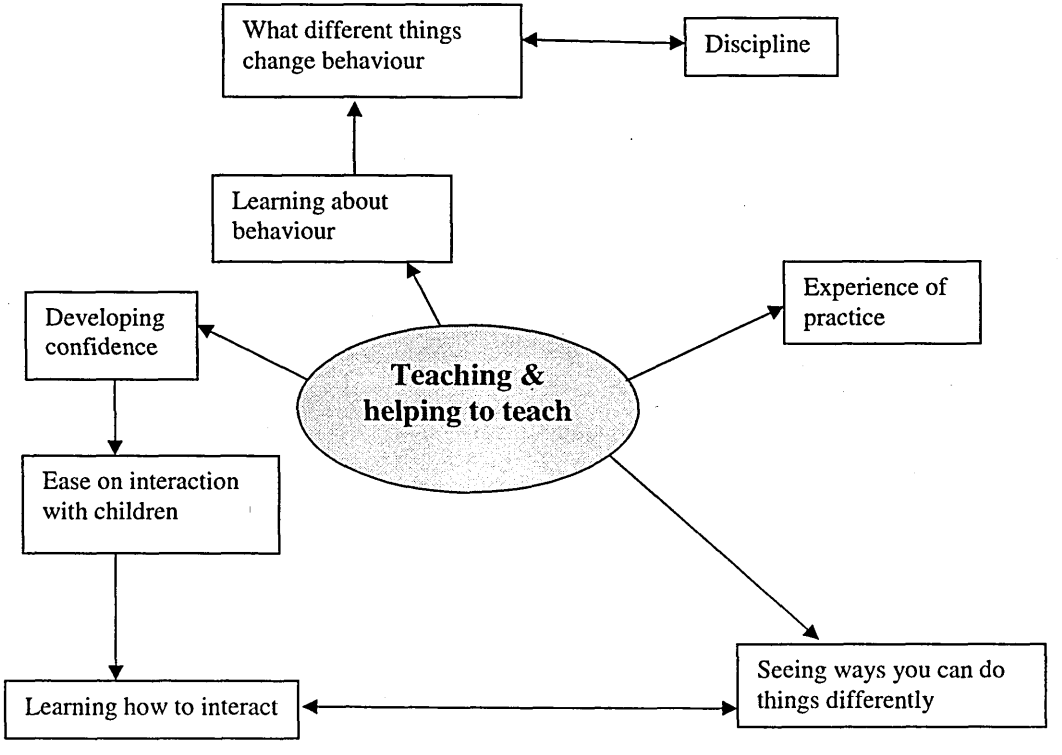
8.5.1 Issue that was given highest priority rating



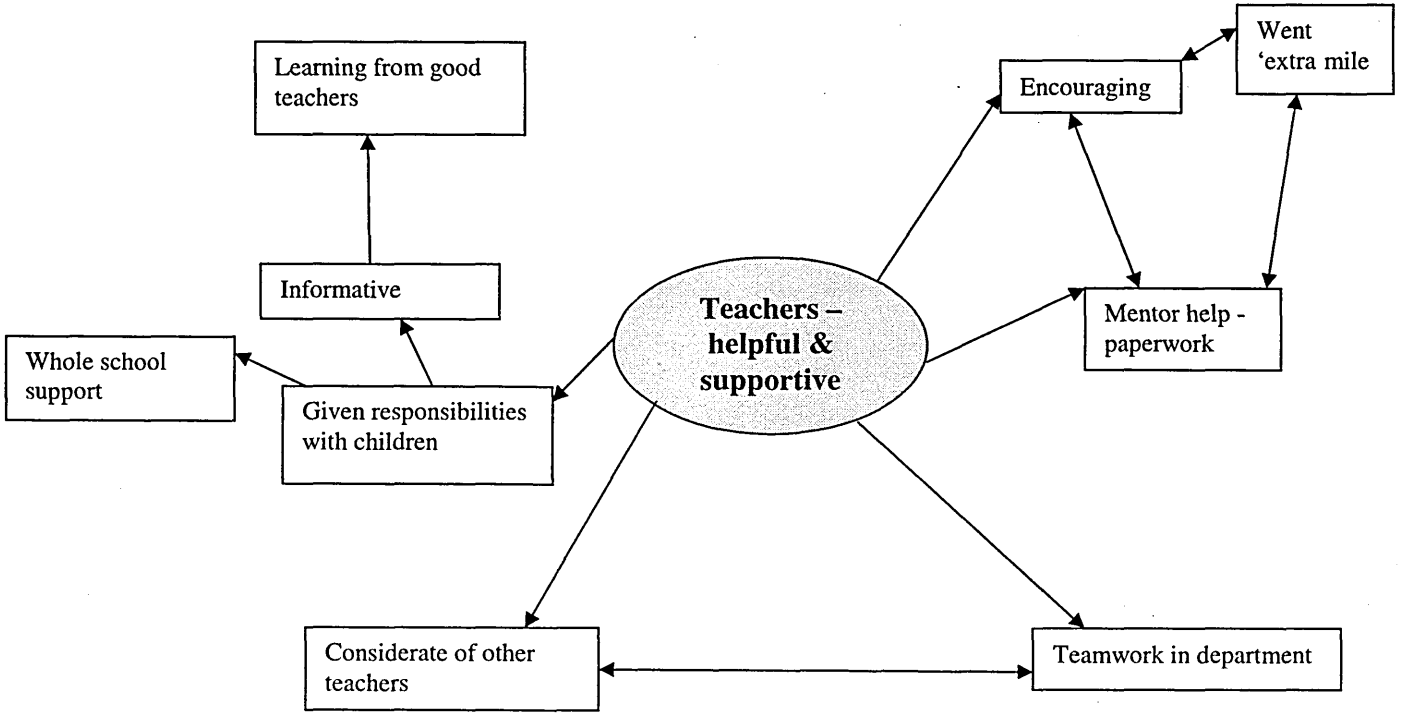
8.5.2 Issue that was given lowest priority rating



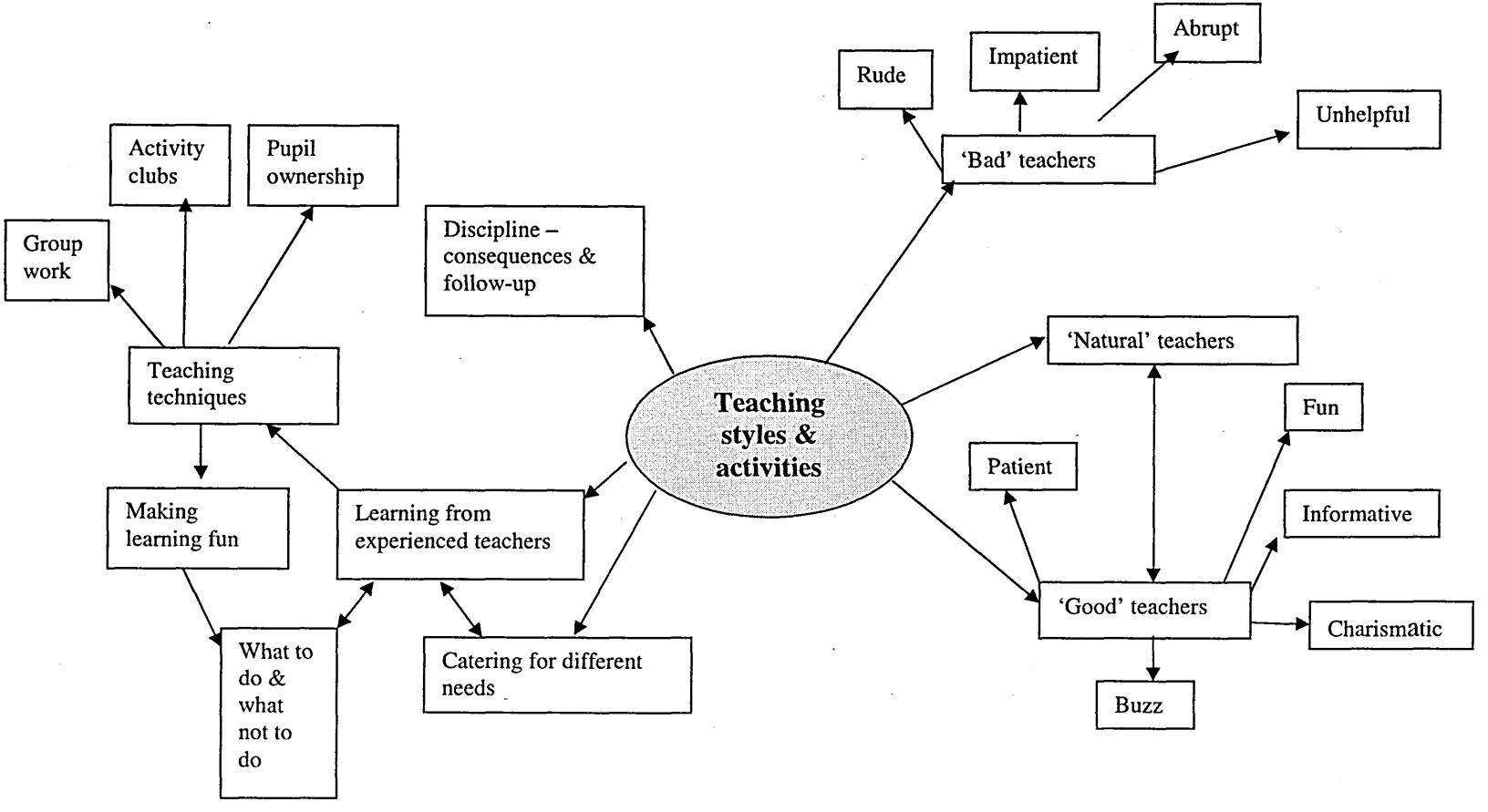
8.5.3 Issue that was given the second priority rating



8.5.4 Issue that was given the third priority rating



8.5.5 Issue that was given the fourth priority rating



Appendix 8.7 Kelly's Fundamental Postulate and Corollaries

Fundamental postulate:

"A person's processes are psychologically channelized by the ways in which he anticipates events."

1. **Construction Corollary.** We anticipate future events according to our interpretations of recurrent themes.
2. **Individuality Corollary.** People have different experiences and therefore construe events in different ways.
3. **Organization Corollary.** We organize our personal constructs in a hierarchical system, with some constructs in a superordinate position and others subordinate to them. This organization allows us to minimize incompatible constructs.
4. **Dichotomy Corollary.** All personal constructs are dichotomous, that is, we construe events in an either/or manner.
5. **Choice Corollary.** We choose the alternative in a dichotomized construct that we see as extending our range of future choices.
6. **Range Corollary.** Constructs are limited to a particular range of convenience, that is, they are not relevant to all situations.
7. **Experience Corollary.** We continually revise our personal constructs as the result of experience.
8. **Modulation Corollary.** Not all new experiences lead to a revision of personal constructs. To the extent that constructs are permeable they are subject to change through experience. Concrete or impermeable constructs resist modification regardless of our experience.
9. **Fragmentation Corollary.** Our behaviour is sometimes inconsistent because our construct system can readily admit incompatible elements.
10. **Commonality Corollary.** To the extent that we have had experiences similar to others, our personal constructs tend to be similar to the construction systems of those people.
11. **Sociality Corollary.** We are able to communicate with others because we can construe their constructions. We not only observe the behaviour of others, but we also interpret what that behaviour means to them.

Appendix 8.8

Consent form for participants to be interviewed as part of the research project titled:

Undergraduates' personal constructs: classroom teaching and the role of a teacher

The aim of this research is to explore how, by placing undergraduates in schools to work with practicing teachers, their constructs of teaching change. Also to examine the ways in which school-based placements affect the decision-making processes with regard to choosing teaching as a career.

I agree to take part in the above research project. I have had the project explained to me, and I understand that agreeing to take part means that I am willing to:

- be interviewed by the researcher either one on one, or as part of a focus group
- allow the interview to be audio-taped
- make myself available for a further interview should that be required
- record my time in school in the form of a reflective journal

Also,

- I understand that my name and identifying details will be changed and access to the original tapes and transcripts restricted to the researcher and supervisor to protect my identity from being made public
- I understand that I will be given a transcript of data concerning me for my approval before it is included in the write up of the research
- I also understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

Please tick the appropriate box:

- The information I provide can be used in further research projects which have ethics approval as long as my name and contact information is removed before it is given to them ☐
- The information I provide cannot be used by other researchers without asking me first ☐
- The information I provide cannot be used except for this project ☐

Name: .....

Signature: .....

Appendix 8.9 Conversation Summary and Notes

Type of conversation (Pre / Post)

Name: .....

Date: .....

Start Time: .....

Finish Time: .....

Length of conversation: .....

Elements chosen:

Number combination	Element statements*
Pair	
Contrast	
Pair	
Contrast	
Pair	
Contrast	
Pair	
Contrast	
Pair	
Contrast	
Pair	
Contrast	
Pair	
Contrast	

*completed by researcher after the conversation

Appendix 8.10 Pre- and post conversation data

8.10.1 (a) Participant M - Pre-experience conversation

1	**The ideal career** • Personally need to change • Supportive • Good behavioural management	**Myself as I would like to be** • Need more experience • Improved skills • In a caring role • Better educated • Willing to adapt	**Myself as I am** • Care about vulnerable children • Giving rather than taking • Still developing • Willing to learn
2	**Myself as a teacher** • Imparting knowledge • Not in school • Get experience & develop skills • A communicator	**Myself as I would like to be** • Need more experience • Improved skills • In a caring role • Better educated • Willing to adapt	**Myself as I am** • Care about vulnerable children • Giving rather than taking • Still developing • Willing to learn
3	**Myself as a teacher** • Imparting knowledge • Not in school • Get experience & develop skills • A communicator	**Myself as I would like to be** • Helping children • Emotionally detached • Helping children develop	**My worst teacher** • Cannot impart knowledge • Cannot communicate effectively • Egocentric • Strict • Personality clash with pupils • Didn't get on with pupils • Affects subject choice • Not ideal career
4	**The ideal teacher** • Honest • Does not appear better than they are • Friendly • Someone who listens • Nor afraid to use discipline • Effective communicator • Open and outgoing • Uses real examples • Confident	**Myself as I am** • Want many of the characteristics of the ideal teacher	**A role model whom I admire** • Don't have one • Everyone has flaws • Want to be a role model
5	**Myself as I would like to be** • Someone people admire - a role model • Feel appreciated • Improve a child's life • Happy • Be positive	**A role model whom I admire** • Don't have one • Everyone has flaws • Want to be a role model	**My worst teacher** • Cannot impart knowledge • Cannot communicate effectively • Egocentric • Strict • Personality clash with pupils • Didn't get on with pupils • Affects subject choice Not ideal career

8.10.1(b) Participant M - Post-experience conversation

1	**The ideal career** • Being able to control • Have respect • Teachers get burned out & stressed - not ideal	**Myself as I would like to be** • Better equipped with necessary skills • Not easily annoyed • Able to build up relationships	**Myself as I am** • Didn't realise how much have to offer • Made me feel good about myself • Felt positive • Passionate
2	**Myself as a teacher** • Fits together with 'Myself as I would like to be' • Organised • Good time management • Firm & have rules • Transferable skills • Fitted the role • Enjoyment • Active teaching and learning • Contextual teaching	**Myself as I would like to be** • See 'Myself as a teacher'	**Myself as I am** • I know how to talk to children
3	**Myself as a teacher** • Fits together with 'Myself as I would like to be' • Organised • Good time management • Firm & have rules • Transferable skills • Fitted the role • Enjoyment • Active teaching and learning • Contextual teaching	**Myself as I would like to be** • See 'Myself as a teacher'	**My worst teacher** • No passion for the subject • No enthusiasm • Did not engage pupils • Did 'basics' to get by
4	**The ideal teacher** • Good at engaging pupils • Good subject knowledge • Use of contexts • Very humble • Good team player • Sees inclusion as important • Will help colleagues • Passionate	**Myself as I am** • "I could see myself as the ideal teacher" • Do things instinctually • To be more personal (one-to-one) • Don't want to 'fall into teaching'	**A role model whom I admire** • Same as before - no role model
5	**Myself as I would like to be** • A role model for others • Someone who works hard • Someone with ambition • Someone who is admired	**A role model whom I admire** • Would like that to be her	**My worst teacher** • Teachers who don't know pupils' names

8.10.2(a) Participant W - Pre-experience conversation

1	**The ideal teacher** • Enthusiastic • Visual teaching/imaginative • Practical work including outside of classroom setting • Personal interest in students • Shares knowledge	**A role model whom I admire** • Inspirational • Encouraging	**My worst teacher** • Threatening • Impatient • Not engaging • Not inspirational
2	**Myself as I would like to be** • Not 'sold' on engineering • Wants to share knowledge • Wants to be encouraging • Wants to be a good communicator	**A role model whom I admire** • Natural influence (family) • Admires qualities of favourite teacher	**My worst teacher** • Threatening • Impatient • Not engaging • Not inspirational
3	**Myself as I would like to be** • Skills from university experience transferable to teaching	**A role model whom I admire** • Would teach the same subject as favourite teacher	**Teaching as a career** • Influenced by family • Frustration lead to negativity • Concerned about teaching outside comfort zone
4	**Myself as I am** • Likes to encourage & excite • Likes to influence	**The ideal career** • Telling stories • Doing something you love • Could require sacrifice	**Myself as a teacher** • Prepared to give 100% • Will find it satisfying
5	**Myself as I would like to be** • Possibly a teacher	**Myself as a teacher** • Answers desires about where he would like to be in life • Scared – 'can I do it?'	**The ideal teacher** • Vocation • Inspiring • Can teach all abilities

8.10.2(b) Participant W - Post-experience conversation

1	**The ideal teacher** • Extracurricular involvement • Mutual respect • Confidence • Life experience • Contextual teaching • Natural ability	**A role model whom I admire** • Commanded the class • Clarity in teaching • Used theoretical & practical approaches	**My worst teacher** • No classroom presence • Lack of respect
2	**Myself as I would like to be** • Confident • Knowledgeable • Enthusiastic • More confident after placement • Will teach eventually	**A role model whom I admire** • Good classroom management	**My worst teacher** • Lack of classroom control
3	**Myself as I would like to be** • Would like to teach eventually • Want to improve classroom management • Be more confident	**A role model whom I admire** • Good control	**Teaching as a career** • Believes could now teach
4	**Myself as I am** • Love to work with kids	**The ideal career** • Happy to change careers	**Myself as a teacher** • Still unsure but less so • Enjoyed experience • Hard work • More experience of classroom control
5	**Myself as I would like to be** • Be myself	**Myself as a teacher** • Better planning • Better self-belief • Enjoy it • Something I think I could do	**The ideal teacher** • Confident • Keep pupils on task • Give clear instructions • Strength of character • Popular (with pupils & colleagues)

8.10.3(a) Participant C - Pre-experience conversation

1	**Teaching as career** • Interactive teaching • Not always wanted to teach • Needs to be enjoyable • Don't need to be good at it • Involvement with children • Bring subject to life • Seeing people achieve • Making a difference • Stability • Fits around family life	**Myself as I am** • "You shouldn't have to change" • "You can only be yourself" • Good relationships	**My worst teacher** • Pupils didn't understand • Felt had lost out • Constantly shouting • Classroom management • Not liking the subject
2	**Teaching as a career** • Interactive teaching • Not always wanted to teach • Needs to be enjoyable • Don't need to be good at it • Involvement with children • Bring subject to life • Seeing people achieve • Making a difference	**Myself as I am** • Lack of self confidence • "If I had all the cards I'd still keep that one [Myself as I am] because I think you should never change who you are".	**My best teacher** • Could enthuse pupils • Passionate about subject • "I know you can do it" • Personal interaction
3	**My best teacher** • Could enthuse pupils • Passionate about subject • "I know you can do it" • Personal interaction	**Teaching as a career** • Approachable • Being liked • Not good at everything • Pupils feel satisfied	**Myself as I am** • "I can only do my best" • Smiling a lot
4	**Myself as a teacher** • Not too stern • Approachable • Work/life balance • Perseverance	**Myself as I am** • Adaptable • All rounder • Approachable • Able to compromise	**The ideal career** • Being happy • Positive • Vocation • Confidence
5	**A role model whom I admire** • Celebrities • Parents • Self belief • Food teacher • Confident • Passionate	**Myself as I am** • Adaptable • All rounder • Approachable • Able to compromise	**Myself as a teacher** • Innovative • Not too stern • Approachable • Work/life balance • Perseverance

8.10.3(b) Participant C - Post-experience conversation

1	**Teaching as career** • Has been confirmed by experience • Surprised at strength of ambition to teach • Positive feedback • Seeing it all come together • Extracurricular work • Always varied • Fun • Hard work	**Myself as I am** • Hard work • Became a different person • Came to life • Became calm • Felt pleased • Fitted into department/school • Didn't need to change (much) • Confidence	**My worst teacher** • Lesson structure • Not interactive
2	**Teaching as a career** • Has been confirmed by experience • Surprised at strength of ambition to teach • Positive feedback • Seeing it all come together • Extracurricular work • Always varied • Fun • Hard work	**Myself as I am** • Hard work • Became a different person • Came to life • Became calm • Felt pleased • Fitted into department/school • Didn't need to change (much) • confidence	**My best teacher** • Fun lessons • Interactive • Creative • Amenable • Calm
3	**My best teacher** • Approachable • Patient • Understanding • Empathy • Stern • Organised	**Teaching as a career** • " ... you probably don't need to be the best teacher"	**Myself as I am** • Ability to adapt
4	**Myself as a teacher** • It's hard work • Approachable	**Myself as I am** • Hard work • Became a different person • Came to life • Became calm • Felt pleased • Fitted into department/school • Didn't need to change (much) • Confidence	**The ideal career** • Something to work towards
5	**A role model whom I admire** • Had become a role model!	**Myself as I am** • I trust myself to do it • Approachable	**Myself as a teacher** • It was nice • On a constant high • "At last I've come into my own" • Enjoyment • Love working with kids • Could be good at it • Wasn't nervous • Confident • Not going to be anxious • Must be organised • Make it fun/a challenge

8.10.4(a) Participant R - Pre-experience conversation

1	**My best teacher** • Inspirational • Active teaching • Did not discriminate • Mutual respect	**Myself as a teacher** • Won't have favourites • Will not discriminate • Be respectful/respected • Make pupils feel comfortable • Approachable	**My worst teacher** • Made pupils feel isolated • Did not help • Showed favouritism • Would have enjoyed subject if felt more involved
2	**The ideal teacher** • Treats pupils as an equal • Make pupils feel comfortable • Does not isolate individuals • Ready to help in or out of the classroom • Use varied teaching styles	**Myself as a teacher** • Would like pupils to describe her as an ideal teacher • Recognise stress in a pupil & try to help • Activity-based teaching • Listen to other peoples' opinions • Cheerful • Approachable • Vary teaching approaches	**My worst teacher** • Made her feel tense/stressed • Not open-minded
3	**The ideal teacher** • Inspirational • Passionate about subject and teaching • Positive relationships with pupils • Different teaching approaches	**The ideal career** • Not like my worst teacher • Enjoyable • Being happy • Good money • Good holidays • Works around having a family • Would only leave if wasn't succeeding	**My worst teacher** • Not respected by pupils
4	**The ideal teacher** • Inspirational • Passionate about subject and teaching • Positive relationships with pupils • Different teaching approaches • Treats pupils as an equal • Make pupils feel comfortable • Does not isolate individuals • Ready to help in or out of the classroom • Use varied teaching styles	**The ideal career** • Not like my worst teacher • Enjoyable • Being happy • Good money • Good holidays • Works around having a family • Would only leave if wasn't succeeding	**Teaching as a career** • Only if can be an ideal teacher

5	**Myself as I would like to be** • Like my role model!	**A role model whom I admire** • Professional & successful • A 'foodie' • Enjoys work • Giving something back • Passionate about work	**Myself as I am** • Not there yet!
6	**A role model whom I admire** • Professional & successful • A 'foodie' • Enjoys work • Giving something back • Passionate about work	**Myself as a teacher** • Able to expand pupils' knowledge • Build pupils' self-esteem & confidence • Not 'preaching'	**Myself as I am** • Working on it.
7	**My worst teacher** • Not open-minded • Not approachable	**Myself as I am** • Need experience	**Myself as a teacher** • Need more confidence • Approachable • Open-minded
8	**Teaching as a career** • Want to give something back • Passionate about subject • Not a teacher yet	**The ideal career** • Would be teaching • Works around family • Holidays • Money	**My worst teacher** • Not open-minded • Not approachable

8.10.4(b) Participant R - Post-experience conversation

1	**My best teacher** • No change from pre-experience conversation	**Myself as a teacher** • Better now had some experience • Nervous but got better • Worked one-to-one - got result & felt proud • Room to develop • Need to work on classroom management	**My worst teacher** • Not professional • Made assumptions about pupils' interest
2	**The ideal teacher** • "Don't want to be the ideal teacher" • Consistency • Classroom control • Approachable • Passionate about subject	**Myself as a teacher** • Passionate about subject	**My worst teacher** • Not professional • Made assumptions about pupils' interest • Not consistent • Not approachable
3	**The ideal teacher** • Consistency • Classroom control • Approachable • Passionate about subject	**The ideal career** • Enjoyment • Satisfaction • Frustration!!	**My worst teacher** • Not professional • Made assumptions about pupils' interest • Not consistent • Not approachable
4	**The ideal teacher** • Consistency • Classroom control • Approachable • Passionate about subject	**The ideal career** • Enjoyment • Satisfaction • Frustration!!	**Teaching as a career** • "It's still what I want to do" • Areas for development • Need more confidence
5	**Myself as I would like to be** • Like mentor • More patient	**A role model whom I admire** • Mentor in school • Can be easily frustrated	**Myself as I am** • Need to work on confidence, classroom management & voice projection • Learn to vary teaching styles
6	**A role model whom I admire** • Mentor in school • Can be easily frustrated	**Myself as a teacher** • Like mentor • More patient	**Myself as I am** • Need to work on confidence, classroom management & voice projection • Learn to vary teaching styles
7	**My worst teacher** • Lack of focus • Lack of consistency • Poor classroom management • Had favourites	**Myself as I am** • Need to work on confidence, classroom management & voice projection • Learn to vary teaching styles	**Myself as a teacher** • To be like mentor • Strict • Mutual respect • No favourites
8	**Teaching as a career** • Nothing surprising • Need to develop/gain experience	**The ideal career** • "Teaching is a career that will be my ideal career"	**My worst teacher** • Lack of focus • Lack of consistency • Poor classroom management

Appendix 8.11 An example of a conversation analysis.

Pre-experience conversation

Participant W (08.06.09)

Conversation		Memo
I	Can you choose your first three cards please? Take your time. (*Pause while W chooses the cards*)	
W	Right, OK. I'll take these three.	
I	Put the two that you want to go together … right, so you've got 'The ideal teacher' and 'A role model whom I admire' you're putting together and 'My worst teacher' over there. Tell me why you've chosen those two and why you've put them together.	
W	Erm … one of the reasons why I kind of got interested in this scheme was because I thought about my experiences in secondary school and I, erm, these two I put together because there was a teacher who taught me physics in school who I do admire and, erm, I think the way he taught me … he was exceptional and I think that's what made him the ideal teacher. So there was one person who linked these two [pointing to the two cards together].	*Personal*
I	So tell me about the way in which he taught that made him exceptional.	*Enthusiasm*
W	Erm … he was a very enthusiastic teacher. Erm, and there was lots of little things about the way he taught which, erm, definitely stuck in my mind so he did a lot pictorially. On the board he would use a lot of pictures and I guess, for me that helped me learn a little bit better than streams and streams of writing. Erm, he also did a lot of experiment work. Like he even took us outside of the classroom to do	*Visual teaching* *Practical work outside normal environment.*

	experiment work and I think that stuck in my mind. Erm, he was always willing to answer questions, er, and to give me more time at the end of the lessons as well. Erm, and like took an interest in us all, I guess individually. Erm, so a combination of all those … I'm sure there were many other things why I enjoyed his lessons as well but, yeah, that was what his character was an I guess there's a certain part of me as well who likes the idea of, erm, sharing your knowledge with other people, doing that in imaginative ways and it makes people remember it afterwards.	*Personal interest.* *Sharing Knowledge. Imaginative teaching.*
I	Was he a young teacher?	
W	No, not really. No, erm, in actual fact I, erm, was just talking to my um the other day and she said that he retired a year after I left. So he's not even at the school anymore. Yeah, he just stuck in my memory.	
I	Did you continue to study his subject?	
W	I did … that was Physics that he did and I kind of didn't know what to do at university bit I kind of knew I wanted to go and do something and I thought with the combination of Physics, Maths and Technology, and engineering degree would relate in some ways. So at A level, yeah, I did and then at university I didn't but it was sort of related.	
I	So he taught you at A level?	
W	He taught me some in lower school and then also at A level, yeah.	
I	Would you say that interest could be tracked back to him?	
W	Erm …	
I	Or were you already interested in the subject?	
W	To be fair, I think I already had a little bit of interest because, erm, my dad sort of interested me in Physics. He used to talk to me about some principles and	

	that kind of stuff but definitely, erm, it was kind of engendered by this guy and kind of built up a lot more.	*Inspirational.*
I	What about your worst teacher?	
W	Well it kind of links in the same way. Erm, it was actually in a subject that I probably most enjoyed, which was Physics. Which is kind of quite strange because of that I've said how much I love Physics - the subject and the teacher. But I had another Physics teacher who, like, tried her best to put me off the subject. She, erm, she didn't have any patience with firstly my class and then ... I don't think she had any with me either and wasn't really, erm, didn't take very well to questions during class. I mean, I think, yeah, if you went to her at the end and asked her questions, then she'd give you a little bit more time but he whole, like, demeanour was not very engaging and, you know, in school I definitely remember there was an attitude of some teachers kind of, you secretly admire. You would never say it in school but you still secretly admired, but there was some teachers who you openly just tell everyone how much you don't like them and she was one of those teachers which I think, you know, to be fair, all that was said was blown up out of proportion, exaggerated and not very fair. But definitely she didn't have the same qualities of, kind of, like, inspiring learning that my favourite teacher did.	*Threatening.* *Impatient.* *Not engaging.* *Admiration.* *Uninspiring.*
I	So when did she teach you?	
W	Erm, I ... in my school and college were the same, so, erm, I think she taught me maybe one year, yeah one year in lower school I think and one of my A level classes as well.	
I	It's interesting that your best and your worst teachers are the same subject.	
W	Yeah, I know. [Laughing]	
I	Any other role models that you admire	

	other than your Physics teacher?	
W	Erm, yeah there were certain aspects of other teachers in the school that I admired but, erm, it was always aspects rather than the whole teacher and I always, I could always say well, you know, I like the way that they encouraged me by challenging me to do this but, you know, I think it makes the rest of the time ... just they weren't really thinking about what was better for me.	*Encouraging & challenging.*
I	What I would like you to do is just change one card.	
W	Right, OK.	
I	It doesn't matter which one, so it can be this one on its own or it can be one of those two. (*Pause while W changes one of the cards*)	
W	Right ... that's hard! Yeah, OK, I'll change these.	
I	OK. So we've now got along with the role model one we've got 'Myself as I would like to be'. Tell me about that.	
W	This kind of links into, er, my starting point for applying for this scheme 'cos my parents are teachers, my sister's a teacher. Erm, this kind of ... I have always admired teachers and some aspects of teachers so I've always thought maybe I'd like to do that and I've not really been 'sold' on my engineering degree as a career. So it's [teaching] always been in the back of my mind. Erm, but, er, I'm in a position now where I got offered a PhD after I've graduated and I've also been offered a job with the Environment Agency. So this [teaching] was something which I was kind of giving thought to and then these other things came up so I've kind of decided that I'm gonna go ahead with the job, take it and doing this scheme[SAS] is more of a	*Natural influences (family)* *Career uncertainty.*

	kind of a taster to see if there's any point in doing … if I want to do this and so my view of where I'm going to be in the next three years, it's not a teacher, it's not training, erm, so, yeah, there are a lot of aspects of teaching and people who are teachers who I admire and that is how I would like to be but at the moment I'm not 'sold' on teaching is the way that I achieve that. If that makes sense.	*Unsure about teaching.*
I	Yeah, that makes a lot of sense. What are the aspects of being a teacher that you do admire? You say there are lots of things you admire …	
W	Yeah. Well it comes back to what I was saying at the start. The kind of … if you've got, er, if you know how things work and you are able to explain that to other people in a simplified way like kind of a broken down way that leads them to understand but not only understand but enjoy understanding that and kind of … well also, kind of wanting to share that with other people as well, then I think that's brilliant and that's what, you know, that's what attracts me. That's what appeals to me. Erm, but teaching as a profession from, you know, my family and, just, I guess, me and the popular consensus, it's a hard job, like you don't get a lot of rewards for doing it and that sort of thing and, erm, I guess my idealistic view is that there's other ways to achieve those goals of sharing your knowledge with other people than just teaching, though maybe in a … there'll be a dawning realisation with me at some point in my life when I go 'Oh maybe it's that that I need to be doing'.	*Empathy.* *Inspiring.* *Realistic.* *Altruistic.*
I	What other ways, other than teaching can you do these things?	
W	You're challenging me now! [Laughing].	
I	Yes.	
W	Let me think. Well, erm, for example,	

		last year I took a year out of my studies and ran for election as a student officer in our student union and that gave me an insight into, kind of, how organisations work and especially how, erm sort of being elected into an office and then fulfilling a role that other people have voted you into and having to realise that the work you are actually doing is quite different from the work that the people who elected you thought you would be doing and having to hold those two in contention and, erm, yeah, this is quite apt with what's going on at the moment [laughing] but, erm, I guess the way that I can see that, erm, what I was talking about before about sharing knowledge can, and, and influencing people and having to get people to understand certain things. I guess another way that that can be done, or in my view I can see that that can be done, is sort of, in that sort of role. Er, I was writing papers last year which explained what I'd seen in, erm, in student activities and how people had been encouraged to get involved in certain activities and how if we changed certain practices and certain methods by which we, er, encouraged people to join societies we could increase numbers and that sort of thing. And, yeah, it is different but that's ... that's one area that interests me and how I can see that, erm, kind of spreading knowledge through communication and to actually, you know, talk - giving presentations and talking in front of people as well just as, you know, together we can do this and change the way that things happen. Erm, and achieve something by doing that and that gave me, kind of, like, another outlet to, kind of, realise how that can be done by kind of, influence - is that what I want to be doing?	*Sharing knowledge.* *Encouraging.*
I		Is there anything in the job that you're going to take at the Environment Agency?	

W	Yeah. Erm, one of the things that, kind of, sold it to me when I was actually at interview was they, erm, kind of gave me a scenario of - there's a house that's been flooded by a river which is nearby. Erm, you have to go to the scene and, kind of, explain to the occupants what's happened and why it's happened and what's going to be done about it and that kind of thing and I, kind of, realised then that, erm, having an understanding of how, like, storm water can flow affects, erm, certain geographical locations and that kind of stuff and how, erm, drains can be overflowing in certain, like, hydraulic conditions and that kind of stuff gives me an understanding which I can, erm, then pass on to other people and it kind of ... I kind of like the idea of, erm, being able to do that, being able to do that in a way which, in my view, would be better than I've seen done in the past. So, I've seen, kind of, people giving information in such cold ways - 'I can't believe you don't understand this information'. Simple things and having been in that situation and had to say, 'Oh yeah, I do understand' but not quite understanding because people are not spending that time with me. I kind of think, well, I could do that. I could do that and spend time with the people and hopefully be a bit more patient and understand that even the simplest ideas for me might not be that simple for them. So I'm willing to, kind of, explain a bit more.	*Patience, understanding & empathy.*
I	And do you think the placement is going to help you in any way?	
W	Yeah, I think, erm, it, well, obvious... obviously it's gonna give me a lot more understanding of what being a teacher is.	*Role of a teacher.*
I	You've got a whole family full of teachers!	
W	Yeah, but I see, I see the lesson plans, I don't see the lessons so - do you	

	understand what I'm saying? And I've never seen lessons then seen the lessons from a student's point of view but I've not seen from the teacher's point of view. I've never given a lesson, so I'm gonna try and take that up in the scheme. Erm, is the question, will that help me for my job or is that the question, or will it help me with my understanding of teaching?	*Role reversal.*
I	Well I think in the first instance, do you think it will help you in your job?	
W	Erm ...	
I	Because if you have to stand up and explain things to people ...	
W	Yeah. Definitely. Erm, my question, which won't be resolved until I've done this, is whether it's the same method for students 11 to 14 or ... and adults. Yeah, who are my seniors by about 30 years. Erm, if it's going to be completely different. My hunch is that it's going to be completely different of the two in terms of delivery, whereas the skills that are required, er, are probably similar in terms of conveying information.	*Skills needed.*
I	OK, excellent. Right, you know what I'm going to ask you to do. I want you to change another one.	
W	OK. Well I'll be a little bit controversial and I'll put this here and then I'll put 'Teaching as a career' here.	
I	Right so we've stuck with those two up here ['A role model whom I admire' and 'Myself as I'd like to be']. On its own is 'Teaching as a career'. Why is it on its own?	
W	Because, erm, I think ... yeah, maybe I've been influenced by a lot of talk ... I don't think, er, teaching is as desirable as it could be, perhaps. I think, er, you know some of the comments that I hear my parents saying. I hope this never gets back to them [laughing]! Some of	*Realistic about teaching.*

	the comments are along the lines of, although they didn't say it explicitly, you know teachers are underpaid for what they do. Erm, I think my dad especially gets really frustrated with other members of his school who, erm, don't see the big picture. Sometimes they only look a few years ahead or a year ahead and he's been probably one of the longest times of any member of staff and feels as though some of the lessons that he learned should be more listened to. So I hear a lot of frustration from my parents. Erm, so I think that kind of casts a negative light on it.	*Realistic about teaching.* *Frustration & negativity.*
I	Are they secondary teachers?	
W	One secondary, one primary. Erm, so, yeah, erm ...	
I	Has that influenced your ideas about teaching as a career?	
W	Yeah, definitely. My dad'll say to me ... he'll only say it half-heartedly, as a joke, but he'll say to me 'Don't go into teaching'. That would be his advice.	
I	You find most teachers say that to their children.	
W	Erm, I think, I think ... well, actually, yeah, there is a sort of, erm, a realisation that perhaps he, that is really a joke and he would actually quite like it. Erm, because I went home last week and, erm, we're having some work done on our house and one of the builders said to me 'Oh you must be the youngest son, the one who's gonna be a teacher' and I was like ' No that's not ... oh yeah, that might be me, yeah'. Erm, so that was kind of what my dad had obviously told him that I was doing this course [SAS]. So, I don't know, but I think just through, I mean amongst my friends, there's a couple of them who are going to be teachers but I think the rest of them it would be like, why go into it, especially with an engineering degree, it's kind of ... there's a little bit of arrogance	

	associated with engineers which I think inevitably leads to rub off on me which is, if you've got an engineering degree you could get a technical job. In two years time you could, if you work hard, you could be earning, you know, 30, 40 grand like, why would you, it's not a lot of money but ... why would you want to go and be a teacher where you could work for I don't know how many years and do that ... so ...	Degree & salary prospects versus teaching.
I	So, within the engineering community, would you say that teaching has got a bad 'press'?	
W	[Pause]... amongst my friends 'yes'. Amongst our tutors 'no' because their kind of encouragement is, you know, why, why don't you do a little bit more study and think about academia sort of thing.	
I	Hence the PhD?	
W	Yeah and that's where I'm kind of coming from. Erm and the whole, the whole of erm ... I mean that's only really come out in the last semester because they want people to do PhDs and it is our last semester in uni but the whole of our course is geared up to go straight into industry as it should be. I mean I don't think it should be geared up to say, now you've got your engineering degree, let's think about other areas but obviously you do need teachers who have specialised in a variety of subjects at university and at that point, once they've reached kind of a quite good level in understanding will say right now I'm gonna start again and be a teacher and use the skills I've learned to impart knowledge.	Sharing knowledge.
I	Do you think engineering, therefore, doesn't lend itself to becoming a	
W	teacher? No, no, no because we use engineering in really broad terms. I've been studying civil engineering, erm, and that's given me a lot of opportunity,	

		which I've loved, to do presentations of kind of, erm, developing, er, plans for a school, from conception through to sending it to ther architects and it's given me a lot of opportunity to look at project management and skills and areas which I've really enjoyed, so It's not just been technical numbers. That's not my forte anyway! Erm, whereas, er, my housemates last year was a mechanical engineer and an aerospace engineer and both of them, erm, just had heads that were, like, clued into numbers and were very mathematical and, erm, fortunately both of them, they were both, erm, very, er, likely people and, you know, it ... 'cos they had heads like that it didn't mean that they were, erm, in any way antisocial. No, that's not the word I'm looking for.... Whereas some of my other friends who'd done very mathematical courses, in social situations, honestly....	*Social status.*
I W		You're being very diplomatic! No, no it's mainly from lack of words to use, but erm, I mean ... I think, er, my course has given me a lot of opportunity to, erm, gain a lot more people skills and meet people. Meet people from industry. They've done that a lot; they've brought people in from industry and given us lectures and then we've been able to talk to them one-on-one. Erm, and I think, although it is basic skills for life, it is also good skills for, kind of, teaching because it's, erm, the sort of thing where you meet new people, you're, erm, asking questions but you're also, kind of, delivering information as well. So it's been good, erm ... as for the rest of engineering, I can't give you an answer for that. I can't say whether it's geared up towards teaching or if there's an attitude of, er, any sort of negativity towards teaching but, I mean, it's natural that the department is going to be geared towards sending people into industry and that's just the way it is.	*Social skills.* *Transferable skills.*

I	If you did choose to go down the teaching route, some way down the line, what would you teach?	
W	It comes back to what I was saying at the start, my favourite teacher at school taught Physics and that would be where I would feel ... I mean, erm, because I've done an engineering degree, er, I have had to study Maths and I think, erm, I've got a certain competence in Maths, er, which, would mean that I could probably teach it, erm, at ... up to a certain level.	*Continuing influence of favourite teacher.*
I	Is it Physics you are going to be teaching on your placement?	
W	Well, erm, I think I've been kind of given a variety of lessons to go and look at and certainly more than just Physics as a science subject. I'll have other science lessons as well.	
I	How do you feel about that?	
W	Alright because erm, kind of, up to GCSE level, er, I had the other sciences as well and, er, it wasn't, I don't think it was too challenging for me. There was obviously difficulty, you know, but I think if you enjoy it then you, kind of, look past ...	
I	Anything outside your comfort zone, you've got issues about it?	*Concerns about teaching outside subject area.*
W	Yeah.	
I	OK.	
W	Sorry, I've waffled a lot.	
I	That's fine. That's fine. What I want you to do, is I want you to see if can come up with a completely different set of three.	
W	OK, [pause] and one of them needs to be completely different from the others?	
I	Well, in the way you see them.	
W	OK, well and I'm still thinking about kind of now, 'cos I'm willing to accept that my views might change.	*Open to change.*

I	Fine. Do this as you are at the moment because they may well have changed by the time you've been on placement. (*Pause while W chooses the cards*)	
W	Yeah, OK so I'm going to put 'Myself as a teacher' over there and then put 'Myself as I am' and 'The ideal career' here. OK, 'Myself as I am' and 'The ideal career'. Talk to me about those two. What do they mean to you? My erm, I did a Camp America placement, whatever you would call it, a couple of years ago and, er, the guy there, erm, who ran the camp was in many ways like sort of, erm, a role model whom I admired. You know, like I said before, there was aspects of his character, things that he did which I definitely didn't agree with but, erm, he had a real knack for, erm, exciting the children and telling them stories which had like, erm, like really obvious morals which were associated with them which at the end he would kind of like ask them questions. What have you learned from this and they'd all, like, cheer back at him what it was. I think in a part way that was to do with it being an American culture and that sort of thing and kind of more engendered but, erm, I really liked that about him, erm, and one of the things he said to me was you know I'm doing, er, my career what I've chosen to do is what I absolutely love about life and it's hard work and it's long hours and it takes over my life bit it's what I love to do and so that's why I do it. Whereas, you know, you get the other sort of people in life, not that there's only two sorts of people in life, who work hard at their job and do it for as little time as possible because they spend the rest of their lives doing what they really love and he was saying to me, you know, you've got to make a choice between	*Influential figure.* *Inspirational.* *Work-life balance & vocation.*

	the two. You've got to decide whether you're just gonna work for a living and do what you really love or whether you're gonna find something you really love no matter what the sacrifice you have to make and do that. I kind of laughed it off at the time but it's stuck with me. I'm still thinking about it now in this room after two years. Erm, so my ideal career, I think I've come to the point of realising that I want it to be something that I love and I'm prepared to give it a lot more time to it if it is something that I love. Erm, and so that's why those two are linked together for me – 'Myself as I am' and 'My ideal career'. I think I want it to be something which.....	*Making sacrifices.* *Personal fulfilment.*
I	A vocation?	*Vocation.*
W	Yeah.	
I	And what would you be looking for then when you say it's got to be something that you that you love? That you want to dedicate your life to. What would you be looking for to get that, obviously other than satisfaction?	
W	Erm. D'you mean specific ... what would I be looking to do specifically, or excites me, or ...	
I	Yeah. What would this job be? What would it be like, that's going to give you this feeling of vocation?	
W	I like ... I like to produce things that, er, encourage and excite people. I like to, erm, that sounds very artistic. It sounds like I'm very arty, but that's not really ... I'm not really an artist in any way. I just like to, erm, influence other people but I want it to be for good reasons and, erm, for, er, yeah, I can't really explain it.	*Encouragement & excitement.* *Being influential.*
I	Who's going to benefit from this, you or them?	
W	I would hope both. It's like giving a gift to someone. You give a gift to someone because you give it to them	

	and you want them to enjoy it and you want them to unwrap it and be excited. But equally you can never separate yourself from the fact that by giving that gift you're, you know, pleasing yourself. You're satisfied by the fact that you've made them happy. So it's a duality; it's between the two.	*Satisfaction.*
I	And you job at the Environment Agency; do you think that's going ... what do you see in that that might address some of these issues?	
W	Erm. Well I'm hoping it's not gonna be having to deal with flood situations everyday [laughing] but, erm, you know there's a lot of aspects to the job which are sort of dealing with people and having to take charge of situations and having to strategically plan, having to produce things which, erm, will benefit people. So, there's a lot of money which gets spent by the Environment Agency on sea defences and, er, river defences and that sort of stuff and that's, from my point of view, is kind of like, sitting down, conceiving a project, seeing it through to completion, erm, and having to take into account along the way all the issues of, erm, 'Is this what the public want in this area?'; 'Is there something else which they would prefer to have public money spent on?'; 'If so, is that actually better?'; or 'Should we take a hit in terms of our perceived popularity and do ... and spend the money on the other project because in the long term that is actually going to be better?' And so it's all those sorts of ideas where, like, yeah, it comes back to, like, I'm prepared not to be popular for something which is better, er, in the long run. Erm, other than just looking for people's, you know, praise for something which looks good so, erm ... what am looking to get out of it? *PAUSE*	*Altruistic.*

I	Do you see this as your career? Do you see yourself just doing this?	
W	I don't know because the specific job that I got offered with the Environment Agency is something that I'm not going to understand fully what I'm doing until I'm in the role. From what I understand of it, yeah, it is the sort of thing that I'd like to be doing because it gives me the opportunity to, erm, to speak to people, to explain ideas to people, to see projects though. Erm, that sort of thing and, yeah, it does lack a lot of the other areas that I've talked about, in, kind of, my ... of teaching and what I would get out of teaching. You know, until I've experienced both I think I'll find it difficult ...	*Opportunity to explain; perseverance.*
I	Which is presumably why you've put 'Myself as a teacher' over here?	
W	Yeah.	
I	Erm, do you see any of the aspirations, these career aspirations that you've got, being addressed by teaching?	
W	Yeah, and that's why I'm doing this [SAS] and I could just run away from it completely but I'm not and I want to know, I want to reconcile in my mind whether it is something that I could do and something that I would want to do. Erm, I think, erm, E asked me when I first came on a scale of 1 to 10 whether I would like to be a teacher and I said something very low. I'm not entirely sure what the figure was; it was 4 or 5 maybe. Erm, I think that's true. Erm, and like I said, I'm prepared for that opinion to be changed. In fact, I think probably, secretly I do want it to be changed toward more being a teacher but you know, I'm also prepared to go into this and discover there's a lot of paperwork as I've seen; there's a lot of paperwork and I know that my parents get a lot and if that's something which, you know, doesn't excite me or I don't see the benefit of, then it's gonna put me off. And there's probably other	*Confidence.* *Maybe wants to teach but realistic about demands of the job.*

	things as well about the job that are gonna put me off.	
I	You can't go into it looking for things to put you off.	
W	No.... I'm prepared to have my opinion changed.	*Open to change.*
I	What would you do if your opinion's changed completely?	
W	Well it could go either way.	
I	And if you come out of it thinking I really, really want to teach, what are you going to do?	
W	Sit down and make some life decisions [laughing]. Erm, I don't know, I really don't know. I'd have to cross that bridge when I came to it. Erm and I am expecting it to radically change my view but I don't know which way.	*Open to change.*
I	Well, that's why it's there on offer and you're under no obligation just because you're doing this [SAS] to automatically then go into a PGCE. The idea behind that is to help you make your mind up whether it's something that you want to do or not. OK, we're going to do one more. I just want you change one.	
W	OK. I feel sorry for whoever's got to ... is it you transcribing this?	
I	Yes and analysing it!	
W	My thought processes have been everywhere! I'm not following a consistent train – I'm sorry. Right, change one.... I'm gonna put them all back here.	
I	OK. Start again.	
	PAUSE	
W	Do you want me to play devil's advocate a bit and put....?	
I	You can do whatever you like.	
	(*Pause while W chooses the cards*)	

W	OK I'll do that. 'Myself as I would like to be' and 'Myself as a teacher'. Erm and then ... OK and then I'll put this one here ... O no, I don't..... I'll put this one here.	
I	OK. Right. So you're going to talk to me now about why you've put 'Myself as I would like to be' and 'Myself as a teacher' together.	
W	OK. I put these two together because, erm, this is the other option isn't it? This is the extreme of my thought process which has led me to this choice. Erm, I have considered teaching. That's why I'm here. 'Myself as I would like to be' – yeah, I would like to be a teacher. Erm ... there are a lot of aspects of the job which, you know, you've drawn out of me right now and they're what I've been thinking about anyway, that are appealing and erm ... yeah and of where I've been would answer a lot of my desires about where I'd like to be in my life. Erm, I'm not saying that's definitely, you know, the future, but that is definitely something which is related in my mind – 'Myself as a teacher' and 'Myself as I would like to be'.	*Positive about teaching as a career.*
I	OK, so why is 'The ideal teacher' over there on its own?	
W	Yeah, yeah 'The ideal teacher' is on its own over there because, erm, I think some of my teachers who weren't ideal, erm, had gone into it with the wrong motives.	*Must want to teach.*
I	Tell me about that.	
W	Erm. I had a Maths teacher – had two Maths teachers actually who were probably very similar; who'd had previous careers that, from what I understand, hadn't worked out for them and at that point had chosen to do a PGCE and go into teaching. Erm, and I think, you know, to be fair to them, they weren't my worst teachers, they	*Second career.*

	just weren't ideal teachers and they didn't encourage as much as they could of and they, I think, erm, it's really difficult teaching because there's so many different learning styles and there's so many different, er, abilities of students as well and to have all of that in your mind for the 30, you know, different classes that you teach, it's an inevitably difficult job. But, in my mind, those teachers who, er, had come into it late and perhaps hadn't been sold on the idea to start with, erm, hadn't ... didn't have the ability to do that as well and certainly for me hadn't ... couldn't encourage me as much and so the reason why that's there on its own is because 'Myself as I would like to be' and 'Myself as a teacher', if I go into it, I want to make sure that I am different to that, to the teacher that I loved, not the teacher who was adequate but not ideal.	*Not encouraging.* *Lack of commitment.* *Positive aspirations.*
I	What made you think that they were there for the wrong reasons?	
W	Yeah, that's probably a pretty harsh statement, erm, just because it was clear to me that they'd come into it late and didn't come into because that was, you know....	
I	Last resort?	
W	Yeah. Erm and because I and ... the reason why I didn't think they were ideal was because they didn't encourage me. I keep on using the word 'encouragement' and I don't erm...	*Lacked encouragement.*
I	That's fine.	
W	I think it is about encouragement. I think it is about, kind of, inspiring and they lacked that. But, to be fair to them, there was other students in the class who loved their style of teaching. Who did get a lot out of it and who, you know, passed those modules with flying colours. So, it wasn't a complete, you know, erm, black stain on their	*Not inspirational.*

	characters because, they clearly could do it but what I'm saying is that, for me, it didn't really work and I think as teacher you've probably got to, you've got to try your hardest to be malleable to every kind of, you know, diverse student that you get because it's you teaching all of them. You're not just teaching the five cleverest.	*Ability to teach all pupils.*
I	Do you think you can do that?	
W	[Pause]. I'm scared I probably can't which is why I've separated these two ['Myself as a teacher' and 'The ideal teacher'] from each other. Erm, yeah, I don't think I should go into it as a last resort. But then I'm here today aren't I, so I'm thinking about it at this stage of my life. Who knows....?	*Unsure of own ability.*

Appendix 8.12 The 14 Core Goals & Evidence Required

Core Goal 1 – Professional Behaviour	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to learn how to behave professionally in a school setting, and to demonstrate and promote in young people positive values, attitudes and behaviour.	They have behaved professionally in the school and classroom and provided a positive role model to young people, showing qualities such as punctuality, commitment, willingness to learn, reliability and initiative.	Confirmation by the school-based mentor.
	They have satisfied consistently the requirements of the code of practice for their school placement.	The Student Associate's records.

Core Goal 2 – Relating to Young People	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to learn how they can establish fair, trusting, supportive and constructive relationships with young people in schools.	They have learnt from observations of how experienced members of the school workforce establish constructive relationships with young people.	The Student Associate's records.
	They have treated young people consistently, with respect and consideration.	Confirmation by the school-based mentor.

Core Goal 3 – Engaging with Young People's Learning	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to learn to communicate effectively in engaging with young people's learning, when supporting individuals or groups of young people in the classroom, and to give timely, accurate and constructive feedback.	They have cooperated with members of the school workforce by engaging supportively with individuals or groups of young people in the classroom.	Confirmation by the school-based mentor.
	They have communicated effectively with individuals or groups of young people, providing timely, accurate and constructive feedback on their classroom work.	The Student Associate's records.

Core Goal 4 – Managing Behaviour	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to develop some knowledge and understanding of the ways in which effective teachers promote good behaviour, and to begin to develop some strategies for managing young people's behaviour when working with individuals or groups of young people.	They have discussed with experienced members of the school workforce key strategies for managing young people's behaviour and recorded observations of these in the classroom.	The Student Associate's records.
	In their interactions with young people they have shown awareness of classroom rules and procedures.	Confirmation by the school-based mentor.
	They have identified instances where the school's behaviour policy has been used.	The Student Associate's records.
	They have noted any systems of rewards and sanctions in place and identified instances of these being used.	The Student Associate's records.

Core Goal 5 – Planning and delivering part or all of a lesson	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to learn how to plan and structure part or all of a lesson, and to begin to develop knowledge and understanding of some effective teaching strategies and different kinds of resources for promoting learning within their subject or phase.	With the guidance of a teacher, they have planned and delivered one or more lessons or parts of lessons (with groups or a whole class) in their subject or phase and reflected on their planning and teaching.	The Student Associate's records.
	They have shown awareness of appropriate teaching strategies.	The Student Associate's records.
	In their planning and delivery they have shown secure subject/curriculum knowledge.	Confirmation by the school-based mentor.
	Under the guidance of a teacher, they have prepared appropriate resources and used them in the classroom.	The Student Associate's records.

Core Goal 6 – Understanding the curriculum	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to gain a basic knowledge and understanding of the relevant statutory and non-statutory frameworks for their subject or phase.	They have linked the objectives and content of lessons or teaching episodes in which they have participated to relevant statutory and non-statutory curriculum frameworks.	The Student Associate's records.
	They have referred to relevant statutory and non-statutory curricula and frameworks accurately, using correct terminology.	The Student Associate's records.

Core Goal 7 – The range of young people in a class	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to become aware of the need for teachers to provide for the range of young people within a class and some of the ways they manage this.	They have assisted teachers in lessons by supporting individual young people or small groups who have been identified by the teacher as needing additional help or greater challenge.	Confirmation by the school-based mentor.
	They have shown awareness of the distinctive needs of these young people.	The Student Associate's records.
	They have been able to identify ways in which they have sought to respond to these needs.	The Student Associate's records.

Core Goal 8 – Equal opportunities	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to develop awareness of how teachers take practical account of diversity and promote equality and inclusion in their teaching,	They have adhered to the school's equal opportunities policy.	Confirmation by the school-based mentor.
	They have shown awareness of issues of diversity, equality and inclusion in their interactions with young people.	The Student Associate's records.

Core Goal 9 – The well-being of young people	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to begin to develop an awareness of current legal requirements, national policies and guidance on the safeguarding and promotion of the well-being of children and young people.	They have cooperated with school staff in the implementation of policies relating to the safeguarding and promotion of the well-being of young people in schools and behaved in a way consistent with these	Confirmation by the school-based mentor.
	They have reflected on any examples observed of the application of the school's policies, for example, in relation to bullying	The Student Associate's records.

Core Goal 10 – Reflective practice	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to learn how to reflect on their own contributions to teaching and the effective practice of others, to act upon advice and feedback from mentors, and to take increasing responsibility for their own personal and professional development.	(For those interested in ITT) They have summarised in the SASTEP* their personal achievements and experience on the scheme in relation to Goals 1–9 and the aspects of the QTS standards indicated in the right-hand column for these goals. *SAS Training Entry Profile	The Student Associate's entries for their SASTEP.

Core Goal 11 – Raising aspirations for HE	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to help to raise the personal aspirations of young people for Higher Education, particularly those from groups that are typically under-represented in HE.	The Student Associate has presented his or herself positively to young people in schools as an enthusiastic and committed student in Higher Education.	Confirmation by the school-based mentor.
	They have planned and taken opportunities in formal and informal settings to share with young people their own experience of Higher Education.	The Student Associate's records.
	They have shared with young people the advantages and benefits of obtaining a Higher Education qualification.	The Student Associate's records.
	They have sought in specific ways to raise the aspirations of young people for HE.	The Student Associate's records

Core Goal 12 – Raising interest in learning	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to help to raise the interest and enthusiasm of young people for learning in general, drawing on their own subject knowledge and skills in their interactions with young people to promote interest in their subject.	They have taken opportunities to explain to young people in schools how a positive attitude to learning in school has benefited them personally.	The Student Associate's records.
	They have demonstrated their own interest and enthusiasm for learning in the classroom.	Confirmation by the school-based mentor.
	They have got alongside one or more individual young people who might be under-achieving in school and encouraged them to aim higher.	The Student Associate's records.

Core Goal 13 – Evaluation of WP and raising aspirations (RAP)	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to evaluate their impact on young people in schools in relation to Goals 11–12.	They are able to identify young people they have worked with who, for various reasons, need to have their aspirations for Higher Education or learning raised.	The SA's completion of the SASRAP.
	They have recorded evidence related to the impact of their contribution in terms of Goals 11 and 12.	The SA's completion of the SASRAP.

Core Goal 14 – Personal development	**Examples of achievements during school placement experience**	**Sources of evidence of achievement**
Student Associates are to evaluate the contribution of their participation in the scheme to their own personal development and transferable skills.	They have demonstrated and developed useful transferable skills, such as planning and organisational skills, communication skills, and working with others.	Contributions to the Student Associate's personal skills development profile.

Appendix 8.13 Placement School details

School	Type	Number on roll (approx)	Specialism	OFSTED
All Saints Roman Catholic High School	11-18 state coeducational secondary school	1347	Sport	Overall evaluation of the school was Grade 2 - 'All Saints' Catholic High School is a good and improving school'. (2008)
Eckington School	11-18 state coeducational community school	1620	Engineering	In 2009 OFSTED described this as a satisfactory school, which is transforming and improving at a rapid rate.
Edlington School	11-18 state coeducational community secondary school	1231	N/A	In 2008 the school was given a notice to improve by OFSTED inspectors.
King Ecgbert School	11-18 state coeducational secondary school	1408	Technology	The school was given good grades in a recent OFSTED report, rising from 'good' to 'very good'(2008).
Note Dame High School	11-19 coeducational Roman Catholic school	1230	Technology	The school was given outstanding grades in the most recent OFSTED report (2008)