

**HOW DO THOSE COMPLETING INITIAL TEACHER TRAINING IN THE
POST-COMPULSORY EDUCATION AND TRAINING SECTOR CONSIDER
'THEORY' IN RELATION TO THEIR PRACTICE?**

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Abstract

This research examines theory in relation to educational practice; however the aim is not to examine the worth of any particular theory but to analyse how one specific group of practitioners consider the construct 'theory' in relation to their practice. The participants were drawn from those completing Initial Teacher Training in the post-compulsory education and training sector as it was felt that they were at a position in their careers where the range, purpose and application of 'theory' were most likely to influence their teaching practice. The participants were all members of the same cohort; had been asked to consider a range of theories as part of their studies, and had been asked to reflect on 'theory' in relation to their practice in one of their examined assignments. I was drawn to study this area when, as the participants' teacher, I found myself questioning the unexamined regard that the curriculum held 'theory' in.

The data was collected through individual interviews, focus group discussions and the examination of written assignments. All the data was gathered at the end of the participants' studies in order to gain a 'snapshot' of their perspectives at that particular moment. The data suggests that participants were inclined to consider that theory starts from practice and can be adapted by practitioners and it was found that the participants built their own personal pedagogical perspective through consideration of their subject, context and experience.

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Chapter 1: Introduction

This introductory chapter is set out as follows:

- I introduce the scope of my research
- I share initial background information on participants and context
- The broad landscape of educational 'theory' is established
- There is discussion on what 'theory' might mean in relation to the research context
- Key literature is introduced
- I set out my research aim
- There is discussion on the development of my three hypotheses
- A chapter summary is given and links with the next chapter highlighted

Scope

This research looks at how those completing Initial Teacher Training in the post-compulsory education and training sector consider 'theory' in relation to their teaching practice. This study is not about 'grand theory' but about how one specific group of practitioners felt educational theory related to their practice. This research examines how a specific group within a specific institution at a specific time discussed and considered the relationship of 'theory' to their practice. In researching this area I take a reflexive position and acknowledge that in my dual role of teacher-researcher I had a working relationship with the participants. My research is bound by literature that frames my methods and creates characteristics that have been used for data analysis. The data suggests that participants were inclined to consider their practice in relation to the hypothesis that 'theory starts from practice and can be adapted by practitioners'.

Background

In the initial part of this study I was employed as a lecturer in the further education (FE) college under study. As part of my role I taught the Post-Graduate Certificate in Education (PGCE) and the Certificate in Education (Cert Ed) to lecturers in the post-compulsory education and training (PCET) sector. These qualifications were taught at the college and validated by the University of Greenwich. Most of my students were employed because of their professional subject knowledge and specialism; many were employed on the proviso that they gained a recognised teaching qualification within two years of the commencement of their employment (DfES, 2001 – revised DIUS, 2007). The main qualifications in this area have historically been the PGCE for those who hold a degree and the Cert Ed for those who do not hold a degree.

Those studying for the PGCE/Cert Ed (PCET) came from a range of teaching disciplines and included lecturers in Hairdressing, History, Child Care, Motor Vehicle Studies and Business Studies. The teaching of the course was not subject-specific but meant as a generic grounding in a range of teaching principles and practices. The PGCE/Cert Ed (PCET) course ran for two years part-time and during this time trainees taught in their subject areas and attended the course one day per week. There were 21 members of this cohort; they were a relatively wide-ranging group and brought a range of ideas regarding the merits of this study. Some of the group had no experience of teaching until they started the course, others had several years 'practical' experience but no formal training. They were all experts in their own subject area - however I see ITT as a behaviour change process (Kealey et al, 2000)

and saw my role, as a generic teaching practice specialist, as opening avenues of thought regarding educational perspectives and allowing trainees to consider new ways of thinking about, and teaching, their subject that may be more in line with concepts about how people think and learn.

The group selected for this research completed their PGCE/Cert Ed (PCET) course in June 2007, when the primary data was collected. The group were studying for the qualification through the University of Greenwich, but were taught in one of the university's partner colleges. They had been 'taught' and had been asked to consider educational, teaching and learning theories throughout their two years of study and, in the six months leading up to the completion of their course, they had a more in-depth look at these areas. My study discusses how participants considered the educational theory that they learnt as part of their studies affected their practice. I was drawn to research this area as, when working as their teacher, I began to question the role of 'theory' when many in the class saw teaching as a practical undertaking.

Educational theory

In discussing educational 'theory' it is worth noting the broad landscape: there are theories that cover motivation, personality, cognition, creativity, memory, development, behaviour, perception and much more. Some theories conflict and some co-exist. Some theories are replaced or discredited and some, like Piaget's, continue to box above their weight (Thomas, 2007). Some theories purport to be 'Grand' and some suggest they are practical or specific. Kezar suggests that there are three levels of theory:

Level of Theory	Universal or Grand	Middle Level	Local Level
Examples	A broad phenomenon like culture or nature of man or learning; across all contexts and cases	A more focused phenomenon like critical thinking; relates to many different cases or contexts	Specific phenomenon such as critical thinking among first year students at college; relates to a specific case or context such as liberal arts colleges or a specific institution such as University of Washington

Figure 1, Levels of theory (see Kezar, 2006:292)

As well as the range and level of theory we might consider what the word 'theory' means and what uses theory might have. Here Thomas (2007) considers the work of Chambers (1992), who found nine meanings of 'theory', and distills these further into four broad uses:

1. Theory as thinking (as opposed to doing)
2. Theory as generalizing (an explanatory model)
3. Theory as explanation (grouped bodies of knowledge)
4. Theory as science (as propositions and rational empirical enquiry)

Pring (2005) suggests that theory has failed to address the divide between the conceptual and the practical branches of education. Others, such as Liston, Whitcomb & Borko (2006), comment that the distance between educators and the originators of theory could lead to the misapplication or misuse of theory. Klein (1992) argues that theory should come from practice rather than be used as a framework for practice. It has also been highlighted that no educational theory that purports to be a framework for practice has ever been wholly successful (Carr, 2006) so perhaps the quest for a definitive guiding theory is a waste of time and resources.

Education is awash with ‘theory’ and theories about theory but it was not my wish to analyse the type, level, meaning, use or worth of any one theory but to consider participants’ perceptions of the relationship of the construct ‘theory’ to the practicality of teaching. For this reason a research design that focused on a single defined version of ‘theory’ did not seem appropriate for this study as this would move the focus away from the participant perspective.

By adopting a participant-centred perspective and asking participants to reflect on their practice I hoped to focus on how they perceived the link (or absence of one) between theory and practice; allowing participants to consider how their practice affected the experiences of their students (Koutselini & Persianis, 2000; Taylor, 2003); how they were influenced by fellow practitioners (Cook-Sather & Youens, 2007), and how their personal¹ philosophies shaped their practice.

Theory and context

Although the word ‘theory’ might mean very little without an adjective, during data collection I deliberately kept the term quite open so that participants were free to discuss theory in relation to teaching, learning and wider aspects of education. My reason for doing this was to allow the participants to define what theory meant to them; however I decided not to ask explicitly for a definition but rather to allow participant definitions to develop from their discussion of their practice.

¹ The word ‘personal’ is used in this thesis to suggest that individuals have developed ideas from other sources and amalgamated these into their own perspective. Here a Wittgensteinian approach is used, where the usage of the word ‘personal’ does not mean that the individual has created anything but that they make sense of the world by drawing on pre-existing words and concepts.

Wittgenstein (1953:§23) suggests that language can change its meaning according to its application in a specific context and the 'game' being played with the language, therefore the meaning of the word 'theory' during data collection was likely to be different to participants' typical usage. Therefore I deliberately did not advance my definition of the word 'theory' so that participants would be more likely to apply their own 'typical' meaning.

In his analysis of private and public language, Wittgenstein (1953:§293) tells of two boys - each with a matchbox containing what he calls a 'beetle'. They agree never to look inside each other's matchbox and also agree that they both contain a beetle. In this analogy we see that the thing that is a 'beetle' is private to each boy but that the term only has meaning through its public use. It does not actually matter what is in the box and the word 'beetle' now means 'the thing inside the box'. In a similar way my study asked participants to discuss the thing inside their head that they called 'theory' (their beetle). Here 'theory' has a private meaning but it can only make sense if others share a similar understanding of the word – in this way, language is private-shared.

Language is also context-bound: the context of Wittgenstein's example was a game played by two boys but two scientists in a laboratory would play a different 'game' and have a different understanding of 'beetle'. Foucault (1986:23) suggests that 'we live inside a set of relations' therefore relations within the context of an FE college are likely to influence any research within such a space. Since I was interested in participants' private language and personal perspective, opening the box and comparing the contents to a control 'beetle' was not necessary. For this reason my study did not require any side-by-side analysis with another participant group and it did not require

me to define what I meant by 'theory' during interviews. However, since private language is context bound, it was important that I considered my research in relation to the space in which it took place.

Key literature

This research was bound by literature that framed my methods and created characteristics that have been used for data analysis. This framework was developed through identifying key articles and analysing the epistemological and ontological assumptions of the authors. That is, what the authors said about the nature of knowledge and its relationship to subjective and objective existence. After identifying three such key articles I contacted their authors and asked them if they could suggest articles/authors who would take the counter-position. I then used these suggested texts to balance my research framework.

The three key articles are Wilfred Carr's paper, 'Education without theory'; Richard Pring's lecture, 'The language of curriculum analysis', and Gary Thomas's book, *Education and Theory*. Carr, Pring and Thomas examine links between theory and practice from three similar but subtly different positions.

Carr (2006) argues that 'theory' is a product of its particular circumstances rather than an objective and transferable concept and that 'practical significance is not something that educational theories intrinsically have' (p.154). Pring (2005) suggests that theories are not accounts of actual practice and since 'curriculum knowledge is ultimately about practical reality...

theory therefore must be theorizing about this practical reality, put to the test or made to work in it, and validated by its practical consequences' (p. 167). Thomas (2007:42) states that 'those who speak of theory and theorizing in education often use the word indiscriminately, with little attention to its use from one moment to the next' and suggests that if the word 'theory' is a misunderstood and misapplied label then surely we must question its worth and its use. These three texts are discussed in more detail in chapter 4 'Research Framework' where I use them as tools to clarify my own research position.

Research aim

My research aims to contribute to academic and practitioner understanding of 'theory' in relation to practice and examine how a practitioner-led philosophy of FE might be developed. This is done through analysing how one specific group of practitioners felt educational theory related to their practice - not to discuss theory and practice from an objective standpoint or from a macro position but to focus on explicating local knowledge (Donmoyer, 1996:22). My intention was to investigate the participant perspective therefore my research questions, hypotheses and design embrace the position of the participants and use their thick description (Geertz, 1973) to tell the story of their local situation.

Many trainees came to the course with (either consciously or subconsciously) pre-formed ideas about how their specialist subject should be taught and learned (Gordon & Debus, 2002; Koutselini & Persianis, 2000). The trainees

may have learned the 'ways' of their subject; this may have happened through their own study, through practical experience, or through reflection and I hoped to draw out participants' thoughts regarding their subject, studies and practice and their perceptions of 'theory' in relation to these.

There were other considerations regarding how participants might consider their practice in relation to theory. For example, many ITT students teach as they were taught (Bathmaker & Avis, 2005a); many teachers develop their practice through focusing on the needs of learners (Henson, 1987; Taylor, 2003); many teachers focus on maintaining the status quo (Brown, Stephen & Cope, 1999), and all these groups may disregard or ignore theory as being 'other'. This may mean that there were aspects of the PGCE/Cert Ed (PCET) course that did not make the impact they were expected to make. Asking, "Does ITT make a difference to teacher development?" was too big a question for this study – instead my focus here was on finding out what theories participants identify as relevant and how they suggested they relate to their practice. I have done this through thematic template analysis of participant created data. The templates were drawn from two data analysis pilots that are discussed in more detail in chapter 6, 'Data Coding Pilots'. Furthermore, as I am not just the researcher but was also the teacher of the participants I must also consider if this has impacted upon my research. Here, I take a reflexive position; recognise my role within the research, and hope to use my insider perspective to help scrutinize the 'overlapping consensus' (Rawles, 1993) produced by the participants' responses.

The study is meant as reported implementation-analysis and is not about the things that the participants did, but how they felt about them; focusing on the

unobservable (Nelson, 1969). I was most interested to find out what this group thought; not necessarily how I could validate their responses. In researching this area I was not trying to judge the 'distance travelled' by the participants therefore there is no comparison with a control group nor is there any analysis against benchmarked expectations. There are, of course, issues in formulating questions that hope to gain participant insight:

- ITT students may say that they teach in one way but may actually teach in another way altogether (Fung & Chow, 2002)
- Trainee teachers' self-analysis of their strengths and weaknesses can be affected by 'desirability' (Jegade & Taplin, 2000)
- Honest, balanced self-review and analysis is difficult (Schön, 1992)
- Theory may make a merely rhetorical subscription to practice (Thomas, 2007)

There are other ways of gaining an insight into the relationship between theory and practice. Kyriakides, Demetriou & Charalambous (2006) offer the 'other' perspective where a more scientific approach is used and teachers are evaluated against 42 criteria classified into six categories. Such an approach was not appropriate for this study as the resultant data would likely be based on concepts such as 'effectiveness', 'stake-holder satisfaction' and 'performance evaluation' and such data would lead to an assessment of practice which was not my intention.

Some issues arose in researching this particular area of education as, in regards to FE, much of the literature is focused on policy, management or assessing practice and there is an 'overemphasis upon the writing up of various curriculum development projects' (Elliott, 1996:103) rather than an

engagement with practitioner perspectives; therefore it can be difficult to gain philosophical viewpoints on this sector. Much of the focus in FE is on educational objectives and outcomes (Child, 2009) and the rise in managerialism (Orr, 2008) and it is 'hard to find anything that might count as a philosophy of FE or even an exploration of the values that might inform it' (Halliday, 1996:66). My study aims to start to fill this gap and begin to form a practitioner-led philosophy of theory and practice in FE.

Three hypotheses

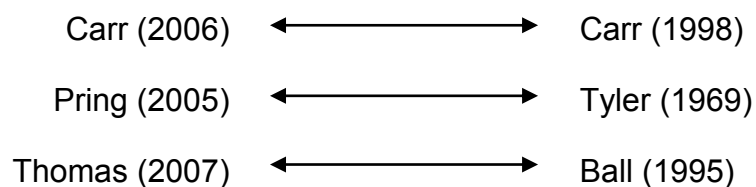
In constructing my research framework I balanced the positions taken by Carr, Pring and Thomas with those of three authors who take 'other' positions. In identifying these 'other' positions I contacted Professors Carr, Pring and Thomas and asked each to suggest who they felt might offer an opposing perspective. Two of the authors responded with helpful suggestions offering a number of alternatives, and, after reviewing the suggested alternatives I identified three contrasting positions. The third author did not respond so I selected an 'other' position through reviewing articles that the author had critiqued and mapping these against counter-points in the other two articles.

These 'other' positions came from Wilfred Carr's earlier article 'What is an Educational Practice?', Ralph Tyler's text, *Basic Principles of Curriculum and Instruction* and Stephen Ball's paper, 'Intellectuals or Technicians? The Urgent Role of Theory in Educational Studies'.

In these three opposing articles we see a concept of 'theory' that is more practical, guiding and concrete. Carr (1998:73) argues that theory and

practice are 'continuously being modified and revised by the other' thus suggesting that theory can lead practice. Tyler (1969) argues that teachers must work from some theory of learning and a 'philosophy of education is necessary to guide in making these judgements' (p.4). Ball (1995) tells us that he 'shall wail and curse at the absence of theory and argue for theory as a way of saving educational studies from itself' (p.266) and in his broad and uncritical use of the word 'theory' forms a counterpoint to Thomas.

From these positions I created three critical debates:



The fact that these counter arguments are older than the lead articles is not particularly significant but may be indicative of a general movement towards a less defined idea of what 'theory' might be. These counter positions are also older as it is from assessing these articles (or similar articles offering similar proposals) that Carr, Pring and Thomas have developed their ideas – therefore part of the significance of these 'other' positions lies in the role they have played in constructing the lead propositions.

From a review of the literature that forms these three critical debates I was able to draw three hypotheses that were used in data coding and analysis and form an umbrella covering my research that maintains a focus on whether 'theory' is reported to be adopted, adapted or rejected by the participants in their practice. (There is further discussion on how these hypotheses were created in chapter 3):

Hypothesis 1

'Theory' is just a name and it does not relate to actual practice

Hypothesis 2

Theory starts from practice and can be adapted by practitioners

Hypothesis 3

Theory is an essential part of practice and can guide practitioners

Bannan-Ritland (2003) offers a staged model for the design of research in education (see Fig. 2) and the first three stages of this model are in line with my epistemological framework but this framework also forced me to question my ability to complete the fourth stage of this model. My research orientation holds that the findings of this study are specific to their environment; therefore it is not possible for me to suggest their broader impact. Instead my adaptation of this model (see Fig. 3) replaces the need for generalisation (stage 4) with a meaningful conclusion.

Informed Exploration	Enactment	Evaluation: Local Impact	Evaluation: Broader Impact
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Figure 2, Bannan-Ritland (2003) General Model for Research Design

Informed Exploration	Enactment	Evaluation: Local Impact	Meaningful Conclusion
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Figure 3, Adapted General Model for Research Design

It is outside of the scope of this study to suggest any broader impact that my research might have. In providing a meaningful conclusion I propose that certain findings are particularly important and merit further debate. That is to say, I found certain things to be distinctly significant and invite others to take these points into account in their consideration of post-compulsory education. In drawing such a conclusion I began to see that, whilst 'theory' was primarily considered to be developed and guided by practice, participants spoke about 'theory' in a number of ways. In analysing the participant data I developed three persuasive discourses or rhetorics showing how the construct 'theory' was considered by the participants and, therefore, how it might be considered by others in the post-compulsory education and training sector.

Chapter summary

This chapter has introduced the research context, participants and question:

How do those completing initial teacher training in the post-compulsory education and training sector consider 'theory' in the relation to their practice?

I have also introduced the broad landscape of educational theory and explained that since I was interested in understanding participants' perspectives I did not start from a particular definition of 'theory'. In analysing the data I drew from three key articles: Carr (2006), Pring (2005) and Thomas (2007) and this chapter has described how these texts were used to help form three hypotheses. I have also used this chapter to set out my research aim and explain how I hope to offer an authentic account and valid analysis of my participants' perspectives on the relationship of 'theory' to their practice through considering how we might find the truth in educational research and

through reflecting upon how the space that the research takes place in might impact upon any research findings. This chapter closed by giving a brief outline of my research design. The next chapter looks at how my research is specific to its context and how the 'space' of the research relates to the meaning in any data produced in that 'space'.

Chapter 2: Research Context

This chapter covers the following:

- I start by introducing Foucault's concept of a heterotopia and relate the six principles that define a heterotopia to my research context
- I propose that an FE college is a heterotopia
- There is a chapter summary and links with the next chapter are highlighted

Heterotopias

In his lecture, *'Of Other Spaces'*, Michel Foucault proposes that there are certain environments that are 'outside of all places, even though it may be possible to indicate their location in reality' (1986:24). Foucault explains that whilst these 'other spaces' form part of a society they are reserved for specific individuals and offers examples such as prisons, brothels, ships at sea, boarding schools and honeymoon hotels, where the rules and rites might differ from those in public spaces. He calls these spaces 'heterotopias' and offers six principles, or a heterotopology, that might define such places. In this chapter I wish to consider how a further education college might fit Foucault's six principles to be a heterotopia and discuss how this affects my research within such a place focusing on the 'space' of the research rather than the research data itself.

Foucault suggests that these 'other spaces' have recognisable qualities that impact upon our experiences of them. Dewey, too, tells us there is a 'general principle of the shaping of actual experience by environing principles' (1997:40) which suggests that if we can recognise the qualities of a space we

are clearly being affected by it. So it seems that the environment in which we live/work/research is likely to have an impact upon us.

'Utopias are sites with no real place' (Foucault, 1986:24) one of the most significant instances of this is More's *Utopia* which is a satirical tale of 'no place' that reads like a blueprint for a perfect land based on a 'grand absurdity' (2003:113). Such places are not supposed to exist but are to be used as 'devices for embarrassing the world we actually have' (Eagleton, in Halpin, 2001:309). For Foucault, the world we actually have is not a simple one and he uses the concept of a heterotopia to show real spaces that exist within the real world but are somehow separate from the wider society.

Foucault offers six principles that define these 'other spaces':

1. They are reserved for those in crisis or deviance
2. Their function is affected as history unfolds
3. They are formed from juxtaposing spaces
4. They are linked to slices of time
5. They are closed systems
6. They have a relationship with the wider society

In this next section I hope to draw on wider examples regarding the role and function of an FE college and support my argument that it is a heterotopia by addressing these six principles individually; suggesting how an FE college might relate to Foucault's heterotopology.

First principle

Foucault suggests that the first principle of a heterotopia is that it exists alongside the wider society and works in relation to it but that it follows a

slightly different code. The heterotopia is an 'other space' that has its own rules, culture and context. In his first principle Foucault gives us two categories of heterotopia: crisis heterotopias and heterotopias of deviation. The crisis heterotopia is 'reserved for individuals who are, in relation to society and the human environment in which they live, in a state of crisis: adolescents, menstruating women, pregnant women, the elderly etc.' and the heterotopia of deviation is a place that houses 'individuals whose behaviour is deviant in relation to the required mean or norm' (Foucault, 1986:24-25).

An FE college seems to satisfy Foucault's first principle to constitute a heterotopia in that it is both a heterotopia of crisis and of deviation. The FE college lies on the borderline of these two categories as those who find themselves within an FE college are often at points of change in their life: moving up from compulsory schooling; gaining professional qualifications; engaging in continuous professional development, and, in the case of the participants in my research, changing careers within their subject specialism (from practitioner to lecturer).

An FE college may not have been considered by many as a 'normal' step but as careers and personal histories change there may have been a crisis that has led them to consider entering this 'other space'. An FE college is also a place of deviance in that those attending courses are not in the norm. If we look at the statistics on FE attendance (see Fig. 4) we can see that, although FE participation is growing, it is not, historically, a place that the majority of society chooses to engage with.

		1970/71	1980/81	1990/91	2000/01
Males	Full-time	116,000	154,000	219,000	543,000
	Part-time	891,000	697,000	768,000	1,528,000
	All FE	1,007,000	851,000	987,000	2,071,000
Females	Full-time	95,000	196,000	261,000	543,000
	Part-time	630,000	624,000	986,000	2,376,000
	All FE	725,000	820,000	1,247,000	2,919,000
Total FE		1,732,000	1,671,000	2,234,000	4,990,000
UK Population		55,928,000	56,357,000	57,439,000	59,113,000
% of population in FE		3.1	3.0	3.9	8.4

Figure 4, UK FE attendance, adapted from ONS (2004) & ONS (2007)

These figures suggest that those attending FE are in the minority – the deviant group. Foucault explains that, ‘in our society where leisure is the rule, idleness is a sort of deviation’ (1986:25) we might further suggest that, in our society where leisure is the rule, study is a sort of deviation.

Second principle

The role of FE is changing, from supporting apprenticeships (1970s) to teaching arts and craft evening classes (1980s) to last chance/second chance (1990s) to the most recent developments in meeting the skill needs of society. In each instance we can see that an FE college fits Foucault’s second principle of a heterotopia in that our ‘society, as its history unfolds, can make an existing heterotopia function in a very different fashion’ (1986:25). In FE’s recent history we have seen a move from technical colleges to ‘corporation’ (under the Further and Higher Education Act of 1992). This led to a business based approach to FE with individual colleges

managing their own budgets and staff. The 1992 Act also changed the way that FE colleges were funded: through the Further Education Funding Council (FEFC) who decided that if they were funding colleges they should know if these colleges were doing a good job. This then led to the Office for Standards in Education (Ofsted) inspecting colleges for the first time. Further changes in FE came in the Learning and Skills Bill (2000) with its focus on lifelong learning and a new funding body called the Learning and Skills Council (LSC). The LSC created a climate of business links and employer engagement and, at the same time, driven by the Moser Committee report, 'A Fresh Start' (DfEE, 1999), there was a push to reduce adult illiteracy. Since then further changes in the LSC funding mechanism have pushed FE colleges to 'prefer' some course over others as the LSC now turns its focus on the 14-19 age group in an effort to develop a skilled workforce for the future (DfES, 2005; Leitch, 2006).

We can see in this abridged recent history that changes in FE are not of its own doing and that FE colleges have had to change with the times. This does not mean that these changes have been quickly and easily adopted as changes in methods and cultures are difficult and take time (Hofstede, 1980) but we can begin to see how the function of FE has changed as the history of the society around it has unfolded.

Third principle

Foucault's third principle of a heterotopia, that it is 'capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible' (1986:25), creates an image of a place that is

compartmentalised. Foucault draws an analogy with a garden that is divided into different areas and where the plants are collected from all around the world. We can imagine different beds and borders that consist of plants that would not, without our intervention, grow together as they have been 'drawn from the four parts of the world' (ibid.).

An FE college is not one distinct place. There may only be one physical building (in fact in my research there were three major sites and numerous satellite sites) but inside the space that is called 'college' there are different areas and departments that do not belong together. These areas have been drawn from the parts of society. In the one institution we can see departments teaching Motor Vehicle Studies, Hairdressing, Child Care and ITT side by side; these specialisms do not belong together, they are alike only in that they are subjects to be taught and learned and in that they are housed within the same space. The college 'culture' is not one distinct entity; the various parts have created a culture that is a 'complex of values, customs, beliefs and practices' (Eagleton, 2007:34). The participants in my research came from a range of subject specialisms but what they had in common was that they worked (and studied) in the same space.

Departments, areas and subjects within one college are even discussed using different terms: academic, vocational, business, roll-on roll-off, key skills etc., and I detected such divisions in the primary data where the word 'theory' had different meanings dependent on participants' subject specialism. For example, participants G, H and S all taught Beauty Therapy and described a course that was split into two key elements: practical and theory. The 'practical' teaching involved performing facials, filing nails, and

applying beauty products in a specially set up salon and the 'theory' teaching involved taught sessions on basic biology and body chemistry. Because of this G, H and S regarded 'theory' as anything in their subject area that was *non-practical*. Participant F who taught Theatrical Make-up and participant N who taught Hairdressing also described their practice as having practical and theory sessions whereas participants from other department were not able to isolate the theoretical and practical elements of their teaching: even participants C who taught Motor Vehicle Studies and J who taught Bricklaying did not discuss this duality in their teaching. Here we can see different terms and approaches being specific to one area of the college but not to another. Robson (in Hall & Marsh, 2000) suggests that subject specialisms have their own culture and that the diverse cultures of FE have few bonds between them. Somehow no-one problematises the fragmented nature of an FE college, we are schooled into thinking that this is normal, 'there are some oppositions that we regard as simply given' (Foucault, 1986:23). An FE college juxtaposes many different spaces in a single real place: learners sit in refectories, some in overalls, some in tabards, some in football kit, some in smart clothes, some in everyday clothes, some with books, some with nail files, some old, some young, all different, the only thing they have in common is the space they are in.

Fourth principle

FE like most education is affected by the needs of the wider society. Educationalists might debate the values of intrinsically worthwhile progressive education against extrinsically worthy traditional education but,

on the whole, the government's education policy decides what education is for (at least at that particular moment in time). Foucault's fourth principle of a heterotopia is that it should be 'linked to slices in time' (1986:26) and we can see that the particular slice of time and the particular government of that slice of time has a significant impact on the role of an FE college. I have already discussed some of the recent changes in FE but there are more changes afoot: the marketisation of FE (Bathmaker & Avis, 2005b); a movement towards 'schooling' cultures with the growing emphasis on more and more learners in the 14-19 age group being taught in FE colleges (Bathmaker & Avis, 2005c), and the 'modern' concept of FE colleges embedding sustainability (Martin et al., 2007).

Trends, culture and the needs of society have changed FE but it is not just societal changes that affect FE, there are also life change events that affect how individuals perceive college at different slices of time. For example, we might imagine a teenager studying an NVQ in Social Care at her local FE college, who then leaves and works as a care worker. Perhaps, after a while, she decides to attend a college evening class to learn to speak German for a family holiday. Later still she decides to change career and re-enters the college to gain some qualifications in accountancy. After working as an accountant for many years she retires and fills some of her time attending college and doing a range of craft/hobby courses. In this example the function of the FE college is related to the slice of time in the woman's life and she enters the college each time with preconceptions from past experiences, with expectations concerning her present endeavour and with projections regarding her future plans.

The participants in my research were also in an FE college due to their present slice of time. Many had attended college courses before and had gained subject specialist qualifications before working in their particular field. They then found themselves returning to college as lecturers and as ITT students. Their history of FE gave them a unique understanding of the space they were working/studying in and having these different time-linked perspectives helped build a picture of the effect of this 'other space' upon them.

Fifth principle

Foucault's fifth principle for a heterotopia states that,

Heterotopias always presuppose a system of opening and closing that both isolates them and makes them penetrable. In general, the heterotopic site is not freely accessible like a public space. Either the entry is compulsory, as in the case of entering a barracks or a prison, or else the individual has to submit to rites and purifications

Foucault (1986:26)

The participants in my research were only able to study for the PGCE/Cert Ed (PCET) because they were working at an FE college; they met the entry criteria, and, in turn, their learners also met criteria for entry onto their courses. For some learners entry to FE was through exam results; for others it was work experience; for most it involved funding, and for many they were interviewed before being accepted onto a course. Unlike compulsory education FE is not a right. FE is not a freely accessible system and those who wish to enter must meet certain criteria. Once accepted onto a college

course many learners are given an induction to this new space, this often involves them signing some form of learner 'contract' agreeing to the college rites and purifications. Some FE colleges, and many college libraries, have entry systems that involve devices like swipe-cards and those who wish to enter must swipe their card before they can access this space.

There is further evidence of the closedness of the FE college in the concept of the 'academic year'. The college has its own unique system for opening and closing throughout the year, this academic year is different from the standard calendar year that the wider society refers to. The college year runs from September to July with further holidays scattered throughout. Those who do gain entry to an FE college (staff and learners) are systematised into the ways of the organisation; the yearly, termly, weekly and daily timetable of movement from one space to another. There may be some benefit from this as the system of opening and closing might help those within it to feel some bond and gives the college its own culture and context that might support communication and interaction (Smeyers & Burbules, 2006). This is not to say that the closed system of FE creates and recreates the same perspective, as Foucault's fourth principle shows, but that the isolation of the system only allows for restricted changes to the culture of the FE college and the professional identity of FE lecturers (Bathmaker & Avis, 2005b).

An FE college is not freely accessible, 'to get in one must have a certain permission and make certain gestures' (Foucault, 1986:26) and each FE college has a system of entry and a system of punishment that will limit entry and allow those outside of it to see it as a specific closed heterotopic site.

Sixth principle

Foucault's sixth principle of a heterotopia concerns the relationship between the 'other space' and society at large. Foucault suggests that heterotopias 'have a function in relation to all the space that remains' (1986:27). We see this in the realm of FE colleges as there is a clear link between the college and the wider society; whether this is enskilling the workforce or offering courses that encourage personal growth. Within the college (in the many courses that help the college to meet the third principle of heterotopias) we see courses that have direct links to the real spaces around them as 'their role is to create a space of illusion that exposes every real space, all the sites inside which human life is partitioned' (ibid.). The participants in my research had all worked in their subject specialisms in the 'real world' and had gained an understanding of how things are done in the wider society but in their teaching they focused on concepts such as 'best practice' whereby they taught their learners how things should be done, not how things tended to be done on the outside. In doing this they highlighted the link between the two areas and simultaneously drew distinctions between them. In some areas of the college lecturers take on the role of vocational assessor and visit learners in the workplace to assess levels of competence; here again we see a college-society link.

There are also policies that seek to develop the relationships between FE colleges and the space that remains around them and initiatives such as 'Train to Gain' (LSC, 2007) which hope to encourage people in the workplace to develop skills and gain qualifications through college-business links. Other such links include the modern concept of 'employability' that FE lecturers are

asked by their management to address when writing and delivering courses. Here lecturers are asked to consider how their teaching supports their learners' chances of employment.

An FE college as a heterotopia

It would seem that an FE college does fit Foucault's six principles to be a heterotopia and that the culture and context of a college is one of 'other' (Jameson, 1993) or one of 'difference' (Asante, 1991). There are spaces where the rites and rituals follow their own system and an educational institution seems to be a place that is significantly different from other contexts (Schön, 1987). We might even consider that every FE college is deviant from every other FE college (Gleeson & Mardle, 1980).

Considering an FE college to be a heterotopia has had an effect upon my research within such a space. As my research focuses on participants' perspectives of how 'theory' might impact upon their practice taking a heterotopian approach takes into account any inherent differences in culture and context. There are conceptual aspects of educational heterotopias that affect those within them (Rossum, Deijkers & Hamer, 1985) and there are cultural features that affect those who enter an FE college as an ITT student (Koutselini & Persianis, 2000; Target, in Gould, 1999) so each participant in my research, although in the same space and time, could only report their experience of the world around them from their own perspective. There were, of course, some common factors such as an institutionally shared idea of their professional role (Shulman, 1998; Robson et al., 2004) but such job

cultures are, again, likely to be influenced by the space in which the job is undertaken. In relating Foucault's concept of a heterotopia to an FE college I was left researching different people, with different views, inside a 'different' space.

Halpin (2001) uses More's *Utopia* as a model or catalyst for social change: changing education through asking questions; challenging the social order, and thinking about social reforms. If this is what the utopian view offers, what does the heterotopian view offer? Taking a heterotopian perspective meant that, since my research was undertaken in an 'other' space that is linked to, but different from the society it exists within, it is highly unlikely that my results can be generalisable. And, if we take the same approach to other social contexts we might find that research undertaken within them is also ungeneralisable due to the 'otherness' of those spaces. It could be that adopting a heterotopian perspective means that no social science research is generalisable. The effect of applying Foucault's six principles of a heterotopia on the space of my research was that I could see my study only for what it was in itself. This meant that, in analysing my research data, my focus was on what the data *meant* and not on what I should *do* with the results.

Chapter summary

This chapter has considered Foucault's six principles to be a heterotopia and explored how the 'space' that my research takes place in relates to the data produced in that space. In reflecting on the research context this chapter has shown that, if the college is indeed a heterotopia, the PGCE/Cert Ed (PCET)

classroom is a heterotopia within a heterotopia as: entry to PGCE/Cert Ed (PCET) was dependent on taking a new role (principle 1); governmental and college initiatives changed the nature and focus of PGCE/Cert Ed (PCET) qualifications (principle 2); the PGCE/Cert Ed (PCET) students came from a range of subjects yet studied in the same classroom (principle 3); those studying for the PGCE/Cert Ed (PCET) were at a specific time in their career (principle 4); entry was dependent on certain qualifications (principle 5), and by studying for the PGCE/Cert Ed (PCET) they were likely to have an enhanced impact on their students (principle 6). In arguing that my research is heterotopian I have suggested that my focus should be on considering the meaning that lies within the data rather than any possible application of research findings. The next chapter develops this argument further and considers the role of the construct 'truth' in this meaning-making process.

Chapter 3: Research Purpose

This chapter is set out as follows:

- I start by discussing how reflecting on 'truth' helped formulate my research purpose
- Perspectives on finding the 'truth' are reviewed
- I examine how 'truth' might be considered by educational researchers
- I look at how Thorndike (1911) and Bruner (1966) might find the 'truth'
- There is discussion on how 'telling the truth' affects research
- There is discussion on how 'telling the truth' affects my research methodology
- A chapter summary is given and links with the next chapter highlighted

Formulating my research purpose

A number of key constructs underpin educational research. If educational research is to be honest, robust and useful it must work within some generally agreed constraints; as with all things there will be debate regarding the make-up and level of importance of these constraints but here I shall take a broad stance and consider that the principles of research are generally held to be the constructs of truth, validity, reliability, accuracy, knowledge, quality, and rigour. Here I focus on the concept of 'truth' and by doing so highlight some debate in this area. I shall do this by discussing how considering 'truth' has helped me to make sense of my research experience; has helped inform my methodology, and has given focus to my research purpose.

The purpose of my research is not to discuss theory and practice from an objective position but to analyse how one specific group of practitioners felt 'theory' related to their practice. Where research in FE has largely focused on

quantitative analysis of policy, professionalism and performance my research uses qualitative methods in order to 'mine rich seams of data' (Elliott & Crossley, 1994:189). The questions that support this research are not intended to present answers that will create a 'grand theory' but to offer an authentic representation of the participants' perspectives and proffer insight into some of the personal philosophies that FE practitioners might hold.

Pallas (2001) suggests that it is important for researchers to have an epistemological framework and proposes that addressing this is central to educational research and Ernest (1997) offers a table to show how the three main research paradigms impact upon research methods. We can see from Figure 5 that adopting a paradigm that is 'personal', 'social', 'individual', 'subjective' and focused on making 'sense' meant my research was always likely to be qualitative. Formulating my research purpose also involved reflection upon my own position as well as that of the participants: this chapter highlights key features drawn from this reflection and discusses how my epistemological perspective influenced my research and my purpose.

In researching this area I take a reflexive position: acknowledging my relationship with the participants and accepting my place within the research (Greenback, 2003). Such a method addresses the concept of interpretation and subjectivity from the start and does not pretend to be purely objective or purely scientific; however, it is useful to interrogate the trustworthiness of research data produced through adopting a reflexive position and consider just how authentic such an account can be.

Component	Paradigm		
	Scientific	Qualitative	Critical Theoretic
Ontology	Scientific realism (objects in physical space)	Subjective reality (personal meanings)	Persons in society and social institutions
Epistemology	Absolutist, objective knowledge	Personal, constructed or socially constructed knowledge	Socially constructed knowledge
Methodology	Mainly quantitative and experimental, involving many subjects and contexts	Mainly qualitative case studies of particular individuals and contexts	Mainly critical action research on social institutions
Intended Outcome	Applicable knowledge and generalizations	Illuminate subjective understandings	Intervention for social reform, social justice
Interest	To comprehend and improve (through prediction and control) the world	To understand and make sense of the world	Social justice, emancipation

Figure 5, Simplified summary and comparisons of the three main paradigms Ernest (1997:37) based on Bassey (1990-91); Ernest (1994); Schubert (1986)

Since my research hopes to produce a truthful illumination of subjective understanding it is worthwhile considering some different ideas regarding what ‘truth’ might be. In reflecting upon what ‘truth’ might mean in regards to my research I shall critically evaluate Thorndike’s ‘Law of Effect’ and Bruner’s ‘Three Forms of Representation’, and explain how these perspectives helped inform the methodology of my research. I would now like to discuss two

perspectives regarding 'truth': 'truth as an objectively discovered answer' and 'truth as a subjectively created concept'.

Finding 'the truth'

Clearly the notion of 'truth' as being either objectively discovered or subjectively created is a false dualism, and educational research is likely to take place in a much more murky environment where the practical and theoretical collide, but I use this over-simplistic binary opposition as a means to generate debate and highlight some issues that researchers should consider as they try to find 'the truth'. The notion of 'truth as objective' finds its place in the writings of Plato and is shown through his theory of 'Forms' (Plato, 1955) where even abstract things such as beauty and, indeed, 'truth' are ultimately objective; existing outside the human world. Later still during the period known as The Enlightenment (where 'truth' is found through science) this concept of 'truth' fits neatly into the research perspective where reality is static and detectable and exists outside of human existence awaiting our discovery. This 'Truth' is an independently existing reality that can be accessed through a scientific approach. For many involved in research (perhaps especially natural science research) this view of 'truth' works and 'real' answers can be found, but for many researchers (perhaps especially social science researchers) this viewpoint fails to address the interrelationships of people.

The alternative perspective suggests that finding 'the truth' is dependent upon factors such as perspective, language, location, place in history, the values of the researcher and the values of the researched. Here we have the view that

'truth' is not fixed in time and space but is a social construct. Those of us who find ourselves working within and researching educational establishments are likely to realise that the teaching and learning environment is not an easy place to find answers and may recognise the importance of social dynamics when it comes to getting the answers we seek.

We might label these two perspectives as 'positivist' and 'post-positivist'. Positivism adheres to the scientific research paradigm that embraces an absolutist epistemology whereby 'the truth' can be found through logical enquiry. The ambition of positivism is to observe, describe and measure the world that we encounter. Positivism has its roots in 'an all-pervading intellectual and moral outlook which began to dominate Western thought in the latter half of the nineteenth century' (Carr, 1998:104) and its methods are still evident in much natural science research. Positivism uses reasoning, enquiry and scientific method to draw empirical data that will ultimately create a true representation of the area under study. In doing so, positivist enquiry mainly relies on experimental design and quantitative data and in educational research is often perceived as being out of touch with the post-modern condition.

Pring (2005) suggests that, when we question what counts as knowledge or 'truth', we are adopting a post-modern paradigm. This paradigm often falls under the heading 'post-positivism' where knowledge is value-laden and linked with the culture, context and social dynamics of the research area. Post-positivism recognises that there is a reality 'out there' but questions its immutability; suggesting instead that possible 'truths' can be manipulated, falsified, misread and misunderstood. Post-positivism, like positivism, is a

general term within which resides a number of different sub-terms and Tesch (1990) offers a list of 26 post-positivist approaches. Smith (in Smith, Booth & Zalewski, 1996:35) suggests that 'there is no such thing as a post-positivist approach, only post-positivist approaches' and that 'the various post-positivist approaches operate within very different epistemological positions', this indicates that it is not enough to know that you are a post-positivist but that you should know which type of post-positivist you are.

Further, it is not just that there are different concepts of 'truth' and different research paradigms that might be applied in an effort to find 'truth', Pring (2000) suggests there are two different worlds for the educational researcher to find 'truth' in: the physical world (where scientific fact-based research can find definite answers) and the social world (that is a human and temporal construction based around ideas of culture, tradition, ritual and relationships). This social world seems to be an amorphous blend of idea and ideals and Ainsley (2000) suggests we need a new way of looking at educational research based on a 'truth' that is dependent on societal interrelationships.

In the initial phase of this study (data collection) I was employed as a lecturer at the FE college under study. As part of my role I taught the PGCE/Cert Ed (PCET) and it was my critical reflection during this experience that led to my research interest. This reflection also made it clear to me that my role was part of the social dynamic of the group and that I should not try to remove myself from this study and should discuss this in my writing; as research includes review and investigation of the assumptions of the researcher (Altricher et al, 2002). Researching education is not about researching something that is static and happy for you to stare at it down a microscope for

long periods of time – the ‘truth’ of a classroom seems to be dependent on a fluctuating social dynamic.

How ‘truth’ may be considered by educational researchers

If one of the roles of the researcher is to search for an answer (a ‘truth’ or ‘The Truth’) then it seems fair to examine how this may occur. Some may hide behind one-way mirrors and ask ‘objective’ questions; gather data and examine the facts, but is it not the case that choosing this approach depends on a set of values? – a set of values that say, “Don’t interfere with the research!” Researchers adopting this approach must then decide upon the best way to reduce interference ‘from their own bias’ but in choosing their approach they make a personal and value-led decision. Thereafter each of the checks and balances they put in place are decided by them; based upon what they ‘believe’ to be the least influential methods. To combat values in the search for ‘The Truth’ these researchers may then use some kind of weighting system of positive discrimination to readjust and realign their findings – but in selecting the methods or readjustment they may fall back on subjective approaches. Each check and each balance is decided upon by someone for something, and each choice must have a degree (even the smallest possible degree) or personal opinion inside of it. These counters and counter-counters show ‘the complex interaction of the researcher’s moral, competency, personal and social values [and we should] reject claims that research is able to uncover ‘the truth’ by adopting a value-neutral approach’ (Greenback, 2003:798).

Even if the natural sciences can offer us a 'truth' that is value-neutral and truly objective it is quite something else for the social sciences to do so. I might suggest that it is 'quite hot today' another person in the same location may say 'scorching' another 'boiling' and another 'roasting' and another may say 'it's not quite as hot as it was yesterday'. If all these comments are honest and robust personal statements then all these are true (to the person saying them) yet their qualitiveness works to disguise an objective answer. This is where a quantitative statement, perhaps by a meteorologist, would help: 'it is 32 degrees centigrade in the shade with 27% humidity and a high pollen count.' But can such quantitative statements be made about participants' reflections? A second research perspective may recognise these difficulties when starting the search for answers by considering how the journey to 'truth' may create a predominantly subjective understanding that the researcher may mistake for an objectively deduced answer. Such researchers may even consider that the language they use to describe their 'truth' is a selected and social construct which is 'a sprawling limitless web where there is a constant interchange and circulation of elements, where none of the elements is absolutely definable' (Eagleton, 1995:129). They would then allow for this subjectivity in their analysis but is this 'truth' then accurate and useful and could such research be built upon?

How can educational researchers know which perspective will offer them the opportunity to gather the most accurate and reliable data? If it is the search for answers that is important - then how are educational researchers affected by the construct 'truth' and how does it affect their research methodology?

Two different ways of finding ‘the truth’

There are many perspectives that could influence how we might find ‘the truth’ and I would now like to address two such: behaviourism and cognitivism. I have selected these schools of thought as they might typify the objective-subjective debate discussed above and might offer scope for further deliberation.

Behaviourism hopes to learn about participants through observing what they do; for many behaviourists it is folly for researchers to make assumptions about the thinking processes of the participant, as this is not scientific.

Cognitivists take a different view and postulate that since humans think and can describe their thoughts and the reasons behind their actions then we should make use of such information. The behaviourist and cognitivist schools of thought are large and complex, therefore I shall focus on two theorists (one from each school): Thorndike and Bruner, and examine Thorndike’s ‘Law of Effect’ and Bruner’s ‘Three Forms of Representation’.

In researching participants’ perspectives regarding theory and practice I was struck with a slight dilemma – I do not personally consider there to be fixed ‘truths’ about everything awaiting discovery and broadly align myself to cognitivist educational perspectives (where meaning is created by individual interaction) yet as a teacher I often find myself working in a behaviourist manner. I teach, review and assess; I praise and reward and, by doing so, might reinforce the behaviours I seek/expect from my students. On reflection this sounds like a form of conditioning (Thorndike, 1927; Tuckman, McCall & Hyman, 1969) where I mould students to a certain prescribed format and they repeat back the answers I require. This sounds much more ‘behaviourist’ than

I may be comfortable with. I have long rejected the idea of 'do as I say' but it seems that in part of my practice I am doing just this. I see my role as that of facilitator of change through reflection and enquiry yet at times I find myself working in a behaviourist manner.

This dilemma also applies to my research purpose and methodology. When considering how I should find 'the truth' through my research I was initially drawn by two methods of data collection: through observation and through interview. By deciding to observe the teaching environment I could see things for myself, and by interviewing students and practitioners I could gain insight into how they perceived things. My initial thoughts were that it would be more 'scientific' if I were to observe practice and base my research around observed behaviours and criteria (most teachers are used to assessing success through criteria of some form) after all it seems easier to report what you see rather than what you think the participant has learned (Dolmans et al, 2003). However, since I find myself 'involved' in my research as teacher-researcher, and since I have known most of my students over the course of their study there must be an element of subjectivity in such an observation (Tuckman, 1995). If I was to research from an observational perspective I would find myself analysing *only* what I saw and whilst I may have been able to collect facts and statistics this would not be in line with how I understand and interpret the world. I take the view that understanding the world comes through interaction with others therefore the validity of my results becomes a question of interpretation. Here, 'the truth' is found through the authenticity of my findings and the soundness of the methods used to draw a conclusion.

Thorndike (1911) finds 'the truth'

Thorndike's 'Law of Effect' states:

Of several responses made to the same situation, those which are accompanied or closely followed by satisfaction to the animal will, other things being equal, be more firmly connected with the situation, so that, when it recurs, they will be more likely to recur; those which are accompanied or closely followed by discomfort to the animal will, other things being equal, have their connections with that situation weakened, so that, when it recurs, they will be less likely to occur. The greater the satisfaction or discomfort, the greater the strengthening or weakening of the bond.

(1911:244)

For Thorndike (1874-1949) learning is direct; is not mediated by ideas; is based on a chain of responses to stimuli, and is strengthened through reinforcement. Like most behaviourists Thorndike supports the concept of conditioning as the mechanism for development. Behaviourism, although a broad school, focuses on the concepts of stimulus-response (S-R), association, conditioning and reinforcement where observing phenomena is scientific but describing thoughts is not (Pepper, 1923). Thorndike's 'Law of Effect' suggests that students are more likely to develop S-R bonds if they associate the learning with satisfaction as pleasure tends to reinforce association – children, for example, are therefore more likely to develop 'wished-for' behaviours when rewarded with praise.

Behaviourism is the study of behaviours and not of mental states (Whiteley, 1961) and, in regard to the study of humans, is sometimes criticised for ignoring self awareness and the impact of reflection (Marton, 1993). It has also been suggested that the participants can conceal their behaviours (Ziff, 1958) and that behaviourism is limited in that it ignores the unobservable

events (Nelson, 1969). This not to say that behaviourists do not recognise that humans are thinking creatures; Thorndike (1937) himself states that humans are creatures who 'differed greatly in what they thought about' (p.437) but Thorndike reads this from their produced results, not through questioning the participants, as he believes that humans are not able to describe thoughts and thought-processes in an objective and scientific manner. Behaviourists may allow that humans are self aware but, as Wallis (1924) points out, this awareness should not affect how scientific study examines them and that purpose should be read into their actions rather than relying on participants describing their thoughts.

There does seem to be some irony in that as a teacher I am drawn to Thorndike's 'Law of Effect' but as a teacher-researcher I found it too difficult to ignore my thoughts to commit to such a perspective as a methodology for my study. The attractions in Thorndike's work include standardisation, structure and measure (Thorndike, 1912) and such a formula seems likely to yield a reliable 'truth' that can be found again and again. As a teacher I recognise aspects of Thorndike's work in my practice, but, as a teacher-researcher the outcome of using a behaviourist methodology would be to place me as a catalyst of change within my own study, leaving me with two distinct roles: teacher and researcher. I felt that having two roles would lead to some conflict within my research and that in such a situation my self-awareness might influence my objectivity making it difficult to separate my actions from my thoughts on such actions. Such a situation would seem to lack the 'scientific' quality that I would have hoped to gain from adopting a behaviourist methodology.

Bruner (1966) finds 'the truth'

For Bruner (1915 -) social interaction is an integral part of learning and learning is a process of discovery where 'the concept of reinforcement, runs counter to too many important phenomena of learning and development to be either regarded as general in its applicability or even correct in its general approach' (Phillips, 1976:192). Bruner suggests that 'truth' is not a fixed commodity but that we represent the world around us in three ways, using our experiences and reflections; he calls these 'Three Forms of Representation' - enactive, iconic and symbolic:

there are probably three ways in which human beings accommodate this feat. The first is through action ... [then] there is a second system of representation that depends upon visual or other sensory organization and upon the use of summarizing images. Finally, there is representation in words or language.

Bruner (1966:10)

Bruner proposes that any subject can be taught to any student and that it is the teacher's role to represent the learning in a way that is accessible (Bruner, 1961). He suggests that one of the weaknesses of behaviourism is that it forms a model of observable behaviours but, as it ignores the thinking processes, it does not form a full picture of the student (Bruner, 1985). Instead he offers an educational perspective that has understanding at its centre; where the student moves from learning through action (enactive) to the understanding of examples (iconic) to thinking through the use of language (symbolic). For Bruner it is impossible to develop teaching without understanding learning and being aware that there are links between the active, the cognitive and the affective aspects of learning (Evans & Tsatsaroni, 1996; Henson, 1987).

For Bruner, learning involves the active restructuring of knowledge through experience with the environment. The learner selects and transforms information, constructs hypotheses and makes decisions, relying on an internal and developing cognitive structure to do so.

Bartlett, Burton & Peim (2001:140)

Bruner's 'Three Forms of Representation' suggest that students are more likely to understand learning if they experience it over a number of occasions and at relevant levels of understanding. Here learning is a meaning-making experience where students must reflect upon, and ask questions about, their experiences to develop their understanding. If I am to apply this in my role as teacher I should revisit concepts over the course of study and encourage students to reflect upon and question their own understanding of a topic. If I am to be influenced by Bruner's 'Three Forms of Representation' as a teacher-researcher then I may wish to consider that 'truth' is made through understanding meaning. Using this approach in my research means that I must consider the role of reflection in regards to the participants and myself. During and after this enquiry I should also consider how this relates to my position in the world. This model of enquiry is much more in line with my personal perspective than Thorndike's model and following this model of enquiry I felt much more likely to gain a fuller understanding of the relationship between my learning (my research interest) and my personal understanding of the world.

In considering if I should allow Bruner's theoretical perspective to inform the methodology of my study I was reassured that I would not face the possible conflict of roles that may be the case if I was to follow Thorndike. In Thorndike's case I felt that having the role of teacher-researcher meant that it

would be difficult for me to 'only' observe as I was also part of the study, and that it would be difficult not to be influenced by my own thoughts and reflections. In considering Bruner's perspective I did not face such a quandary: in positioning the participants' understanding of the world at the centre of my research Bruner allowed me to be part of my own study (as it is *me* who is working to understand more about my research interest). In this case my self-awareness is addressed and is part of the study - where enquiry and reflection allow me greater insight into my practice (Bayles, 1966) and into my research.

How does 'telling the truth' affect research?

As a researcher I have a responsibility to produce findings that are honest, reliable and able to withstand scrutiny. As a realist/pragmatist researcher I know that perfection is out of reach but that I have a responsibility to add to the overall field of knowledge. If 'truth' is an absolute and is of another world which sits apart from ours awaiting discovery then the search for 'The Truth' through purely positivist methods will lead me away from the tangible world in which I live, and if it is this world that I wish to understand then perhaps I should do so through research that is true to my individual beliefs; true to my convictions, and true to myself.

I might not have found 'the answer' but I would hope that the addition of 'my answer' to the field of knowledge could work to move us forward; through influence, through debate, through epiphanies, and through further research. As long as I have gone about my task in an ethical way then I can offer my

research to the world at large safe in the knowledge that it is robust and honest and will (hopefully) add to the general discourse. If I want to make sense of the world then my research may help to do this, and although the ability of researchers and individuals to change social realities is limited (Pring, 2000) by adding my research findings to the collection of humanity's knowledge then I can hope to be part of a positive enlightening movement. This conclusion is only reasonable when I adopt the cognitivist paradigm that Bruner's position offers where socially constructed knowledge is possible.

How does 'telling the truth' affect my research methodology?

I have discussed how 'the truth' and theoretical perspectives may influence the methodology of educational study - I would now like to discuss how this consideration of 'truth' has helped inform my methodology and helped me to make sense of my research purpose.

As an enquiring human I am drawn by the notion that there is much for me to learn. My assumptions about the world and what it is to 'know' reject the positivist paradigm that there is a fixed 'truth' awaiting discovery, and I prefer to take the perspective whereby knowledge is created by the interaction of individuals. Bruner's 'Three Forms of Representation' allows for previous experience and influence to build in an increasing order of importance (Reavis & Whittacre, 1969); recognises the importance of recall and recap (Gagne, 1980) and by doing so allows me to take up the roles of teacher and researcher without worry - as the two should work together building *all* my

knowledge. It is for this reason that I have allowed Bruner's work to influence my research.

Holding the concept of 'discovery through enquiry' at the centre of my thinking has allowed me to adopt a personal-subjective approach to my study. Firstly, I recognised and addressed my dual role (teacher-researcher) and did not work to 'correct' or reduce the influence of one on the other; for this is the situation as it stands and I must deal with it. I cannot completely split the two positions as they are not only what I *do* but also what I *am*. It was not enough for me to simply observe the students as this would have been a false situation – enquiry through questioning is entwined with my teaching role and I felt that I should embrace this situation in my research role. For this reason researching through interviewing students; running focus groups, and engaging directly with the participants seemed most logical as this embraced the fluctuating dynamic of the classroom and my dual role rather than falsely privileging the 'outsider-observer' perspective.

The enactive mode of my research occurred when I acted out the physical phase of my research; through interviewing students. At this stage I was learning (about research; about my participants; about the practicalities of interviews, and about myself) by doing and I then allowed reflection upon these actions to guide future planning and action. Through this mode I created new knowledge and understanding of the research area through practical discovery (Elliott, 2003). During and around this mode I was also involved in an iconic mode of representation; where I gained further understanding of my research area through reading related papers, attending lectures, and cognitively organising and summarising experiences. This process helped me

make sense of my research situation through informed reflection. The final mode of my research was the symbolic, where research findings were sorted into an accessible format and written up; during which time I was conducting my thinking through language and symbols in the hope that the results of my research might lead to new insights and possibly some practical improvements in the area under study.

Chapter summary

In this chapter I have introduced some of the key concepts underpinning educational research and have used my discussion on 'truth' to show how I worked to make sense of my research experience. I started by discussing two broad perspectives regarding 'truth': 'truth as an objectively discovered answer' and 'truth as a subjectively created concept'. Through broadly examining positivism, post-positivism, behaviourism and cognitivism, and through a more thorough analysis of Thorndike's 'Law of Effect' and Bruner's 'Three Forms of Representation' I have highlighted how the consideration of 'truth' helped inform my methodology. Considering Bruner's 'Three Forms of Representation' allowed me to analyse what it was that I hoped to find and offered support for embracing reflexivity in research. This chapter has shown how reflecting on 'truth' in relation to my research paradigm meant that I was able to create a considered research methodology and refine my research purpose. In the next chapter I further refine my research paradigm through developing a research framework drawn from key literature.

Chapter 4: Research Framework

This chapter cover the following:

- I identify broad positions on theory
- Three key texts that lead the debate against theory are introduced
- Definitions of 'epistemology' and 'ontology' are problematised
- The epistemological and ontological assumptions of the three key texts are reviewed, critiqued and countered
- I reflect upon how examining these key texts relates to my own research and how this has helped develop my research framework
- A chapter summary is given and links between the first four chapters and my methodology highlighted

Positions on theory

My research asked participants to consider 'theory' in relation to their practice and I felt that it was important to develop a framework that would aid my analysis of their responses. In this chapter I consider the construct 'theory', its relationship to practice and to my research and, by doing so, show how I used key literature to create three research hypotheses.

The relationship between theory and practice is one that is often discussed: theory cannot exist outside of practice (Carr, 2006); theory and practice are not opposites (Klein, 1992); there are discrepancies between theory and practice (Akazari, 2001); there is tension and ambiguity in the meanings of 'theory' and 'practice' (Schlib, 1991); just because theory and practice are not currently compatible does not mean they never will be (Bayles, 1966), and whilst Eisner (1982) proposes that theory might offer a 'rule of thumb' Curzon (1997:273) suggests that the 'total rejection of all methodology of instruction in

favour of the practices associated with the “personality cult” finds favour among some teachers’. These papers tend to look at the link (or possible link) between theory and practice in the abstract or conceptual but the aim of my thesis is to focus on the micro and to form an authentic thick description of one specific cohort of ITT students and analyse how they consider ‘theory’ in relation to their practice.

Theory finds many forms in educational research and for each position there seems to be an opposing counter. The literature and discussion on ‘theory’ is wide-ranging and abundant therefore it is helpful to take a step back and look at ideas regarding the concept of ‘theory’. This is particularly relevant as the participants in my research were not asked about specific theories but about theories *they used* and about ‘theory’ *in general*. It was also clear from the participant data that it was not important whose theory they used as long as it worked for them (Focus group 1); that being aware of theories could help them reflect (Focus group 2), and that ‘theory’ was spoken about in a number of different ways (individual interviews).

I initially identified two broad positions: one that held the orthodoxy of theory and one that called for the rejection of theory. This first position is, as would be expected, specific to certain theories as it would not be possible to argue for the orthodoxy of all theories. This position is based upon a scientific (positivist) model and suggests that a theory (if correct) can be used by the practitioner and will lead to an expected outcome. In this regard a theory is either right or wrong and can be tested. However, it was the second position that offered most scope for debate. In this second position the construct ‘theory’ itself is discussed and assessed. Questions are raised as to its value,

its role and what we might mean when we say the word 'theory'. This position addresses personal subjectivity, social construction and interpretation.

Here I look at three key articles, by Wilfred Carr, Richard Pring and Gary Thomas, that lead the debate around this second position. These articles are Wilfred Carr's paper, 'Education without theory', Richard Pring's lecture, 'The language of curriculum analysis' and Gary Thomas's book, *Education and Theory*. In analysing the epistemological and ontological assumptions behind these texts I look at how they help form my orientation and inform the framework of my research. I have critiqued the articles from my own perspective in order to relate them to my own research position and I have countered them using three articles which might offset this second position. The three 'counter' arguments come from Wilfred Carr's earlier article 'What is an Educational Practice?', Ralph Tyler's text, *Basic Principles of Curriculum and Instruction* and Stephen Ball's paper, 'Intellectuals or Technicians? The Urgent Role of Theory in Educational Studies'.

Against theory

The articles by Carr, Pring and Thomas examine the link between theory and practice but they do this in different ways and for different reasons. All three offer perspectives that suggest 'theory' does not do what many suppose it to do and that we should examine this rupture and look for alternatives. In examining the epistemological and ontological assumptions that the authors make I hoped to gain an understanding of what they 'count' as knowledge and how their views of the world relate to their positions on 'theory'.

The article by Carr works through a timeline of educational theories showing how theory is always linked to the circumstances around its creation and is therefore never truly replicable. Carr argues that since theory cannot exist outside of its own time and outside of practice then we should not bother with educational theory at all.

educational theory's aspiration to govern practice from a neutral perspective of an abiding general rationality is a futile aspiration because the norms, rules and conventions governing its own practice are themselves local rather than general, contextual rather than abstract and derive from educational theory's own contingent history.

Carr (2006:147)

Pring, highlighting his point through the telling of a recurring dream, discusses the issues of theorists and practitioners abstracting themselves from practice to create 'theory'. He examines different perspectives on this and concludes by indicating that we must remove the divide between those who practice and those who think about practice.

there are severe limitations upon the value of curriculum theory that is not itself arising from the problems felt and formulated by practitioners and constantly tested out in practice

Pring (2005:178)

Thomas's text looks at the use and misuse of the word 'theory'. He examines the way that the word 'theory' has been appropriated and has become a term for almost any thinking process. Thomas argues for the appropriate use of the appropriate terms. His view is not the thesis of anti-theory that some have claimed it to be (see Rajagopalan, 1998) rather Thomas seeks alternatives to 'theory' that will allow research to be less confused, less structured and more

diverse. For Thomas 'theory' has wrongly been given high status where, actually, it is an over-used and under-thought word.

the allure of theory – and the desire of educators to call their ideas 'theory' – rests historically on its success in other fields, most notably natural science. It was from this success that theory drew its epistemological legitimacy. Many educators appeared to have at the back of their minds the idea that theory represented the clearest distillation of intellectual endeavour; the conceptual and epistemological cream of the various disciplines from which it had been borrowed. But my argument is that these successes provide no good reason for contemporary education's romance with theory.

Thomas (2007:20)

All three authors have issues with the way that theory and practice have been examined and applied, and suggest that educational theory is a temporal construction that fails to connect with the practical realities of teaching and does not truly inform or describe the experiences of practitioners.

Epistemology and ontology

Before I can analyse the epistemological and ontological assumptions of the articles of Carr, Pring and Thomas I should first try to define these terms.

These are words that can mean different things to different people - however in the world of educational research many 'key' terms are subject to debate.

Foucault (1970) describes fluctuations in the way we consider 'knowledge'; Smeyers & Burbules (2006) problematise the notion of 'practice'; some question what 'education' is (Peters, 1973; Hinchliffe, 2001); others question what education is *for* (Tate, 1999; Freire, 1996), and the range of paradigms

and practices within education mean that the word 'theory' is just as difficult to qualify (Schlib, 1991; O'Connor, 1957).

In trying to define 'epistemology' and 'ontology' I am faced with some paradigmatic issues in that how I perceive the world affects how I understand these terms. If I take a positivist perspective and see the world and knowledge as fixed entities awaiting discovery I can clearly define the terms as they must have some meaning that is connected with a true concept. If I take this stance I can use a 'dictionary' approach and tell you that epistemology is the study of knowledge and that ontology relates to the nature of reality.

The post-positivist is likely to have more trouble defining words as their meaning becomes reliant upon the words around them. Post-positivists question whether there are fixed truths awaiting discovery and argue that research cannot be wholly objective. A post-positivist may see epistemology as a less tangible term, perhaps one that is connected with the relationship between the researcher and the object of their study (Bettis & Gregson, 2001). Ontology now becomes a question about how we construct reality.

By rejecting the notion of objective truth and a behaviourist methodology in favour of a subjective and socially constructed approach to my research I find myself working within a post-positivist paradigm. However, although I shall position myself as a post-positivist I have only learned what I am not – not what I am! Carr and Pring show similar 'anti' positioning in their articles. Carr tells us that 'there can be no perspective that is independent' (2006:150) and Pring says that, 'I am not as sure as I thought I would be, when I started writing, how to articulate [my] position clearly' (2005:176). In both these instances the authors show that they are researching from a position that is

not static, that is not clearly defined and that relies on other inter-related occurrences. Thomas, however, is much more sure-footed in suggesting that the word 'theory' can be over-used and made hollow when it is applied in a generic sense to thinking or reflecting. Thomas's (2007) point is 'not to legislate for what is correct, but rather the obverse: the point is to counter an academic tendency to want to scoop up all thinking words and paint "theory" over them in metre-high red letters' (p.53).

Carr and Pring argue from an interpretivist paradigm, where a person's relationship with the world creates meaning and understanding (Pearse, 1992). They use mellow discursive texts, with sentences and titles used for effect, to support a position that underlines their epistemological and ontological assumptions. Thomas's approach is much more provocative. Freed from what he calls the 'demons' of peer-review, his text is bold and confrontational. Without stating his position (although he clearly states his argument) he highlights the folly of organising research so as to 'make shape and theory out of that which is shapeless' (Thomas, 2007:82) and in saying this he adopts a perspective that hopes to be untheorized.

Epistemological and ontological assumptions

Carr's article

Carr's article informs us that theory has failed by trying to take an objective position; he argues that such a position is impossible and that there is no independent perspective. Carr suggests that since we are all interpretatively positioned, and that since different positions occur at different points in time,

we must have many ideas of reality. The view that theory is intrinsically linked to its time and place suggests the ontological assumption that the nature of being and understanding are not independently fixed ideas existing outside of the influence of humankind, but that 'reality', and the theories constructed within it, is a shared construction.

Carr positions himself as a 'post-foundationalist', a position which:

refers to a mode of philosophical discourse which acknowledges that the irreversible changes to the ways in which we now understand and relate to the ideas and beliefs of modernity have been so profound that the forms of theorising that continue to rely on foundationalist assumptions are no longer acceptable when we try to make sense of the contemporary world.

Carr (2006:145)

In taking this position Carr's ontological assumption is that, since 'reality' is not 'out there' to be discovered, research should be about understanding the 'contemporary world' through living and thinking in it. This assumption also impacts on his mode of research. Carr takes a very discursive interpretivist approach in his article. There are no tables and pie charts, no facts and figures as these things, for Carr are ever-changing depending on the time and place of the research. To strengthen his position and approach Carr seeks support from some of the 'big' names of philosophy: Wittgenstein, Gadamer, Heidegger, Rorty, Derrida, Eagleton, Fish and Foucault. These influential and regarded names are used to add substance to Carr's position (a position that is not really substantive in that post-foundationalism does not really occupy a positively defined position rather it occupies a position that, by Carr's admission, is not built upon a foundation of knowledge). There does seem some irony in this epistemological perspective in that, whilst Carr argues

against a foundation of knowledge and the positivist paradigm and instead argues that knowledge and understanding are dependent upon positionality, he feels the need to support this ontological assumption by drawing on research and philosophies that are not of his time and place.

In taking a time-line approach to his research Carr works through various theoretical models and shows how they have not been of real use to practitioners. Carr recognises that some theories have been of some use at some times but he claims that since they are always dependent on time and place they are not transferable and therefore not truly useful. Carr argues that the term 'theory' itself is just a name we give to the process of creating answers and since we have so many theories and so many ideas of 'theory' then perhaps we do not really know what 'theory' is. For Carr 'theory' is a question of hermeneutics and each person translates 'theory' in a different way according to their position in time. Since we are all differently positioned then we can never all use theories as they were intended. If this is the case then why bother using theory at all?

For Carr, since educational theory has not done what it said it would do, and since his research has led him to assume that it is unlikely to do so in its current form, then we must bring educational theory to an end. Carr argues that educational theory is too abstract and he treats it as a separate entity with no relevance to practice (Mortimore, 2000). Carr does not see any practical link between educational theory and practice and it can be argued that many practitioners are mainly influenced by the practice of others around them (Cook-Sather & Yousens, 2007) and by reflection on the experience of their students (Koutselini & Persianis, 2000; Taylor, 2003). Carr assumes that

since we cannot determine if what we think to be true really is true we must reject what educational theory currently and historically counts as knowledge. In arguing from a position of 'anti', Carr assumes an almost anti-epistemological position: 'there are no epistemological foundations that enable us to determine whether what educational practitioners believe to be true really is true' (Carr, 2006:156). Carr argues that educational theory that has claimed to be successful is not universally successful as it has only been used in a particular way, in a particular community and in a particular time. Therefore questions about theory's practical role depend on particular circumstances. The key issue that Carr has to face relates to his epistemological and ontological position. If he were to truly argue that educational theory is of no real use and should be abandoned altogether then this leaves his paper in a strange position. If we are to follow Carr's argument and see educational theory as useless and put it to an end then Carr's theory will have had a clear practical application (the removal of theory). Carr recognises this and suggests that if this does turn out to be the case then this is not a case of action following theory but action following persuasion; this argument does seem a little weak, as post-foundationalism, although it is not a clearly defined paradigm, is certainly a 'position' rather than a 'persuasion'.

In analysing the epistemological and ontological assumptions that Carr is making about the nature of his research I am left wondering, "What next?" Since Carr (2006) argues from a post-foundationalist paradigm and feels we should abandon epistemological foundations as there can be no objective truths it makes it very hard for him to predict what will happen next to educational theory. From his paradigm he cannot prescribe he can only await.

If I am to follow Carr's lead then I must assume that any research I do today may be useless tomorrow and, if this is the case, why bother doing any research today! If I hope to find an answer then, from Carr's position, it may only be a temporary answer that fits into my current place in time. However, I feel that this should not stop us from searching. Of course things may be superseded and life is temporal, but Carr fails to highlight how things can sometimes build upon past ideas. Just because a theory becomes obsolete in one time does not mean that it will not be of some use in future times. This argument can be shown through assessing how Carr's article from 2006 is clearly influenced by his article from 1998, where, although different positions are taken there is a clear development of an idea. For Carr (2006), educational theory has not done what it set out to do. I do not think that this is reason to have education without theory, as perhaps educational theory has not yet done what it set out to do – but it may do so at a later date, and it may be the theory we find today, or even a theory we rejected yesterday, will be the catalyst for a future theory that works for all.

In countering Carr's argument it is helpful to look back at an earlier position that he adopted where he attempts to flip the coin and problematise the notion of educational practice in relation to theory. Carr (1998:61) reconceptualises educational practice and theory and reports that they both 'emanated from the same dubious historical source'. Here he looks at the Greek roots of the word 'practice' (*praxis*) and 'theory' (*theoria*) to form the notion of education being a practical science. In this instance Carr (1998) argues that we need to understand what 'theory' and 'practice' are before we can have an intelligible debate; however, in drawing his definitions from ancient sources he attempts

to give 'theory' an objective definition that is not related to its time in space. Carr (1998) discusses theory as judgement or practical wisdom that leads to action. Of course it is okay to change your position on things, and this earlier article was first published in 1987, but these two articles help highlight the debate about the nature of knowledge. In the earlier article knowledge is 'fixed' by the Greek meanings but later Carr argues that knowledge is dependent on an individual's position. Relating this to my study gives two possible positions on 'theory': firstly, 'theory' is dependent on positionality (Carr, 2006) and, secondly, 'theory' is thoughtful guidance that can be moderated (Carr, 1998).

Pring's lecture

Pring's lecture makes the assumption that there is a practical reality to teaching but that theory has failed to be theory about what actually happens. His lecture shows this by examining three examples of how 'theory fails to be theory about practice' (Pring, 2005:167). Pring's key epistemological assumption is that the creation of knowledge is an activity based on understanding. This suggests a constructed, but not necessarily shared, idea of the nature of knowledge. Pring argues that taking a more practitioner-centred epistemology will lead to educational theory that is based on the reality of practice.

Pring's lecture problematises the relationship between the accounts given by theorists and what actually happens in practice. Whilst recognising that research is relevant to practice (Pring, 2000) he sees a problem in creating

theory from an abstracted position and suggests a solution might be for curriculum theory to focus on theorising from within practice rather than describing and/or prescribing from without. Pring suggests that 'research on education' is different from 'educational research'. 'Research on education' involves a researcher, working outside the educational institution under study, describing or prescribing from an apparently impartial and objective position. Since Pring holds that knowledge is a construction he must reject this view of educational theorising as it relies on objectivity and the idea that reality is an independently existing phenomenon. The second view of educational theory is that of 'educational research', this involves the practitioner (perhaps with guidance from the academic community) gaining a practical understanding of educational values through action, insight, research and practice (Elliott, 2006). Pring seems more comfortable with this second view as it is an ontological position that questions the existence of fixed truths, since the research is produced from an entirely subjective and involved perspective. Pring gives three accounts, Hirst (1976), Young (1971) and Bernstein (1971), of how educational theory fails to be theory about practice and by analysing these three accounts he takes for the most part the 'anti' role. The positive aspects of Pring's lecture, or the 'answers' that come from it, are not pushed or pursued but left open for further research/debate. This could be seen as a pragmatic decision but, by opting not to suggest a specific mode of operations, and by deciding not to prescribe from without, Pring supports his own argument – for if he were to offer 'the answer' he would be taking on the role of 'researcher on education' that is in opposition to his own epistemological and ontological position.

Whilst Pring's position is intentionally and necessarily fluid, others faced with similar issues in regards to the educational research/educational practice debate have suggested more proactive solutions such as creating practice-based bases of knowledge (Dirkx, 2006) or working to lessen the divide between theorists and practitioners through addressing the perception that they are in opposition (Schlib, 1991). Norris & Kvernbekk (1997) suggest that these arguments are too simple and that the connection between theory and practice is dependent on the nature of the theory. Pring sees knowledge as the product of a practical reality and views this 'reality' as different for each individual as we all experience the world from our own perspective. For this reason he rejects the proposal put forward by Hirst (1976) that practitioners should work from planned, logical and rational objectives as he feels that this is impossible as the field of practice is so large that there can be no agreement as to what is 'logical' or 'rational'.

Pring feels that the reasons for theorising should be generated within practice but that Young (1971) is mistaken in trying to make sense of the realities of practice as the world of practice is too complex. Pring argues that by trying to come to an 'answer' that will help support practitioners Young neglects the myriad of 'practices' and ends up creating a general theory that is not suited to its original task.

Pring's analysis of Bernstein's article on the classification and framing of knowledge leads him to think that this approach is too limiting and puts 'a theoretical straitjacket' (Pring, 2005:172) on practice. Pring argues that Bernstein's research is not an analysis of practice rather that it is a framework that tries to define practice with little practical use.

Pring takes a common sense view of theory and suggests that there can be no magic theory that assures success; that theories themselves tend to be abstract and the product of interpretation (Akazaki, 2001) and, in the end, theory is something that can be interpreted by the practitioner (Eisner, 1982). If practice is defined by theory from an abstracted source, teachers could be given the wrong theory (Liston, Whitcomb & Borko, 2006). In assuming that there is a gap between theory and practice, Pring is suggesting that theorists and practitioners have different views of the world, an argument that is in line with his interpretivist paradigm. If researchers are not in tune with practitioners then it is no wonder that theory has little to offer practitioners since they tend to make sense of teaching through reflection upon things that have occurred to them and spend time trying to maintain equilibrium in the classroom (Brown, Stephen & Cope, 1999). Pring makes the assumption that a 'real theoretical advance' (2005:166) would be knowledge produced by practitioners and worked into a theory which would be more relevant and more flexible, and that these theories would be further developed over time through further practice. Pring is assuming that if theory is the product of practice then there will not be a gap between theory and practice (Klein, 1992), we must however consider that, if practitioners create their own theory from their own perspective and based on their own practice, their theory may not be relevant to anyone else, and they may even get it wrong. In all, Pring tends to reject any theory that tries to define or decide what practice is and what it should do. Pring sees this as a debunking of the myth that educational theory can define or describe practice. From his perspective Pring must conclude that there is no answer that will suit all as we are all involved in

different realities, but this does not mean we should not seek answers, rather that we should all seek our own answers. Pring highlights what is wrong with each attempt to define a theory that will have a positive impact on practice, and as he sees the world and knowledge as constructs of interaction and perception, he is left concluding that the eclectic nature of practice cannot be confined by theories that work for all. This is not to reject 'theory' but to reject theory that is imposed upon practitioners.

In analysing the epistemological and ontological assumptions that Pring is making I am left with a dilemma. If there is no right answer what use is research? and what use is theory? Surely theory that is created at an individual level only to be applied by that individual is not really theory at all – it is a mode of operation that changes day to day based on that individual's interaction with the world.

Pring assumes that, since the nature of knowledge is dependent on relationships then knowledge is different for everyone as we all have different experiences. I am not so sure. Perhaps we do have different experiences but they happen within a common mode of being and understanding. Humans have common shared ways of understanding (we use language, we ask questions, we draw pictures, we point) and by taking an 'anti' perspective Pring overlooks the common things that humans are 'for'. For Pring we should all make our own pizzas to suit our own tastes – but could there not be some general theory that works as a common pizza base leaving individuals to choose their own topping?

Another counter to Pring's position comes from Tyler (1969) where organising principles, such as philosophy and theory, are held to be part of the structure

that should form education. Where Pring hopes to remove the theory-practice divide, Tyler looks for 'a theory of learning which helps to outline the nature of the learning process' (1969:41). In this instance the theory is created beforehand and then used to make educational judgements. Tyler describes a pre-formulated practitioner theory that determines and organises practice. Where Pring has difficulty in expressing his position Tyler does not seem so troubled and reports that 'certain kinds of information and knowledge provide a more intelligent basis for applying the philosophy [of education]' (Tyler, 1969:4). Relating this to my study gives two possible positions on 'theory': firstly, 'theory' should be drawn from the reality of practice (Pring, 2005) and, secondly, 'theory' is an intelligent organising principle (Tyler, 1969).

Thomas's text

Thomas's text shows a very interesting position in that he argues against the way that the term 'theory' is loosely used and argues for a more exact use of language to describe what is really going on (thinking, wondering, reflecting etc.) yet suggests he is not attempting to 'legislate for correct language' (2007:52). He argues that calling any thinking process 'theorizing' confuses us; places different ways of thinking under the one convenient term, and leaves the word hollow. Thomas also suggests that the word 'theory' is used to give substance to a thought or an idea and is used as a badge of legitimacy. Instead Thomas argues that those involved in inquiry into education should not feel the need to locate their work in 'theory' as a means of strengthening its position but should embrace 'unpretentious problem

solving' (2007:156). In adopting this position Thomas moves the debate from focusing on epistemology and ontology to focusing on the means of inquiry.

Thomas questions the status that has been given to 'theory' and queries whether this kudos has overshadowed the ideas that have emerged from everyday enquiry. Thomas suggests that researchers have blindly accepted that which is labelled 'theory' in favour of ideas that are drawn from other modes of enquiry and that 'education has come to be in thrall to theory' (2007:30). Whilst some report that educational theories are seldom legitimated by evidence (Kennedy, 1997) Thomas (2007) argues that 'theory' *per se* has managed to be elevated to such a level that not to use 'theory' is seen as an academic fault or weakness. Thomas suggests that the 'high status given to theory in most methodological deliberation confuses students and researchers' (p.17) in that they feel forced to base their work on an established theory, and that, in doing so, their work may be mis-directed and square pegs may be placed in round holes. Instead, Thomas argues for ideas and evidence to guide practice. Making this assertion raises a number of issues: primarily, how do we know which ideas we should use, and what *counts* as evidence? Is Thomas suggesting that all ideas are worth exploring and that through trial and error we may find methods that will better steer education or does he privilege certain other modes of enquiry?

Instead of the ubiquity of usage that he reports, Thomas is looking for an exactness in the use of the term 'theory'; he offers tables to show how 'theory' is commonly used, and taxonomies of alternatives. These alternatives are drawn from the Greek and might offer a more faithful vocabulary and give more precise names to different forms of thinking but the difficulty here is that

words cannot be controlled in this way and the broad use of the word 'theory' that Thomas reports is one of the very factors that hampers its replacement. Thomas (2007) remarks that there is a 'familiarity with the employment of the word "theory" in educational discourse' (p.148) and while I agree that 'theory' might not be the right word it is a word that most/all will have a self-definition of and these self-definitions may share similar qualities, whereas the Greek terms, such as *apodeixis*, *doxa*, *eikon*, *heuriskein* and *metanoia*, that Thomas offers as exact alternatives are not of the common language of practice, research or day-to-day living. These terms may be purposeful and useful but lose their purpose and use through their alien nature. Thomas seeks clear distinctions between words so that we may be better able to describe what we are actually doing but this clarity of usage is reliant on words having a fixed and known meaning so that they can be used in such purposeful ways. Foucault (1970) discussed four epistemes in modern European history and shows changes over space, place and time; Thomas too, in his discussion on 'paradigm' recognises that meanings can change, but seems to be running with the hare and hunting with the hounds by suggesting that '[m]ovement in one's position is key' (2007:151) yet implying an episteme of definition and universality.

Where others might privilege 'theory', Thomas privileges the development of new ideas suggesting that 'the priority should be change, not theory' (2007:55). Thomas's text is inclusive in that it questions the use of any theory: grand, grounded, educational, pretentious or personal, and hopes to promote non-theoretical approaches. Thomas offers approval to imaginative, practical and personal thinking tools that don't rely on the constraints that he says

'theory' brings. He questions whether we can actually articulate our personal theory but does not question whether we can articulate our personal application of principles, or our ability to explain our personal craft knowledge. In this regard Thomas makes epistemological and ontological assumptions about the ability of subjective experience to construct an authentic understanding of reality.

Thomas's epistemological and ontological assumptions are closely linked with ideas of confinement and freedom. For Thomas 'theory' has restricted research and placed it within a tradition that limits new approaches. His message is that, for those in fields like education, the priority should be change and the creation of new ideas but that in 'the development of *new* ideas – and I think this is true in education as anywhere else (indeed perhaps more so) – theory rarely plays a part' (Thomas, 2007:64 original emphasis). Thomas argues that the cachet of 'theory' is hard to resist, that researchers feel obliged to ground their work in an existing model and, he argues, since there is no one way to do things we should try to free ourselves from the need to scaffold our research. In this regard Thomas might see researchers 'need' for 'theory' as akin to Gramsci's concept of hegemonic replacement (1971) or Foucault's writings on governmentality (1979). Here we have a system that is self-contained and self-perpetuating; the actors within it are caught in a cycle whose ultimate purpose is control and systematisation. Thomas reports that social scientists use 'theory' for 'epistemic security' (2007:146) in an effort to legitimate their practice. Here 'theory' is thought to lead to new knowledge but instead, he argues, is an 'intellectual stockade' (p.11).

In questioning whether 'people deliberately theorize' (2007:72) Thomas's text is clearly significant for my study. Thomas argues that having a 'practitioner theory' might paralyse social science researchers through a spiralling practice of theorising about theories but this argument only holds if we commit to Thomas's position on 'theory'. In arguing for a more definite lexicon of what practitioners and researchers might be doing Thomas places language in sealed boxes; gives words fixed meanings, and questions the naive use of the word 'theory' (where 'idea' or 'presumption' might be more precise). The trouble with this approach is that when a word is used 'its meaning is whatever its author intends' (Knapp & Michaels, 1987:68). Here Thomas argues for freedom of method but against the freedom to use words as we see fit.

In analysing the epistemological and ontological assumptions in Thomas's text I am left philosophically in agreement yet pragmatically unconvinced. Thomas sees 'theory' as a false idol and whilst my own position means that I share many of his concerns about the broad unquestioned allegiance to 'theory' I also recognise that where participants use the word 'theory' they will be applying their own private meaning. Although the construct 'theory' was discussed at various times during the PGCE/Cert Ed (PCET) class, I deliberately did not promote my definition during the research interviews and focus groups since I am not interested in checking to see if participants are correct in their use of vocabulary but in what they report to be the link between 'theory' (as they see it) and their practice.

As a counterpoint to Thomas, Ball (1995) offers a position on theory that holds it to be essential in offering new approaches and argues that the absence of

theory leaves researchers open to 'unexamined, unreflexive preconceptions and dangerously naive ontological and epistemological *a priori*' (p.266) and links the notion of the abandonment of theory to the change in teaching 'from being an intellectual endeavour to being a technical process' (p265).

Ball articulates what he sees as the role of theory: 'it provides a language of rigour' and the purpose of theory: 'to open up spaces for the invention of new forms of experience' (p.266). It is interesting that both Thomas and Ball seek definition and freedom but have such opposing views on how these concepts are related to 'theory'. For Ball, there is a risk that, without theory, we will be caught in endlessly repeating cycles of practice with no means of reinventing our teaching but for Thomas 'theory' is to blame for inventing these repeating cycles. Relating this to my study gives two possible positions on 'theory': firstly, 'theory' is a badly applied term that is used in an effort to claim authority (Thomas, 2007) and, secondly, 'theory' is essential in opening up new perspectives (Ball, 1995).

How these findings relate to my own research

In this chapter I have looked at the epistemological and ontological assumptions that Carr, Pring and Thomas make regarding 'theory'. The view that Carr and Pring hold that theory is intrinsically linked to its time and place suggests an ontological assumption that the nature of being and understanding are not independently fixed ideas existing outside of the influence of humankind but that reality, and the theories constructed within it, is a shared construction. Because of the assumptions that the authors are

making, they both find it easier to express what they feel is wrong rather than what they feel is right. Thomas, however, does not try to offer up 'the answer', instead he argues that 'theory' has become a word that is over-used and under-thought. Thomas, like Carr and Pring, privileges the practical; he acknowledges that education should happen within a framework but feels that we should rid ourselves of the notion that these practices can either be guided by, or developed into 'theory'.

By examining the assumptions that Carr, Pring and Thomas make I had hoped to find out more about my own position. The trouble here is that, because of the approach taken by the authors they did not give me any real answers. If this chapter is a discussion on my search for theoretical self-orientation then I must consider if I have looked in the wrong places. If I am swayed by Carr I must realise that even if I am currently happy with my own practitioner-created orientation then I should be aware that things are likely to change, and my 'theory' may soon be out of date. If I listen to Pring I should be happy with my own practitioner-created orientation. If I turn to Thomas I should question the notion that I even have a theoretical self-orientation as it may be no more than an idea, an assumption or a piece of overblown craft knowledge. Reviewing the positions that Carr, Pring and Thomas take and balancing these against counter arguments and counter positions allowed me to create a conceptual framework that scaffolds my research. In creating a conceptual framework I took the three critical debates and created a matrix that formed my three hypotheses (see Fig. 6). This matrix shows the positions presented in the three lead articles, those presented in the three counter articles, and also the areas between.

<p>educational theory is nothing other than the name we give to the various futile attempts ... to stand outside our educational practices in order to explain and justify them</p> <p>(Carr, 2006:137)</p>	<p>far from being 'universal' or 'general' ... theoretical generalisations are always abstractions from the malleable world of practice</p> <p>(Carr, 2006:147)</p> <p>those who engage in educational practices have to reflect upon and hence theorise about, what, in general, they are trying to do</p> <p>(Carr, 1998:62)</p>	<p>educational practice is always guided by some theory</p> <p>(Carr, 1998:72)</p>
<p>theory fails to be theory about practice</p> <p>(Pring, 2005:167)</p>	<p>My criticism of curriculum theory is that it too frequently does not respect ... the common-sense language and understandings of the teacher</p> <p>(Pring, 2005:176)</p> <p>theory of learning does not lessen the teacher's responsibility</p> <p>(Tyler, 1969:64)</p>	<p>Since every teacher and curriculum-maker must operate on some kind of theory of learning it is useful to have this theory of learning formulated in concrete terms</p> <p>(Tyler, 1969:41)</p>
<p>what teachers say and do in their work are what they say and do. We have no right to impute more; no right to impose 'theory'</p> <p>(Thomas, 2007:81)</p>	<p>a case for <i>ad hocery</i> rather than theory, arguing that creativity and progress are rarely the fruit of theory</p> <p>(Thomas, 2007:21)</p> <p>We must consider <i>how</i> as well as <i>why</i> we employ theory</p> <p>(Ball, 1995:268)</p>	<p>The point about theory is not that it is simply critical. In order to go beyond the accidents and contingencies which enfold us, it is necessary to start from another position</p> <p>(Ball, 1995:267)</p>
<ul style="list-style-type: none"> • <i>'theory' is just a name that is used or misused</i> • <i>'theory' does not relate to practice</i> • <i>'theory' does not relate to what teachers say and do</i> 	<ul style="list-style-type: none"> • <i>theory comes from practice</i> • <i>the use of theory is guided by the practitioner</i> • <i>must consider if, and when, to employ theory</i> 	<ul style="list-style-type: none"> • <i>practice is guided by theory</i> • <i>teachers operate from theory</i> • <i>theory allows for new perspectives</i>
<p>Hypothesis 1 (H1)</p> <p>'Theory' is just a name and it does not relate to actual practice</p>	<p>Hypothesis 2 (H2)</p> <p>Theory starts from practice and can be adapted by practitioners</p>	<p>Hypothesis 3 (H3)</p> <p>Theory is an essential part of practice and can guide practitioners</p>

Figure 6, Research framework

It should be noted that the nature of any matrix is to organise and categorise data and it is recognised that whilst three hypotheses are offered there are likely to be outcomes that lie in the grey areas between hypotheses. Where I have offered Hypothesis 1 (H1), Hypothesis 2 (H2) and Hypothesis 3 (H3) there are also likely to be hybrid hypotheses (Hybrid H1H2 or Hybrid H2H3). This is not a problem for my research as the labelling of the data is just a starting point and it is hoped that the written description and analysis that accompany the results will be of more significance.

Carr, Pring and Thomas suggest that imposing an externally created 'theory' on someone's practice or research is not practical or realistic and that, if it were possible, it would lead to a restriction of new ideas. If the participants in my study were to 'swallow' a theory verbatim and simply regurgitate it in their delivery then I would be inclined to agree, but if they have reflected upon 'theory' ITT students may then be able to adapt their own practitioner perspective as they move on in their practice (Carr, 2006). By interpreting 'theory' from their own perspective and adapting, adopting or rejecting what they deem to be appropriate for their own practice then it is possible that an external theory may have helped create a new individual practitioner pedagogy (Pring, 2005). This approach would not be one that shows deference to 'theory' but one that is more reflective, more personal and more liberated (Thomas, 2007).

Analysing these key texts; assessing their epistemological and ontological assumptions, and developing critical debates into a research framework helped me refine my post-positivist research paradigm. Because of my reflexive role; because I see the participants in this study as central to

constructing an understanding through thick description of the area under study, and because I hold the 'truth' of my research to be produced through the interplay of the participants' perspectives and my own then it is possible to refine my research paradigm still further and suggest that this work is interpretivist. Bartlett, Burton & Peim (2001:45) report that:

The interpretivist tries to show how choices are made by actors in social settings within the process of interaction. For the interpretivist there is no single objective reality which exists outside the actor's explanations, just different versions of events.

The debates discussed in this chapter and the hypotheses created from these have shown how I clarified my own position whilst recognising my reflexive role and developing an interpretivist research paradigm. The authors I have reviewed and analysed helped me to recognise my own epistemological and ontological assumption that it is not up to others to prescribe practice nor is it possible to accurately describe practice from outside. Carr (1998:86) suggests that 'it is the interpretations of educational practitioners that provide both the subject matter for educational research and the testing ground for its results'; therefore, the participants' responses become central to my research and arguments about what 'theory' is or what 'theory' does come second to participant discussions on it.

Since I have argued that this research is heterotopic and that participants understand language from a private-shared perspective then I must consider that the construct 'theory' is understood transactionally within the space of my research. In which case I would not expect participants to have a comprehensive definition of what 'theory' is rather that they would have a broad-spectrum, unspecified understanding developed through their practice.

Carr, Pring and Thomas argue that 'theory' is just a name and that it does not relate to practice but this seems to be an academic discussion about ancestry, definitions and exactness rather than a private-shared practitioner understanding. With this in mind I would not expect participant responses to support H1 as this would mean that they would be assessing the terminology and exactness of the terms 'theory' and 'practice' and examining how these might relate to each other. Nor would I expect participant data to support H3 as the 'theory' in this hypothesis also calls for fixed positioning and veneration that can only be achieved through an accepted perspective. Participants would be unlikely to pick apart the terminology they use and would be more likely to use words without examining their precise definition. I would not expect participant data to include isolated analyses of constructs, instead I would expect to find participants 'using' theories in broad-spectrum, unspecified ways and feeling comfortable to pick and mix ideas that suited their specific area of practice. Therefore, I would expect the data to support H2 where theory starts from practice and can be adapted by practitioners.

Chapter summary

This chapter started by introducing two broad positions regarding the construct 'theory': one that held the orthodoxy of theory and one that called for the rejection of theory. Literature was identified that allowed these positions to be debated and three key texts were discussed in detail. By analysing the epistemological and ontological assumptions behind three texts that reported 'theory' to be temporal, impractical and falsely privileged and countering them with texts that adopted a more orthodox position on theory, I was able to form

three critical debates. These critical debates led to the formation of my research framework and three hypotheses: (H1) 'Theory' is just a name and it does not relate to actual practice; (H2) Theory starts from practice and can be adapted by practitioners, and (H3) Theory is an essential part of practice and can guide practitioners. As well as establishing my research framework, this chapter has shown how analysing these key texts meant that I was able to further refine my post-positivist paradigm and suggest that my study is interpretivist in nature. These first four chapters have discussed my deliberation on my research question, context, purpose and framework and have simultaneously shown how my reflection upon these areas has worked to help me understand my role as teacher-researcher and my own epistemological and ontological assumptions, the next chapter draws much of this together and shows how these conceits have informed the construction of my methodology.

Chapter 5: Methodology

This chapter covers the following:

- There is initial discussion on the considerations underpinning my methodology
- Specific points regarding the research context are reviewed
- I show how my research question was developed
- The design and stages of my research are discussed
- The feasibility of my research is examined
- A chapter summary is given and links with the next chapter shown

Methodological considerations

This methodology highlights the movement from the general to the specific by discussing how my research methods were developed from the research framework and hypotheses through consideration of the context; research question; research design, and various aspects relating to the study's feasibility. Barlett, Burton & Peim (2001:55) highlight eight areas to consider when starting research:

- There are many research methods which can be used to collect data. Even within particular method types there is enormous variation.
- The researcher may use or adapt an existing research instrument. In many cases the researcher designs his/her own instrument.
- Researchers make decisions concerning the methodology to be used in the light of the type of data they require.
- Practical constraints such as time, money and the nature of the respondent group, will be significant factors to be taken into account when designing the research.
- The data collected will be a reflection of the decisions made by, and the skills of, the researcher.

- Researchers aim to be as rigorous as possible but inevitably their beliefs and assumptions can affect research.
- Large-scale research projects are not necessarily better than small-scale projects.
- The researcher needs to address ethical issues including the confidentiality of the data collected and gaining the consent of those appropriate.

These eight areas are woven through the following discussion and reflection upon these areas has helped focus my study and address the issue of validity and reliability of data. There are other considerations that I have reflected upon during this study regarding other stakeholders and my own position as teacher-researcher and I shall discuss these issues later under the heading, 'Ethical considerations'. Further consideration was also given to the process of meaning-making that occurs during interviews and during data analysis.

Figure 7 gives an overview of the construction of this methodology:

Context	Further education lecturers completing initial teacher training through a PGCE/Cert Ed (PCET) course at an FE college	
Question	How do those completing initial teacher training in the post-compulsory education and training sector consider 'theory' in relation to their practice?	
Design	Template analysis of interview and focus group transcripts and content analysis of a written task produced as part of the PGCE/Cert Ed (PCET)	
Feasibility	Epistemological and methodological framework	Interpretivist and mainly qualitative
	Feasibility and risks	Ability to collect data and risks in being teacher- researcher
	Ethical considerations	Assessed by researcher, supervisor and ethics committee
	Timetable	The study runs over four years in total with 12 separate phases

Figure 7, Key components of methodology (adapted from Pilkington, 2007)

Context

The context of my research and the culture surrounding it have a bearing on my methods and my understanding regarding what knowledge may be and I have discussed some of these issues in chapter 2, 'Research Context', where I considered the principles that form an FE college in relation to Foucault's concept of a heterotopia (1986) and argued that the 'space' that my research took place in gives the data specific meaning and reduces any notion of generalisability as the individuals within such a space are affected by its very nature.

The group selected for this study had just completed their PGCE/Cert Ed (PCET) course and, on analysis of the schedule of their studies, were most likely to be those who are actively reflecting upon the issues of theory and practice. During their studies they had researched a number of educational theories and theorists and they had all had the opportunity to attend lectures covering educational, teaching and learning theory (Appendix D shows the students' Scheme of Work). Since one of the considerations of the PGCE/Cert Ed (PCET) course was to support participants in reflecting upon their own practice, this situation made them prepared for learning (Gagne, 1980) and a suitable group for the purposes of my study.

The construction of my study is bound by two course-specific issues. Firstly, those involved in ITT in the FE sector do so, almost always, as a requirement of their employment. Many are unsure at the start of their studies if they really wish to gain the PGCE/Cert Ed (PCET) qualification; some have been teaching for years and see this as a snub of their current and previous practice. The second issue is that, whilst being a specialist in their field, some

of the ITT lecturers may have had little experience of academic study (many participants had taken a vocational career path) and felt that the PGCE/Cert Ed (PCET) qualification was rather a difficult piece of study.

I must consider therefore that certain affective concerns were at play and this may have impacted upon participants' output and their feelings towards the course. There was also consideration given to the premise that, during interview, participants may have felt a level of loyalty towards me (Alvesson, 2003a) as their teacher and given the answers they felt I was looking for rather than their actual opinion. Although the 'great strength of qualitative research is the *validity* of the data obtained' (Hakim, 1992:27) there is always a question about the validity of findings where respondents know in advance that their work will be used for research.

Question

How do those completing initial teacher training in the post-compulsory education and training sector consider 'theory' in relation to their practice?

This research question was developed from my consideration of how I should research this area and my review of what I was interested to know. I knew that I wanted to 'do' some research on the PGCE/Cert Ed (PCET) course and I initially considered researching the application of components of the course to actual practice but this felt rather mechanistic and I was never at ease with the concept of checking to see if students were doing what they were being

guided to do. In defining my research question, I felt that I should start from something specific to the PGCE/Cert Ed (PCET) course. The assessment of the PGCE/Cert Ed (PCET) had two key aspects – written assignments and lesson observations. In the first year of the course students created a portfolio of professional practice and were formally observed three times. The portfolio was made up of four tasks:

- Task 1 – micro-teaching planning, delivery and reflection
- Task 2 – lesson planning and review
- Task 3 – developing schemes of work
- Task 4 – reviewing assessment methods

In the second year of the course students created a portfolio of professional practice and were formally observed three times. The year two portfolio was made up of four tasks that covered:

- Task 1 – effective planning for individuals
- Task 2 – response to learner feedback
- Task 3 – an account of a theory of learning
- Task 4 – a case study of two learners

After reviewing the portfolio elements I was drawn to Task 3 from Year 2. The PGCE/Cert Ed (PCET) class were asked to complete this task in the final semester of their course and this seemed like a fair place to research (as they had settled into the course; we had built a relationship, and they were now considered to be almost fully prepared for their roles). The original question asked for a report of a theory that students had found useful in their professional context and asked for an account of how this theory had informed practice (students were given 1000 words to do so). I found this

question intriguing and somewhat leading – it seemed to assume that theory was useful and that it *did* inform practice and I could not easily answer it for myself. After considering this further I began to problematise the task and found myself considering the following points:

- What is meant by the word ‘theory’?
- How do individual practitioners define the word ‘theory’?
- Do participants really think that ‘theory’ is useful?
- Does ‘theory’ inform and/or describe practice?

I concluded that Task 3 from the year 2 portfolio would be useful for my research as it seemed interesting to me; it specifically discussed the research context; the task itself seemed presumptive, and I felt that analysing the responses would be likely to gain an original understanding of this situation.

In order to triangulate my data, I was drawn by two further methods of data collection: through observation and through interview. By deciding to observe the ITT trainees’ practice I could see for myself if they were applying theory to practice, and by interviewing them I could gain insight into how they understood the relationship between theory and practice and how they felt it affected them. My initial thoughts were that it would be more ‘scientific’ if I were to observe practice and base my research around observed behaviours and criteria (as with the six PGCE/Cert Ed (PCET) teaching practice observations) after all it seems easier to report what you see rather than what you think the participant has learned (Dolmans et al, 2003). However, as I found myself ‘involved’ in my research as teacher-researcher, and since I had known my students for the two years of their study there was likely to be an element of subjectivity in such observations (Tuckman, 1995). If I was to

research from a purely observational perspective I might find myself reporting on what I saw and whilst I may have been able to collect facts and statistics showing the application of educational theory to educational practice, this would not be in line with my epistemological perspective. I take an interpretivist view (understanding the world through my interaction with others) and position myself as a post-positivist, therefore the validity of my results becomes a question of hermeneutics as I interpret and translate my findings according to my position. Upon reflection it became clear that adopting an objective observational perspective would not suit my research paradigm and would not allow for the participant perspectives that I sought. By recognising that those involved in my study were not subjects but were participants with an active role in creating the truth of my study it became clear that semi-structured interviews were a more suitable data gathering tool as they allowed for a more discursive approach where responses could be developed in the to and fro of discussion.

When discussing their relationship with 'theory' there are a number of other factors that could have affected the participants, including the following:

- Participants' subject areas may have affected their choice of theory
- ITT students gain insight and develop as a result of reflection (Bayles, 1966; Cook-Sather & Youens, 2007) but may not be aware of this development
- Some ITT students may have been resistant to change or may not have felt that they needed to develop and this may have affected the quality of their output
- Some ITT students may not have felt that my input was valuable and this may show in their output

- Even if the participants were all able to apply theory in the same manner they were unlikely to analyse and describe their thoughts and experiences using the same approach
- It is difficult to gauge the impact of educational theory as each practitioner, each curriculum area, and each educational organisation is likely to have their own working practice which may hinder study (Shaw, 1981)
- Other 'wider' factors were also at play, including how social, religious and embedded cultural values may affect the theory-practice interface (Anderson et al, 2000; Koutselini & Persianis, 2000)

The points listed above were considered in relation to the situation of individual participants and the mode of questioning during interview adapted as necessary. These points were also addressed in relation to the conceptual framework for my research and three hypotheses (H1, H2 & H3). This meant that my situatedness as teacher-researcher supported my analysis of the data and that, before I reviewed and coded the data in relation to my three hypotheses, I was able to consider the personal quality of the data which helped me refine my analysis.

Design

Mortimore (2000:12) proposes that:

The first major task of research is to conceptualise, observe and systematically record events and processes to do with learning. The second task is to analyse such observations in order to describe accurately their conditions, contexts and implications.

In regard to Mortimore's suggestion I have taken his 'first major task' and split this to create two initial stages in my research: Participant Recruitment and Data Collection. I have then used his 'second task' and developed this into the

third stage of my research, Data Analysis, so that my research follows a three stage plan:

Participant Recruitment > Data Collection > Data Analysis

Participant recruitment:

In April 2007 I handed out a document and verbally explained my research to all members of the PGCE/Cert Ed (PCET) cohort. I highlighted ethical concerns, asked for volunteers, and gave them full assurance of their right to anonymity and their right to withdraw later (see Appendix B). During an initial meeting with the group four members expressed concern about their Task 3 assignments being published or being added to my work as an appendix.

Although this concern was not held by the entire group it was agreed that it would be best if I only published short extracts from their work. At this stage it was agreed that I could analyse the whole of their Task 3 assignment and report on my findings but that I would only include a maximum of 100 words from each participant's work. I felt that it would be useful for my research to include one example of a Task 3 assignment in its entirety and it was agreed that I could select one at random from the 17 participants who were happy for their work to be included in this way. It was also agreed that I would not identify this participant to the rest of the group but that I would contact them separately. This seemed like a happy compromise; I redrafted the participant guidance sheet (see Appendix C) and all then gave full permission.

The participants involved in the study taught in a range of subjects at an FE college and some taught off-site in specialist provision. The participants were all members of the same PGCE/Cert Ed (PCET) class and were at the end of

their studies. All 21 members of the group gave permission for their Task 3 assignments to be used as part of this research and 12 members also agreed to take part in tape-recorded individual interviews and focus groups. In the end one participant (known as B) did not submit his written assignment to the exam board but did take part in an individual interview and a focus group. After the interviews and focus groups all participants were given relevant copies of the transcripts, were asked to check if they were fair and honest records of what was said, and all issued permission for their use.

My research is primarily a qualitative study and is triangulated using three aspects of data collection:

1. The collection of 20 written assignments produced by the participants as part of their PGCE/Cert Ed (PCET). These assignments were produced in order to meet the assessment criteria for Task 3 of a portfolio of professional practice. Task 3 asks that candidates provide 'an account of a theory of learning that you have found to be particularly useful for your professional context. You must also give an account of how this theory has informed your choice of teaching/learning and assessment activities' (Bloor, 2006:vi).
2. I ran 12 short taped individual semi-structured interviews where participants were questioned on their 'typical' teaching practice; the factors that influence their practice, and what they felt might be the role of educational theory in relation to their practice. As the data collected in Task 3 focused on learning theory I deliberately 'opened' up the concept of theory during interviews and

referred to 'educational theory' as well as 'teaching theory' and 'learning theory'.

3. The participants from the interviews were then split into two taped focus groups of six as a means to develop the ideas raised in the individual interviews. Again, these focus groups were semi-structured in an effort to allow participants to take the lead and extend their discussions. My role during this phase was to keep the discussion relevant and to try to encourage everyone to participate.

Figure 8 gives an overview showing which participants took part in each aspect of data collection:

Participant	Task 3	Interview	Focus Group
A	✓	✓	✓
B		✓	✓
C	✓	✓	✓
D	✓	✓	✓
E	✓	✓	✓
F	✓	✓	✓
G	✓	✓	✓
H	✓	✓	✓
J	✓	✓	✓
K	✓	✓	✓
L	✓	✓	✓
M	✓	✓	✓
N	✓		
O	✓		
P	✓		
Q	✓		
R	✓		
S	✓		
T	✓		
U	✓		
V	✓		

(the letter 'I' was not used as a pseudonym to avoid confusion in written English)

Figure 8, Overview showing areas of participation

In planning this study I felt that it would be feasible as it involved no participant effort beyond June 2007 when I would have collected all the primary data. I gained written consent from all members of the group and consider that our student-teacher relationship made the enquiry feel more natural.

Data collection:

Individual interviews and focus groups were run in June 2007. They were recorded using a dictaphone and later transcribed.

The interviews and focus groups were structured around four points:

1. The format of participants' 'typical' lessons
2. The constructs that influence participants' planning decisions
3. Participants' thoughts regarding the influence of theory on practice
4. Participants' thoughts regarding the role of theory

I decided upon a semi-structured approach as this was in line with my epistemology and I felt it would be likely to create an atmosphere in which participants could feel free to develop their points. I also felt that semi-structured interviews would not seem too unlike tutorials that we had held during the course. To aid triangulation I created interview questions that were based on criteria drawn from the PGCE/Cert Ed (PCET) Task 3. This meant that all participants were asked versions of the same questions and that all participants were likely to be able to offer a response. The individual interviews lasted from 8 to 10 minutes dependent upon the length of responses. The focus groups each ran for around 20 minutes. During

interviews and focus groups some prompts and probes were used but I tried to limit my input and let participants take the lead as much as possible.

Constas (1998) suggests that the methodology of education research has moved away from the scientific to a paradigm that embraces the socio-cultural perspectives of participants and researchers, I decided to use the socio-cultural understanding that already existed to my advantage and allow it to help relax participants during interviews so that they might feel more inclined to offer full and honest answers. Since my research looks at the impact of theory on practice from the participant perspective then interviewing the practitioners in an open, frank and comfortable situation seemed like a valid (perhaps vital) form of data collection.

Semi-structured interviews and focus groups offer a methodology that is rigorous and grounded in theory but they also allow for adaptability and flexibility (Litoselliti, 2003) so using semi-structured interviews allowed individuals to develop points and offer opinions away from the gaze of others and focus groups would offer a middle ground (Morgan & Krueger, 1997) between one-to-one interviews and the assessment of Task 3, and would create non-threatening situations that would allow participants to share ideas and feelings (Krueger, 1994). Semi-structured tutorials and group discussions were common teaching tools on the PGCE/Cert Ed (PCET) course and using a similar format as a data gathering tool hopefully allowed for a more natural and full response. I also decided not to use rigidly structured interviewing techniques as these have sometimes been criticised for ignoring the 'situatedness' of such activities (Hitchcock & Hughes, 1995) that I wished to embrace.

The running order of individual interviews was decided by drawing names and the participant drawn for the first interview is known in the research as 'A' and subsequent interview participants given subsequent alphabetical descriptors. There are advantages and disadvantages to using interviews and focus groups as a research tool as shown in Figure 9 but overall the interviews yielded some very rich data.

Advantages	Disadvantages
Flexible and adaptable	Researcher needs to be skilled to make use of flexibility
Lines of enquiry can be modified	Lack of standardisation
Non-verbal cues can help	Biases are difficult to rule out
Short cut to finding out information	Time consuming
Can provide rich and highly illuminating material	Require careful preparation and transcription

Figure 9, Advantages and disadvantages of interviews (Robson, 2002:272-273)

I decided to record the interview and focus group data using a dictaphone so that I could make best use of my time. These tapes were then transcribed verbatim and a copy sent to the participants so that they could check the details. All participants in interviews and focus groups were given a copy of the transcribed data in August 2007 and all then issued permission for its use. The limited 'bureaucratic burden' (BERA, 2004: section 19) meant that there was almost no risk of participants opting out of the study after this point. I also collected a copy of the written assignments (Task 3) on the assignment hand-in date (8th June 2007) but decided not to analyse them until after they had been moderated at the University of Greenwich on 26th June 2007 so that the gaining of the qualification was given prime concern.

Although some participants held a degree and were studying towards a PGCE (PCET) and some did not and were studying for the Cert Ed (PCET) they were all part of the same teaching group and there was no difference as to how they were taught (or how they were interviewed). Neither should experience impact upon answers as this study is not directly linked to teaching practice but to participants' thoughts about educational theory. The participants were given full information at all times regarding this study and there was no 'hidden' activity or agenda. It is likely that, during my teaching, I influenced the PGCE/Cert Ed (PCET) class as all teachers try to influence their students. My pedagogical perspective is likely to have impacted upon the students and my own biases as a teacher may be evident in some of the data collected; however, this influence is the outcome of my teaching and not my research and should not be seen as invalidating the research data as this influence would be present whether or not the group were researched (by any researcher and by any method). I would also hope that my experience as a lecturer in teacher training and my experience as a teacher supported my credibility as the teacher-researcher of this group.

Data analysis:

My analysis of the Task 3 data focuses on the theories of learning the participants selected; if their work is mainly about the theorist or the theory; how each participant suggests they relate to their chosen theory, and if they discuss the theory in a prescriptive or descriptive manner. The data is then assessed using the three hypotheses and the findings reviewed and summarised (see Fig. 10 for an example of the summary table). As well as

looking for trends in the written assignments, I triangulated the written data with the individual interviews and focus groups to see if trends continue or if the written assignments are predominately written to meet assessment criteria. Taking part in interviews and handing a copy of their work to me did not interfere with the participants' study or my marking.

	<i>Theory selected</i>	<i>Does participant focus on theory (Y) or theorist (T)?</i>	<i>Do they discuss theory in a prescriptive (P) or descriptive (D) manner</i>	<i>Does participant's task support any of the hypotheses?</i>
X	Learning styles	Y	P	H1
Y	Kolb	Y	D	H1H2
Z	Maslow	T	unclear	H3

Figure 10, Example of how Task 3 data is summarised

Analysis of the individual interview and focus group data uses thematic template analysis whereby the transcribed data is broken down into coded sections in an effort to identify key terms, features and patterns. The codes that are applied to the transcriptions were developed during pilots (see chapter 6) where I employed two coding techniques in an effort to find an appropriate and effective data coding system. The pilots produced two useful thematic templates: the 'Aspect' template which is used to examine how participants discuss their practice, and the 'Domain' template which is used to analyse the spheres of practice that participants discuss.

My aim in developing and applying the templates was to ensure that I was reporting and analysing what participants said rather than applying an objective/outside interpretation. Since the final codes for the data analysis were drawn from participant data and from examining the key points of the

research question the final analysis is rooted in participants' understanding rather than imposed upon it.

In analysing the interview and focus group data I applied the 'Aspect' and 'Domain' templates and then coded the data to show where there was support for any of the three hypotheses (the 'Hypotheses' template). Although these templates were used to code the data and instances of coded data were then counted this was only done as a guide to organising the reoccurring themes. In this regard the quantitative is subservient to the qualitative, as the number of instances that are coded is merely a headline or flag, guiding the eye to a certain cluster of information, and it is the participant responses (and the meanings that may lie behind them) that is the real focus. There may be some tension in the data analysis as, no matter how I might fight against it, there will always be some interpretation of data by me; however, in adopting an interpretivist paradigm the relationship between the data and the researcher becomes part of the creation of the 'truth' of the research.

Feasibility

Epistemological and methodological framework

Since my position is one that holds 'truth' to be a construction based on interaction, I did not believe there to be a fixed and constant answer to my study I only hoped to find out what these particular participants perceived to be the link between theory and practice. I was not seeking universal answers that could be generalised but I was searching for individual answers that were specific and that could help create the thick description of this particular

research context. In adopting this position I allowed myself to use any means of data collection I saw fit by recognising that all approaches can be subjective (Howe, 1985). In reviewing how participants interpreted 'theory' this study takes a hermeneutic approach – and interprets these results in a 'social' manner, looking at how interrelationships are part of the human condition. Each participant may have 'read' a theory from their own perspective and it is likely that I only 'read' the results from my perspective - in doing this, my approach to this study was interpretivist.

To undertake investigations of the social and educational world from a quantitative perspective appears to be different from doing so from an interpretive perspective. Each approach sponsors different epistemological implications. One approach takes a subject-object position on the relationship to subject matter; the other takes a subject-subject position.

Smith (1983:12)

Feasibility and risks

This study was designed to be feasible and to cause very little impact upon the participants. The data collection was designed so that the interviews and focus groups were all held in one afternoon when the ITT students were already working in an ICT suite. This meant that they only had to give up a small amount of their time to take part. There was a risk that participants might disclose unexpected or sensitive information during interviews and focus groups and there is a chance that participants may be recognised by their comments. To reduce this risk the transcribed data was reviewed by individual participants and then I examined it for any problematic elements.

There is the possibility that in self-selecting the 12 participants who took part in the interviews and focus groups may be 'politically conscious actors' (Alvesson, 2003b:170) who felt an urge to support my research and offer their opinion, however it is individual opinion rather than a broad abstraction that this study is most interested in.

The written assignments (Task 3) were handed in on the 8th June in line with the course requirements so, in taking a copy of this work, I did not require any further participant effort. This approach also meant that there was almost no risk of participants opting out as the interviews were all done in a tight timeframe and were not repeated.

Bleek (1979) suggests that problems of bias are more likely when there is a great difference between the researcher and the researched. In embracing my dual role as teacher-researcher, and using our previous working dynamic, I felt that there was a reduction in any possible asymmetrical relationship between the researcher and the researched. As this study was to gauge participant perspectives on theory it was not the job of the researcher to decide if the range of practices described were consistent with any theory nor did I rely on benchmarks.

It could be argued that, although the PGCE/Cert Ed (PCET) course discussed educational theory, there were no real means of supporting ITT students to implement this theory. The ITT students were left to their own devices when it came to 'trying out' new/different approaches; something that is typical of the practice of FE colleges (Elliott, 1996). There was also the chance that they might 'implement' a theory without consciously meaning to and they would not be able to report this during interview. Bruner (1966) suggests that we should

give our students 'the experience of what it is to use a theoretical model' (p.96) however I feel that in this case, the fact that the ITT students were not supported to 'use' theory does not affect my study as this lack of support applied to all the students. There is an argument to be made regarding the value of a course teaching theory without the means to support students to make use of it but it is not the task of my research to assess curriculum design or student support. In this regard any lack of support was fairly distributed and should not affect the research.

Ethical considerations

At the start of the project ethical approval was sought from the University of Birmingham. This took the form of an EC2 Ethical Approval form which was approved by my supervisor and by the University's Ethics Committee (see Appendix A), as part of this agreement I read and agreed to comply with the British Educational Research Association document 'Ethical Guidelines for Educational Research' (BERA, 2004). I also contacted the University of Greenwich, who were the awarding body for the PGCE/Cert Ed (PCET), regarding the ethics of collecting this data and the Head of School gave me written permission to do so (see Appendix A).

My main ethical concern was that of informed consent and I worked to make sure that participants were fully aware of the structure and focus of my research. Letters explaining my research were given out to all prospective participants (see Appendices B and C) and, as discussed earlier, I held a short meeting to respond to any initial questions. I also made sure that

participants were aware of their right to withdraw and I sent them copies of transcripts so that they could verify their responses and give me permission to use the data. I feel that far from having any negative impact on the participants there is a greater likelihood that involvement in this research may have helped focus their development as teachers as it may have added a marker suggesting that I (their teacher) valued their input. Participation may have also worked as a focused reflective tool (Schön, 1992) helping participants examine assumptions behind their practice (Smeyers & Burbules, 2006).

I was the lecturer and marking tutor on this course – therefore it was important during the teaching of the PGCE/Cert Ed (PCET) course that I clearly separated myself into my two roles (teacher and researcher) so as not to prejudice the likelihood of participants gaining the qualification. To this end I performed my normal teaching/tutoring role until the PGCE/Cert Ed (PCET) class had been taught and it was not until the end of the academic year that I ran the interviews and collected the data. I recognise my role within the research and that ‘research is not simply a matter of representing, reflecting or reporting the world but of “creating” it through representation’ (Usher, 1996:35) and have addressed this through my earlier discussion on reflexivity.

There is always a question about the validity of findings where participants know in advance that their responses will be used for research and I have tried to overcome this, as much as possible, through the semi-structured nature of the interviews and through a relatively informal style of questioning. I also assured participants that it was their opinions that I was most interested in; that the data would be confidential, and that they would not be identified.

To further protect the participants, each was allotted a unique identifier so that they are only referred to by a code letter (A – V). The participant names and any documents that offer identification were kept in locked storage or in password protected computer files. During data transcription and analysis I was vigilant in assessing whether the participants showed any signs of being at risk – no such concerns were found. There were two brief discussions during the focus groups where participants mentioned the management of the organisation. Neither of these discussions was particularly inflammatory and no individuals were mentioned. Later all the participants involved gave permission for these episodes to be used and to be published; however I felt that it was safest not to code these passages as I did not feel ethically comfortable doing so. The passages are included in the appended transcripts but do not form part of my analysis.

The participants in this study were all adult FE lecturers. No vulnerable adults or children were involved at any stage of my study. The participants involved in this study are professionals and I have investigated the extent of stakeholder concern. The guidance I have received from the University of Greenwich explains that all the participants are responsible for their own study and progression. Students study for this qualification in their own time and participation did not affect their working practice so no employer ‘time’ is lost. There was no element of deception in this study and participants were fully informed and any questions were answered as best I could. No employer input was sought and employers were not entitled to ‘updates’ about participants beyond those already tied up with PGCE/Cert Ed (PCET) study;

however, I informed participants that they were free to share whatever information they liked regarding their involvement in my study.

There are always some risks involved in research but I hope I have addressed most of these. Some might try to dismiss such a study as lacking a quantifiable answer as there is still a great deal of respect for facts and figures about education (Suppes, 1974) and it may be difficult for researchers to ‘use’ my findings as they are likely to offer rather soft foundations (Larabee, 1998) to build upon but as this study is to gauge the participant perspective of theory the ‘answers’ produced do not pretend to be a ‘grand theory’ but instead a ‘meaningful conclusion’ that offers a valid insight into the area under study.

Timetable

Overall thesis schedule		
1	Design and ethical consideration	January – April 2007
2	Participant recruitment	April – June 2007
3	Collection of written data	June 2007
4	Interviews	June 2007
5	Focus groups	June 2007
6	Transcription of interviews and focus groups	August 2007
7	Data coding pilots	July 2008
8	Analysis of individual interviews	December 2008
9	Analysis of focus groups	June 2009
10	Analysis of Task 3 data	September 2009
11	Writing up (thesis)	January 2010-
12	Publication of results (thesis)	Autumn 2010

Figure 11, Thesis schedule

Chapter summary

In this chapter I have reviewed the key components of my methodology and discussed how my research methods were developed. I have considered the research context and how the 'space' of my research gives the data specific meaning. I have reviewed the genesis of my research and how it was developed from my consideration of a PGCE/Cert Ed (PCET) assignment. This chapter has also explained the major stages in my research design: from participant recruitment through to data collection and data analysis. There were three aspects of data collection: 20 written assignments; 12 individual interviews, and two focus groups, and this chapter has reviewed how data was collected in an ethical and responsible way – specifically through the process of informed consent. Once again I have taken a reflexive approach and reflected upon my ability to collect data, my biases, my influence and my role as teacher-researcher and have proposed that I have not worked to counter these but have taken a position that embraces this situation for what it is. In pulling together my earlier discussion on context, 'truth', 'theory' and meaning-making I have been able to construct a methodology that offers rigour whilst embracing my epistemological framework. This chapter has considered the process and ethics of my research; it has addressed feasibility and risks, and it has set out the research schedule. In order to analyse the data produced through this process I felt that it was important to have a means to analyse qualitative data, the next chapter discusses how two data coding methods were piloted in order to create coding systems that would lead to such analysis.

Chapter 6: Data Coding Pilots

This chapter is structured as follows:

- There is initial discussion on extricating and interpreting data
- Two data coding methods are introduced
- A pilot study using open coding is reviewed
- A pilot study using template coding is reviewed
- I discuss issues with the methodologies of open and template coding
- I analyse the processes involved in the two pilots
- I report the findings from the data coding pilots
- A chapter summary is given and links with the next chapter shown

Extricating data

Morgan & Krueger (1997:59) note that 'although analysis and reporting are the final stages in the research process, they are by no means left until the end of the project' and it was with this in mind that I decided to run two data analysis pilots to create coding systems for all the transcribed data. I wanted to find a system that would allow me to extricate and interpret the data in a reliable and useful way.

Analysis, at whatever stage, is necessary because, generally speaking, data in their raw form do not speak for themselves. The messages stay hidden and need careful teasing out. The process and products of analysis provide the bases for interpretation.

Robson (2002:387)

This chapter discusses how two methods of data coding– open coding and template coding – were piloted. The pilot methods were applied to the two focus group transcriptions and here I analyse and evaluate the two methods and discuss how utilising appropriate aspects of both led to my eventual data coding scheme. For the purpose of these pilots I decided that using the

transcripts from the focus groups would allow for a pragmatic, clearly defined and purposeful evaluation of two methods of data analysis. Watts & Ebbutt (1987) suggest that focus groups are 'useful [...] where a group of people have been working together for some time or common purpose' (p.32) which was the case with the participants in my study and this also meant that the make-up of the focus groups were somewhat similar and the two methods of data analysis were suited to side-by-side comparison. Marshall & Rossman (1999) describe data analysis as, 'a messy, ambiguous, time-consuming, creative, and fascinating process' (p.150) and my experience supports this.

Data coding methods

As the three areas of data that triangulate my research are textual I decided that content analysis would be the most likely analytical tool. I was drawn to this type of analysis as, if successful, it would later allow me to critically review the findings in all three areas of data; offering a consistent method. Cohen, Manion & Morrison (2007) discuss content analysis as a means of coding, categorising, comparing and drawing conclusions from text. Krippendorff (2004:18) suggests that content analysis is 'a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use' and, since I was interested in the relationship between my research data and the participants' specific circumstances, I felt that content analysis would offer an approach that was likely to draw legitimate inferences between the transcribed data and the participants' contexts.

Content analysis is dependent on creating labels (codes) that can be applied to data in order to develop data into meaningful categories to be analysed and

interpreted. Stemler (2001) discusses two approaches to the coding of data: *emergent* coding where codes are drawn from the text and *a priori* coding where codes are created beforehand and applied to the text. In piloting two data coding techniques I was able to examine the benefits and drawbacks of emergent and *a priori* coding and consider which was best suited to my study.

I conducted these pilots from a perspective in which epistemology is based on the interplay of researcher and participant (Bettis & Gregson, 2001), or in this case - the interplay of researcher and written data. Adopting such a perspective did not mean that there was only one clear 'best' coding method from the outset as there are numerous qualitative approaches, each with their own standards and measures (Fetterman, 1988) but that it was important for me to be open to data coding methods and use these pilots as a means of discovery. By positioning myself within this study I choose to embrace the subjectivity of my research, therefore the choice of my research methods is likely to be influenced by my values (Greenbank, 2003) and the two analytical methods piloted are also likely to be value-influenced.

Since my position does not hold with the idea of there being a fixed truth in the data awaiting discovery, I also recognise that any coding is likely to be a subjective and interpretive process. Adopting this paradigm means that reducing qualitative data to quantitative answers is unlikely to yield definitive results as each review of data is subject to different interplays of meaning.

The play between data coding and an interpretivist paradigm is always likely to cause tension and this will be discussed throughout. Although the use of coding systems has, in the end, led to areas of quantitative summary these are used to highlight the *significance* of the data and as tools for generating

further discussion rather than 'answers' in themselves. In this regard coding and counting data becomes a pragmatic developmental stage in my analysis of meaning.

The two selected types of data coding were piloted in an effort to evaluate which system would best suit my epistemological and ontological framework; would form an effective analytical tool, and would most likely guide my interpretation of the data towards legitimate 'answers'. The first data coding system that was piloted involved 'open coding': an emergent coding technique drawn from Grounded Theory (Glaser & Strauss, 1967; Strauss & Corbin, 1998). The second pilot used 'template coding': an *a priori* coding system drawn from Template Analysis (Crabtree & Miller, 1992; King, 1998). I applied open coding to Focus Group 1 (FG1) (see Appendices F and G) and template coding to Focus Group 2 (FG2) (see Appendices I, J and K). During the coding of FG1 I found that there were two sections in which the participants 'wandered off'; the comments in these sections (shown in grey) were not coded as they consisted of comments made about other classes and comments on future developments. In both cases the comments had potential to offend and I felt it would be unethical to explore these remarks (although all participants had given permission for their use).

After both FG1 and FG2 were coded and analysed, the results suggest that a template method drawn from the categories that emerged during open coding would best suit my research paradigm. The coding of FG1 and FG2 involved three passes of the text in order to classify the data in as much detail as possible; however, in coding any data it is likely that some things will not fall neatly inside a code and some areas of both transcripts were left uncoded.

This does not mean that such off-topic data is unimportant - only that it has not been classified, and for this reason the analysis of the transcripts of the individual interviews (in chapter 8) and the analysis of the focus group transcripts (in chapter 9) start with a thorough overview of the transcripts as a whole so that no data are left unexamined.

Open coding (FG1)

Open coding is the first stage in the process of creating grounded theory (Strauss & Corbin, 1998). Grounded theory is a system whereby the analysis of text allows the researcher to *find* the answers within; theory is developed from the data rather than imposed upon it. In grounded theory the answers come from repeatedly coding, reviewing and refining the coding process.

Strauss & Corbin suggest three stages to the process:

1. Open Coding
2. Axial Coding
3. Selective Coding

Open coding involves applying codes that are derived from the text (emergent codes). There is some debate regarding how this might be done: Glazer (1978; 1992) suggests that this should be done line by line; Corbin & Strauss (1990) encourage researchers to code 'conceptually similar events/ actions/ interactions' (p.12), and Stalp & Grant (2001) offer a linked framework that guides the first-time open-coder in how to recognise inductive concepts.

Glazer (1978) also proposes constant comparisons of data and categories whilst Corbin & Strauss (1990) suggest three ways to code and that 'the research *process* itself guides the researcher' (p.6). But these angels-on-the-

head-of-pins debates are more suited to those firmly affixed within this field and for my purposes I decided that I would code concepts rather than lines of data. I decided against coding lines of data as this seemed rather arbitrary in that the amount of data on each line would be dependent on the size font used and the length of the line rather than the quality of the data.

The codes that are applied during open coding are not *a priori* codes and the researcher should not try to impose their own codes. This emergent approach causes some conflict with my epistemological perspective as I find myself adopting a reflexive approach to my research. My role in this study is two-fold: I had been the participants' teacher for the two years of their PGCE/Cert Ed (PCET) study and am at some level 'responsible' for their understanding and application of educational theory; therefore, as the researcher it did not seem appropriate to try to withdraw this position and adopt an objective, positivistic paradigm. This made it very difficult to code the data in a detached manner, as I could hear the 'voices' and supposed myself able to understand what participants were 'getting at' when they offered a response. It could be thought that such presumptions are unscientific (Pepper, 1923) but it is also important to consider the importance of structures of awareness (reflection) that allow us to interpret what we find (Marton, 1993).

As well as considering intra-rater reliability, I also considered the possibility of having a second researcher code the data as a means of addressing subjectivity. In the end I rejected this idea for two reasons: firstly, the second person would not have the same understanding of the participants that I felt I had. (Since this study recognises my role as teacher-researcher, hearing the 'voices' and presuming that I understand what participants mean becomes

central to my interpretation.) In this regard my location within the research context and within the analysis of it allows for a more authentic interpretation of the data. My second reason for not using a second coder was that, within an interpretivist paradigm, I could see no clear evidence for strong inter-rater reliability:

Qualitative research involves an inescapable element of subjectivity, and different readers can reasonably disagree. The main issue is that each coder's interpretation must be transparent (understandable) to other coders.

Auerbach & Silverstein (2003:50)

Crittenden & Hill (1971) researched 99 template coders looking at the same data and found that 'inter-coder reliability and coding validity [were] alarmingly low' (p.1079) but, as the sole researcher, I was able to offer a level of consistency in my approach during each coding pass. I also feel that my coding methods (in both FG1 and FG2) are validated by my self-conscious approach (Kennedy, 1984) and by Kvale (1994)'s suggestion that, 'validity pertains to whether a method *investigates* what it purports to investigate' (pp.166-7) – in this regard I can claim my methods to be valid as I have set out clearly what I have done and, throughout, I have focused my methods on assessing whether either coding system will produce analyses that are in keeping with my epistemological framework.

Another issue when applying open coding is that the process implies that there is an actual truth out there awaiting discovery and that by coding and recoding I should be able to find this truth – an argument that is at odds with my interpretivist paradigm that holds the truth to be a social interactional construct. We should also consider whether any coding system can really be

'open' as we are all independently positioned subjects who are likely to start any activity from a certain viewpoint; whether we call this 'individual perspective', 'practitioner insight', 'experience', 'common sense', 'institutional guidance' or even 'theory'.

The second and third phase in discovering grounded theory involve axial and selective coding. During axial coding 'categories are related to their subcategories to form more precise and complete explanations' (Strauss & Corbin, 1998:24) and during selective coding 'categories are organised around a central explanatory concept' (p.161) until an 'analytic gestalt' (p144) allows the theory to emerge. Of course the word 'theory' becomes rather problematic here as my self-orientation leads to a position where 'theory' is an over-used and under-thought term and Strauss & Corbin's use of it seems rather blasé. Instead, I considered that the use of codes would allow the participant inferences to emerge.

As well as the tensions between the quantitiveness of axial coding and my own epistemological framework there appears to be some tension within Strauss & Corbin's position as they move from the logical, systematical and mathematical relation and intersection of data to the sudden insight of discovery. The move from axial to selective coding appears to be a move from the mathematical to the magical. However, since my methodology is somewhat immersive, in that I am positioned within all aspects of the research process, I feel that making such an intuitive leap is possible as it is 'grounded' by my insider knowledge. Whilst 'the text of the written study is [...] considerably removed' from reality (Holliday, 2002:100) the text of my study is brought closer to the reality of its situation through the constant variable of

reflexivity, in this way the *analysis* and the *object under study* are connected. Of course, embracing this position, means that I should also be aware of assumptive bias on my behalf and, in that regard, I can only hope to make my methods as transparent as possible; share my epistemological and ontological assumptions, and allow the reader to assess the credibility of my research. From working with the PGCE/Cert Ed (PCET) group I am not just an objective researcher reviewing data but a subjective teacher-researcher trying to get to the heart of what his student-participants are trying to share. An example of this ‘insider’ perspective can be seen in Figure 12 where I coded participant D’s comment as “UN” (understanding underpinning issues/theory) despite its fragmented nature. In this example, I felt able to code D’s response in this way as I was present during the focus group and therefore aware of subtleties of expression and manner that helped give meaning to these remarks. I had also got to know participant D quite well and have a ‘reading’ of his meaning that I can apply through this historical relationship.

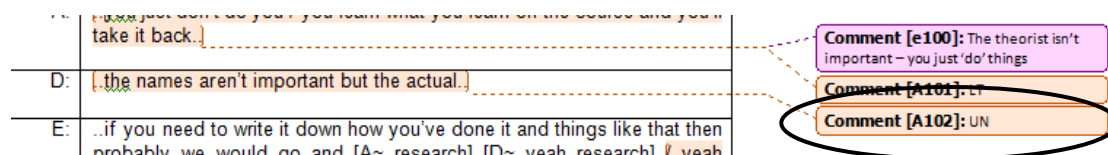


Figure 12, Example of coded transcript

Cheek (1996) argues that qualitative research is textually mediated by the author and personally mediated by the reader and in this instance, as author and reader/researcher, I found it impossible and ultimately reductive not to apply my reflexivity to the coding process. That is: I was there, I transcribed the focus group data and now I have coded and analysed it – it is quite clear

that much of this is mediated by me and I would argue that this can only help develop an authentic account of my participants' perspectives.

In the end, this pilot led to the development of ten codes that were drawn and refined from the transcript of FG1:

CODE	Definition
NA	Learning new approaches
LC	Learning from colleagues
CF	(gaining) confidence
SP	(gaining) specific skills
UN	Understanding underpinning issues/theories
RE	Importance of reflection
EX	(gaining) experience
LT	Learning from ITT teachers
CP	Changed perspective during year
EM	Learning through empathy

Figure 13, Codes found during open coding (see Appendix H for more detail)

Template coding (FG2)

The second analytical tool that I decided to pilot was 'template coding' (King, 1994). The actual process is not dissimilar to that of grounded theory but there are two key details that set it apart. Firstly the codes used are defined by the researcher, which involves using *a priori* codes drawn from research, reading or theory and identifying these codes in the data. It could also be that the researcher 'finds' the codes in the data but accepts that their own epistemology may have affected their interpretation of the data. That is, these codes are either defined beforehand or researcher-interpreted from the text. The second area where template coding differs is in its philosophical perspective. Template coding, in recognising the interpretive nature of the

researcher, moves away from the positivism of open coding, suggesting that some researchers are 'sceptical of the existence of "real" internal states which can be discovered through empirical research, and may therefore feel that template coding is more conducive to their position' (King, 1998:119). In this regard template coding seemed more in-line with my own epistemology and ontology and offered me an analytical method that would allow the data to speak *through* me rather than *at* me.

Template coding also meant that my values and experiences as teacher-researcher could be used (Wilson, 1997) in my analysis of FG2; that my reflexivity during transcription would be addressed (Roberts, 1997), and that the analysis would embrace my position within the study and my personal 'code of conduct' (Watts & Ebbutt, 1987:33). Chinn & Brewer (2001) suggest that when people analyse data they 'construct a cognitive model of the data according to the perspective of the person who is reporting the data' (p.337) – they call this the models-of-data theory and it helps explain how my reflexivity supports my evaluation of the data. Since I am 'involved' in the data collection, transcription, reporting and analysis this has an effect upon the 'answer' that I then find. Dilley (2000) suggests that researchers should practice being self-reflexive and use their 'one voice' (p.154) to analyse interviews – therefore, I felt that template coding would allow me to be honest in my approach and state that I was present throughout this study and I would be discussing things from my perspective. This does not mean that the method adopted is any less valid than others as 'verification is built into the research process with continual checks of the credibility, plausibility and trustworthiness of the findings' (Kvale, 1994:168). Here I claim validity of

method - not by offering a faultless technique but through constant self-scrutiny, reflexivity and the analysis of any conclusions I draw.

The key problem I discovered with template analysis was in deciding which template to use. How would I know which was the most relevant template and how would I know which might produce the results I was seeking? In an effort to answer this I returned to my research problem and interpreted the codes that it offered:

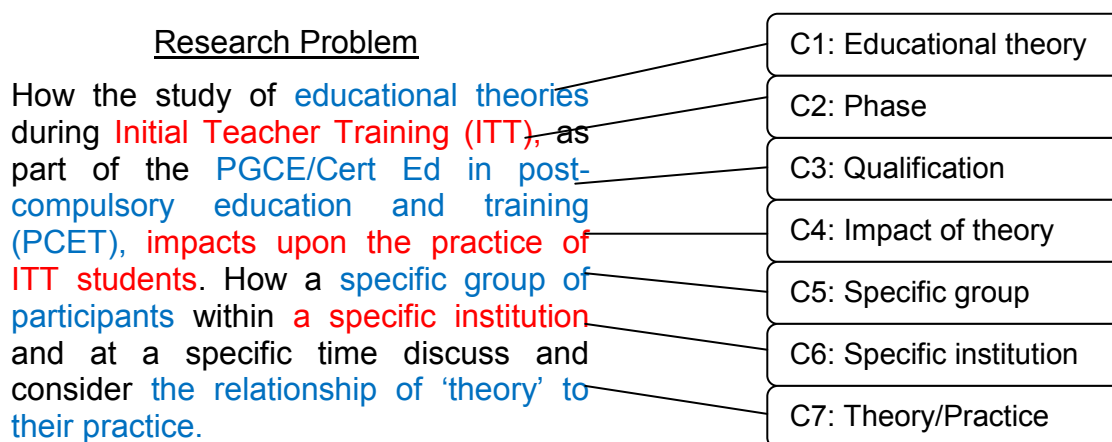


Figure 14, Interpreting the research problem

The term 'theory' appears in C1, C4 and C7 so I felt that a template developed from 'educational theory' would seem appropriate. I decided that C2 and C3 would not be useful codes as the ITT phase and the qualification the candidates were studying for are the things that pull all the participants together and form umbrellas that cover my whole research project, which meant that these codes may be applicable to almost everything thus limiting their ability to highlight specifics. Code C5 was also rejected as this is true of all research participant groups and the specifics of this are already addressed in my research discussion on generalisability. As template coding allows for reflexivity I also reflected upon these codes and considered what I was

looking for (rather than what the coding was telling me). As I was interested in finding out about the space where the participants work and study and about their perspectives on the application of theory to practice I decided to use templates that would code for the *context* of the study (C6) and for the *theoretical underpinnings* (C1, C2 & C7). As my intention is to tell the story of my participants I felt that template coding could offer specific terms that would give the data a voice.

I decided to code the study using three templates. The first template I selected used Foucault (1986)'s six descriptors of a heterotopia. I felt this template would highlight issues regarding the *context* of the study as I have previously argued that an FE college is an 'other space' with its own conventions and processes. I felt that this template would help unpack C2, C3, C5 and C6 and called this template 'Foucault'.

I also decided to code the data using two templates that might focus on relevant *theoretical underpinnings* (addressing C1, C4 and C7). I found that creating these 'theory' templates was rather troublesome. I was most at ease with the 'Foucault' template as I felt that this would offer a way to code data regarding the place under study and highlight the unique nature and unique principles of an FE college but creating templates linked to theory needed much more consideration: in assessing template coding against open coding I was looking for templates that would link to the concept of 'theory' but were specifically *not* drawn from the participants. Since the codes developed through open coding were drawn from the participants (bottom-up) I was looking for templates that would test for my perspective and offer top-down analysis. (At this stage I was hoping to see what was more effective: top-down

or bottom-up analysis but, as will be evident later, this was a little naive). In an effort to find two 'theory' templates I decided to review the content of the PGCE/Cert Ed (PCET) course. I did this by looking at the 2006/7 Scheme of Work (see Appendix D). This document shows an outline teaching schedule that the class followed and also highlights, week by week, key theorists that underpin each lesson. From the Scheme of Work I identified 18 theoretical positions and worked through these to find those that would fit best with my reflexive interpretation (King, 1994). Since I was looking for the perceived relationship between the study of theory during ITT and the participants' practice, I felt that returning to the Scheme of Work would allow me to establish a possible link from one to another. The 18 theoretical positions in the PGCE/Cert Ed (PCET) Scheme of Work came from Maslow, Honey & Mumford, Bloom, Tomlinson, Renzulli, Secada, Osborne, Ausubel, Bruner, Atkinson & Shiffrin, Festinger, Bandura, Schön, Kolb, Fleming & Mills, Spencer, Skinner and Fitts & Posner.

In developing a researcher-imposed template I felt that it was important for me to 'value' the theorists from which I would develop the 'theory' templates. This meant that I was looking for positions that I felt were persuasive and plausible and that had been defined, discussed and developed within the PGCE/Cert Ed (PCET) course. It also meant that I felt these sources would be useful to this specific piece of research and could offer a framework that would be useful for analysis. From this premise I was able to highlight Bloom and Kolb to be apt candidates. Once again, I was able to substantiate this personally as I knew that, in the teaching of these theoretical positions there had been great debate and discussion on the different domains that Bloom and his colleagues

had identified and on the four stages of the Kolb cycle. This is another example of how my reflexivity helped to develop the process of data coding and analysis and how my subjectivity and my dual role (teacher-researcher) meant that I could make decisions that objective-outsiders could not.

Therefore, the first ‘theory’ template was drawn from the work of Benjamin Bloom and his colleagues (Bloom et al, 1956; Krathwohl et al, 1964) and from others who had based their work upon this, and the second ‘theory’ template came from the four aspects of the Kolb experiential learning cycle (Kolb, 1984). As a short-hand I called these templates ‘Domain’ and ‘Kolb’.

The three templates:

CODE	Definition
P1	crisis or deviance
P2	function is affected over time
P3	juxtaposing spaces
P4	linked to slices of time
P5	closed systems
P6	relationship with the wider society

Figure 15, ‘Foucault’ template (see Appendix I for an example of application)

CODE	Definition
COG	relating to cognitive domain
AFF	relating to affective domain
PSY	relating to psychomotor ² domain
CON	relating to conative ³ domain

Figure 16, ‘Domain’ template (see Appendix J for an example of application)

² Bloom and his colleagues did not pursue this domain, their ideas were developed by others (see Harrow, 1972; Dave, 1975)

³ This ‘domain’ was not developed by Bloom or his colleagues but later by others (see Kolbe, 1990; Snow et al, 1996)

CODE	Definition
T	creating a theory
R	reflecting on experience
E	having an experience
A	applying theory

Figure 17, 'Kolb' template (see Appendix K for an example of application)

Methodology

The focus groups had taken place in June 2007, had been tape recorded and I had transcribed the data verbatim. There were two focus groups (FG1 and FG2) and I decided to code both focus groups manually using highlighter pens as opposed to using computer software such as NVivo which is a data coding and data organising tool with the capacity to handle large quantities of data (Gibbs, 2001). Once the transcripts had been coded I then redrafted the material using standard word processing software (Microsoft Word). I decided to manually code the data rather than use data coding software for a number of reasons: firstly there were pragmatic issues to consider, such as the time it would take for me to become proficient in using coding software (Fielding & Lee, 1998). Secondly 'leading programs were developed on the back of a specific approach – coding according to grounded theory' (Flick, 2006:353) which might mean that my analysis of open and template coding could be affected by bias. My third reason for rejecting computer coding software was that Basit (2003) had found that using this approach might be more suited to those who wished to ultimately quantify their data, therefore this approach did not match with my objective as I wished to use this quantification as a stepping stone to a more qualitative analysis. Finally, I rejected using computer software for reasons of personal preference – I felt more at ease

with highlighter pens and paper spread out over my desk and floor. This was the way that I had always worked; using this method gave a tangible quality to my research; I began to know exactly which sheet held which comment, and I felt this approach gave me an overview (cognitively and literally) of the data and allowed for connections to be made.

Open coding

FG1 was selected for open coding based on the toss of a coin. In an effort to 'focus on the meaning' (Charmaz, 2000:510) that the data contained I tried not to have any pre-determined terms, groups or codes (for this reason I also coded FG1 before FG2 so that it would not be influenced by existing templates). The open coding methodology was drawn from Miles & Huberman (1994) and led to the creation of 10 codes (see Appendix H). In keeping with the principles of open coding I did not define the number or the method of each stage beforehand but recorded what emerged as the process developed:

1. In a first pass of the data I coded instances rather than lines of data as I could not be sure that something would necessarily emerge on each line. 51 different concepts emerged and were coded based on the meanings they evoked (see Appendix F).
2. Upon review the 51 concepts were divided into 16 categories.
3. I then took a break for two days. This was important as I wanted to clear my head of the concepts behind the categories and limit any preconceptions I may have had.
4. In a second pass I applied the 16 categories to the FG1 transcript (see Appendix G).
5. Upon reflection five categories were removed as they were replicated in some of the other categories. One further category was removed as it only really applied to one specific instance. This left 10 coding categories.

Template coding

The template coding methodology involved three passes of the data, using the 'Foucault', 'Domain' and 'Kolb' templates (see discussion above). I decided on having three passes as Marshall & Rossman (1999) suggest that qualitative researchers can become 'intimate' with the data through, 'reading, reading and reading' (p.153). Each pass happened independently so as to limit the bias from previous passes. The order that the templates were applied did not seem important as they would come together later in a meta-template (see Fig. 18). I decided that in the three passes I would code for concepts rather than line-by-line as this is in keeping with the open coding method and would allow for side-by-side analysis with FG1 coding.

1. Firstly I coded a blank (uncoded) FG2 transcript using the 'Foucault' template (Appendix I).
2. A second blank FG2 transcript was then coded using the 'Domain' template (Appendix J).
3. A third blank FG2 transcript was then coded using the 'Kolb' template (Appendix K).
4. The three templates were then combined so that all the codes were layered (Appendix L). I hoped that by combining the templates I would be able to look through the three codes and use them as layers of contextuality that would accentuate the richness of the data.

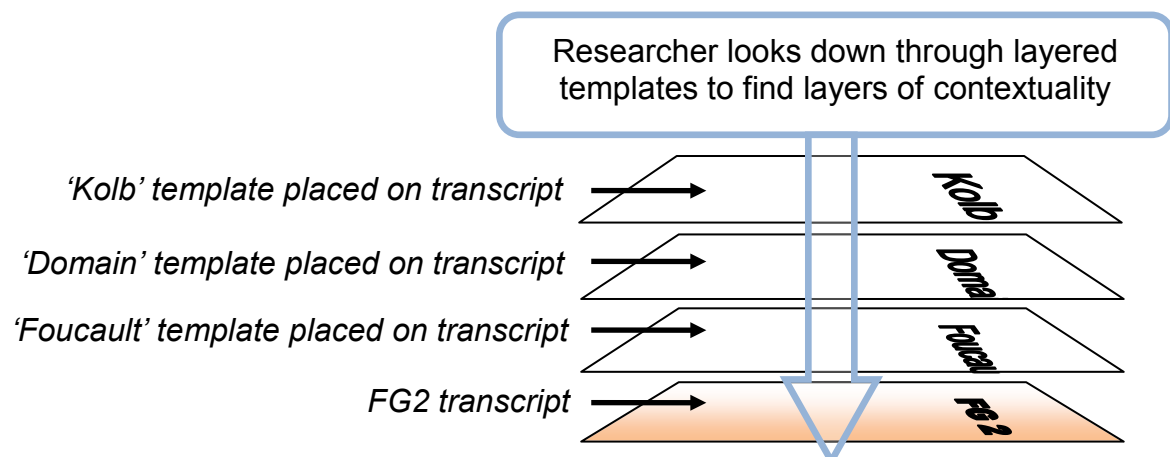


Figure 18, Layering templates on transcripts

Analysis

As predicted I felt my epistemological framework was at odds with the open coding pilot. I constantly had to force myself not to pre-label responses and not to assume I knew anything beforehand. This was rather 'fake' as the transcription process meant that I had previously spent hours listening to the tape recording of FG1. However as the second phase (applying the categories to the transcript) progressed I did find it useful as a means of analysing which responses appeared most often in various forms. I attempted some axial coding but became frustrated as participants' subjective realities started to turn into numbers and grids and the movement from qualitative to quantitative data seemed to lose some of the essence of participants' comments. Shaffer & Serlin (2004) suggest that qualitative data can 'shed light' on quantitative data but this seems to a somewhat subservient role. Strauss & Corbin (1998) suggest that through open coding the answer will emerge from the data, sadly I did not have an 'analytical gestalt' during FG1 analysis (but grounded theorists would probably suggest that I should just keep looking until the theory comes forth, which is a bit like a teacher saying that you should 'try harder' without actually telling you how to do so). In total FG1 was coded 81 times – a number that is not significant in itself but does point to 81 areas where subsequent qualitative analysis would be likely to explicate participants' subjective understandings.

I had presumed that I would prefer the template coding approach as it would give my data a language with which to speak but I often felt constrained by its pre-definedness. Applying the templates sometimes felt like using a tool that was not specifically designed for this purpose. I had assumed that the

templates would filter the data but there was a chance that they filtered out some key information. By choosing templates I was creating a system whereby some data was bound to be highlighted and some ignored – this seems at odds with my rather egalitarian (Labaree, 1998) research position. Having a template meant that I was specifically searching for things that might not be there and was faced with numerous decisions about whether a concept met the template definitions. If a statement did not form a match with any of the templates I was left with two choices: to leave the data uncoded or to shoehorn it in to a code that it didn't quite fit!

Although FG2 was coded 91 times, there were only 14 instances when a piece of data was coded using two of the templates and only five instances where the same piece of data was coded using all three templates. Analysis of Appendix L shows that, whilst many areas of the transcript are coded the templates tended to highlight large chunks of data rather than specific key information. The templates used did not produce the thick description that I hope they would, instead they highlighted broad areas of data and offered general analysis. Therefore, looking down through the three superimposed templates did not produce any substantive answers.

Findings

These two pilot studies attempted to discover a reliable and useful way of coding the transcribed data. I have discussed the factors that were at play throughout these pilots and their relationship with my epistemological and ontological assumptions. The purpose of these pilots was not to analyse the

data but to establish appropriate templates that could be used to guide me towards key areas of data. The open codes were able to highlight specific items/instances (possible because they were developed from the focus group and therefore more likely to relate to its analysis) and the template codes tended to highlight large areas of data. In the end my analysis of the pilots has led me to conclude that open coding is not suitable for qualitative researchers who adopt an interpretivist paradigm and that template coding is very dependent upon the selection of the 'correct' template.

The open coding system did not lead to a "*Eureka*" moment but the ten coded aspects that were developed through it are clearly participant-based and, since I hoped to seek their perspective on the relationship of theory to their practice, these codes seemed likely to be useful tools. I feel sure that the codes drawn from open coding are unlikely to be completely unbiased, and I have already suggested how my reflexivity might enhance the research project, but they are clear, relevant and useful. Not all the methods of grounded theory are suitable for my research but the first stage, open coding, has produced a template that is useful for highlighting aspects of practice that are discussed by participants. As a short-hand I have called this the 'Aspect' template.

The application of the 'Foucault' and 'Kolb' templates to FG2 did not produce any really useful 'answers', and I suggest this is through a mis-match between template and data; however, the application of the 'Domain' template was quite useful. The 'Domain' template highlighted something that seemed in need of further investigation: of the 46 times that it was applied, 21 of these were related to discussion on cognition; 11 were related to the psychomotor

domain; seven to the affective domain, and seven to the conative domain.

This slight bias towards cognition seemed worthy of further exploration.

I had originally set out to evaluate two data coding tools and find which of the two was appropriate for my research. The open coding system helped develop a bottom-up template that reflects key concepts that were found in the participant data. The template coding system involved a more top-down classification of the data using concepts drawn from my consideration of what was important. In the end there was no 'best' method - instead I decided that a combined approach using the 'Aspect' template from FG1 alongside the 'Domain' template from FG2 would be likely to produce more thorough analysis. Using this combined approach also means that confirmatory bias is reduced as the bottom-up and top-down templates speak to, and counter one another – leaving results that are neither wholly mine nor wholly objective.

The result of these pilots was the development of two templates: 'Aspect' and 'Domain' that, when used in conjunction with my three hypotheses, hope to draw out valuable areas for analysis in the subsequent chapters.

Chapter summary

Since all three areas of my research data involved written text, I decided that content analysis would be the most appropriate analytical tool. Content analysis is dependent on labelling data and this chapter has examined two piloted methods of data coding (open coding and template coding) in an effort to examine which method would be better able to classify my data in a reliable way. This chapter has focussed on how effective the two methods were in

coding the focus group data; how these coding methods relate to particular research paradigms, and how my own interpretivist paradigm has influenced my choices when applying and analysing the data coding methods. I have also explained that, in this study, quantitative information produced by data coding is used as a guide to the answer rather than as an answer in itself and that it is the discussion developed from data coding that is my real interest. In piloting these two methods I encountered a number of issues - some of which were paradigmatic and some of which were pragmatic. I felt that applying open coding in the way described in the Grounded Theory literature was too defined and forced me to try and adopt an artificial objectivity and I found that template analysis was rather reliant on my ability to identify the relevant template. In the end, my application and review of the pilots led to the development of two templates ('Aspect' and 'Domain') that were then used, alongside the three hypotheses, to code the individual interview and focus group data. The next chapter is the first of three analyses of the research data and examines the 20 written assignments in relation to my hypotheses.

Chapter 7: Analysis of Task 3

This chapter is structured as follows:

- There is discussion on the background to gathering participants' written assignments and some issues in using this data
- I present the data and analyse each participant's response
- The individual analyses are pulled together to form an overview of responses
- I present a final analysis and conclusion of the Task 3 data
- A chapter summary is given showing links with the next chapter

Background

There were 20 participants involved in this aspect of data collection. The participants consisted of the all the members of the PGCE/Cert Ed (PCET) group who handed in a Task 3 assignment as part of their final portfolio of work. Only one member of the group (B) failed to hand in the portfolio for assessment. Although B took part in the interviews and focus group discussions he withdrew from the course before the final submission for personal reasons.

The task asked members of the group to give 'an account of a theory of learning that you have found to be particularly useful for your professional context' (Bloor, 2006:vi) and expressed that candidates focus on assessing how the theory had 'informed' their practice. There are clearly some issues in using this data in my research. Firstly the question asked was rather leading and made the assumption that theory informs practice. Shulman (1998:517) suggests that 'in nearly every form of professional education, students perceive the practicum experiences as truly valuable, while barely tolerating

the academic experiences' and much of the data here supports this position; however, students were not offered an alternative title and were therefore required to write from a particular perspective. Secondly, based on this assumption, participants were always likely to write reports that met the assignment brief rather than give full and honest opinions. The third issue here is that this data was not produced for my study but in order to meet the assignment brief; therefore it was always unlikely that it would produce the authentic 'truth' of my research problem. In this regard the Task 3 data was used as a starting point for my analysis and further review was later focused on the individual interviews and focus groups where I could set an agenda that was less leading and more specific to my area of investigation.

Another area of concern pertains to my using data that was not originally produced for publication or research analysis. In a meeting held at the start of my research some members of the PGCE/Cert Ed (PCET) group remarked that, whilst they were comfortable with me using this task for my research, they were not happy for large sections of text to be published. At that stage we agreed that I would not use more than 100 words from each assignment. The exception to this is with the work of participant P: whose Task 3 appears in Appendix E. From those participants who did not mind if I used their work in full I drew a name from a hat to find an assignment that I could include as an example, I then double-checked with P that I could do so (see Appendix C) and P's assignment is shown as a verification of my data analysis methods. The other extracts below are not supported in full in any appendices. The participants were also sent emails showing the passages I wished to use and all gave permission for me to do so.

The passages used below were selected as being broadly representative of each participant's work. I have not reviewed the merits or worth of the various theories that are mentioned as it was never my intention to do so; I have only analysed how the participants consider these theories. In analysing the data I have used template analysis by applying my three hypotheses. I have not applied the 'Aspect' or 'Domain' templates as the tasks were not produced as a result of my research project and therefore applying these templates might lead to mis-match and possible mis-analysis. As well as applying the 'Hypotheses' template I asked two further questions of each assignment:

- Does the participant focus on the theory or the theorist?
- Do they discuss theory in a prescriptive or descriptive manner?

I asked this first question as the names of theorists are often used as a shorthand for their theories and I wanted to see if this distracted participants into reviewing one rather than the other. In the end this did not produce any data that I found to be useful and only participant Q focused on the theorist for long passages in her work. I used this second question to triangulate with questions asked during individual interviews and focus groups and hoped to find out how (despite the leading nature of the assignment) participants reported 'using' theory.

There are potential concerns with this data, and two important areas for consideration are the terms 'theory' and 'reflection'. I have already discussed problems with the construct 'theory' and these are evident in the data, but, in asking participants to review the influence of theory on their practice the construct 'reflection' is worth further review. Although Biggs (2001) sees

reflection as a means of improving the quality of teaching through quality assurance measures, Marcos, Miguel & Tillema (2009) report that reflection often tends towards a justification of past and present practice. Moon (2000) discusses the process of reflection as leading to the building of theory and, in my analysis, I shall show how this may have occurred. The data here supports both these positions with some evidence of the task allowing participants to consider how they might work to improve the teaching and learning experience and some evidence of this reflective exercise leading to pedagogical entrenchment.

Presentation of data

Below I discuss and analyse the participants' Task 3 assignments. The data is presented alphabetically showing excerpts from participants A through to U. The extracts were selected as being relevant and broadly representative of each participant's full assignment. The extracts are discussed individually and then an overview of responses is shown in Figure 19. This chapter then closes by analysing the data using the three hypotheses.

Participant A

I guess it's now in reflection that I can see how my style of teaching and learning is applied without actually thinking about what I'm doing.

Pretty much all of what we teach in public services is centred round the 'hands-on' approach and dynamically addresses all three phases to learning but in a rather different context.

Fitts and Posner's model to learning appears realistic, practical and 'hits the nail on the head' for our method of delivery.

In this excerpt we can see participant A discussing how Fitts & Posner's theory describes what he is already doing in his practice. Participant A makes reference to how his subject area and his own style of teaching have created a particular pedagogy but that it is only later that he found a theory that reflects such an approach. Two words in the first sentence work to create an image of (initially) unexamined practice: the use of the word 'reflection' and the use of the word 'thinking' both come after the practical. Schön (1987) might suggest that, although A seems untheorized in his practice, he will be making practitioner judgements based on reflection-in-action and by doing so has helped construct his own methodology; however during a focus group discussion A categorically rejects this notion (see chapter 9). Participant A's Task 3 work discusses 'theory' as coming after practice but does not go so far as to say that it has nothing to do with practice (perhaps because of the nature of the task). In this regard participant A's assignment supports H1H2.

Participant C

I believe that reading the works of Spencer among others has made a difference to my teaching, understanding the theories behind what we do, has been informative and interesting. I use both inductive and deductive styles and method in my teaching and find myself switching between the two as the need arises.

I believe that the educationalists have much to teach us but, in conclusion I discovered that the theories put forward by the theorists were not so much a reflection of what we should do, but often an observation of what we actually do.

Participant C's comments seem slightly out of synch. Whilst reporting that theory has made a difference to his practice and highlighting what can be

gained from theory, C also regards theory to be an observation of what is already happening. This account suggests that C is happy to consider and to accept elements of theory (possibly elements of *any* theory) that he feels will be beneficial to his practice but that, in the end, theories are likely to have come from practice. Here it would seem that theory is developed from practice and then fed back into it. This response then regards theory to be a description of practice that can be reviewed and improved upon through further practice and reflection upon it. For C theory is a development from, and a description of, practice; therefore his work supports H1H2.

Participant D

Phil Race has a mission 'to help students learn more effectively, with increased efficiency and greater enjoyment'. (Race 27th November 2006). When writing training manuals he explains using 'plain English' and hates jargon and this is one reason I feel he relates to my way of teaching and is relevant to my professional context.

Although I agree in the main with Race's theory of learning I do believe that three extra circles should be added to the pond ripples.

Participant D's selection of Phil Race is quite interesting as many would not regard him to be a 'theorist' in the way that many others, discussed in Task 3, are regarded. The participants were not restricted in their choice of theory/theorist and in selecting Race participant D helps highlight what 'theory' might mean to her. She does not privilege the 'big' names of theory but finds comfort in a practice-led approach. Race is reported as 'writing training manuals' which we might imagine as being rather prescriptive and authoritative but D takes Race's work and adapts it to create a theory that she

feel better suits her practice. Participants D's work support H2 as she reports how theory has evolved from practice and might then attempt to advise practice but, in the end, the application of theory is guided by the practitioner who makes appropriate judgements regarding how theory might be adapted for specific contexts.

Participant E

Instinctively I have been using some part of his theory in my professional context

Ausubel's own research suggested that the use of organizers can enhance the relationship between cognitive structure and new material, thus facilitate teaching and learning. And I totally support with Ausubel's research and agree that most students would respond favorably to the use of structured learning process rather than being challenged.

Participant E's use of the word 'instinctively' is interesting as it suggests a natural or innate methodology. In choosing this word, E makes it clear that her practice is not based around conceptual theoretical principles but is drawn from what she *feels* is the right approach. This instinct may have been conditioned through experience but if she did not explicitly know about a theory we must assume that abstract theory does not lead her practice and therefore reject H3. In discussing Ausubel's work, E reduces 'theory' to the simplistic concept of structured learning - building one thing upon another - which she feels is only suitable for most students. This seems like an attempt to satisfy the assignment brief by offering a compromise role that theory might play but this is not enough to suggest that E truly supports an adapted concept of theory. For this reason E's work mainly supports H1.

Participant F

The five levels of the affective domain of feeling emotion and attitude I feel ties in well with my specialist area, of teaching and assessing.

In discussing the affective domain, participant F is making reference to the work initiated by Benjamin Bloom and his colleagues and by suggesting that this domain 'ties in well' with her teaching, F removes any possibility of theory having a guiding role. In this instance theory and practice are combined to produce a practitioner pedagogy that is suited to a specific subject area. F's assignment mainly focuses on her teaching role and offers little insight into the theory-practice relationship. This extract is rather brief and it was quite difficult to find clear evidence in her work of theory being adopted, adapted or rejected. The task spoke of theory and practice under two separate headings and the discussion on the links between the two offered no clear examples to clarify F's opinions. It is unclear if this work supports any of the hypotheses – although by not directly discussing how theory impacts upon practice we might infer that F does not see theory as having an essential role.

Participant G

Learning theories are very important to me teaching in the Beauty Therapy programme as we use many different styles of teaching. We have practical, theory, information from text books and explanations from the tutor. By identifying each learner's style I am able to teach more effectively.

...part of [Kolb's] learning process is too detailed and complex when teaching on the level one and two Beauty Therapy programmes. I only use the initial outer cycle, Feeling, Watching, Thinking and Doing.

The first part of this extract conflates teaching and learning and suggests that G found it difficult to separate the two. This is also evident in the third sentence where learning styles are reported to influence teaching practice but there is no discussion as to how this might happen or why knowing about learning styles might affect teaching practice. If G lacks some precision in her language and does not draw distinctions between teaching and learning then how can she define the influence of theory on her practice? In the second part of this extract G is honest in admitting that the complexity of part of the Kolb cycle means that she does not use it – a clear case of theory being adapted to suit specific practice. It is also interesting that G suggests the complexity of this theory is not suitable for learners at a certain level. Here we see the theory that there are different discernable learning styles being accepted without critique and an adaptation of other areas of theory: for this reason, this assignment supports H2H3.

Participant H

...we use a learning styles questionnaire by Honey and Mumford to determine our learner's preferred learning style.

These questionnaires tell us how a learner prefers to gain, store and process information given. The idea is that people learn in different ways.

While researching for this assignment I have discovered that when teaching beauty therapy, the course structure involves a variety of different teaching methods which enable us to cater for all learning styles.

Using such a variety of teaching methods enables our courses to suit all learning styles.

H (like G) accepts without discussion the notion of learners having preferred learning styles and she allows this to guide her practice. Without further detail and without critical examination of learning and teaching styles she is left suggesting that people learn in a variety of ways and that people teach in a variety of ways – points that hardly need ‘theory’ to support them. In this case, we can see the notion of ‘theory’ being used to give credence to a broad concept and Thomas (2007) might argue that ‘theory’ here is used to add weight to such a proposition. Whilst H initially reports changing her teaching methods to suit various learning styles we can see in the third section that this is actually done through her planned curriculum and that ‘the course structure involves a variety of different teaching methods’. In this example ‘theory’ has not directly affected H’s practice but has indirectly affected it through curriculum guidance: a proposal that supports H2H3.

Participant J

Fitts and Posners` theory has influenced my teaching strategy and I use key aspects of it in my role as a Bricklaying tutor.

It is clear that different theorists have highlighted different aspects of learning psychology, building on knowledge previously gained. I feel that the subject matter and possibly the level of the group will determine to an extent which theory is best utilised. This may be a mixture of some or all. My own subject matter is practical in nature and therefore I believe Fitts and Posners` theory is well suited to this.

Participant J reports being ‘influenced’ by ‘aspects’ of Fitts & Posner’s skill acquisition theory but this is not to say that theory has offered absolute guidance, rather it is to suggest that J has selected aspects of the theory that

he feels are appropriate to his subject area. This is a subject-specific discussion that is developed in the second passage where the importance of subject matter and the level of the learner determine how theory is used. For J, theory needs to fit the specific area of practice and, even then, can be modified by the practitioner. Interestingly, J finishes this extract by suggesting that the practical nature of his subject needs a theory that offers him what Pring might call a 'common-sense language' (2005:176). In this instance, theory is selected and adapted by practitioners if they consider it to be rooted in their subject area; therefore this work supports H2.

Participant K

...it has helped me to be more affective in my teaching...

...it could also be argued that the post 16 learners that I teach are stuck in a rut and lack motivation because their lower needs are not being met. However, the fact that the majority of learners regularly attend the course means they must have some motivation and adequate commitment in order to do so. This view may conflict with Maslow's model.

The Maslow model may not be suitable for all. However, I feel that this model plays a big part when developing my learners confidence and self-esteem.

Participant K discusses Maslow's hierarchy of human needs and this extract starts with what might be a spelling mistake but, in the end, is an interesting remark. K says that reviewing Maslow's work helped her to be more 'affective' – if this is true then the theory has not had a direct unmediated impact upon her practice but, in considering Maslow's work, K has become emotionally influenced. In this case the influence of theory is upon the practitioner rather their practice. Later, whilst suggesting that the model is suitable, K starts to

pick holes in it and reports views that 'may conflict with Maslow's model'. K also reports that the model is not universal but that it 'plays a big part'. K seems to recognise something in this model that is suitable for her area of practice but does not find it wholly useful, instead she personally mediates the theory to form a practitioner adapted position that supports H2.

Participant L

... [I decided to] discuss the value of P.M. Fitts' theory of Skill Acquisition (1964) due to the recognition of how this theory plays a part in my current tutoring skills development within my organisation's learning environment.

Standing alone Fitts' does not fulfil all requirements (being heavily weighted towards deductive learning), although transferring well into producing skilled practitioners who can continue to improve their competences this theory has to be complimented by broader models such as Bloom's Taxonomy.

The extract from participant L opens by explaining how he selected a theory that fits his area of practice and fits with his organisation's learning environment. L is quite clear in discussing how the theory he selected for this assignment is not able to work by itself as an organising principle but that it needs to be 'complimented' by other theories and it would seem that, for L, the curriculum and culture of an institution determine how a theory can be used. For L, skill acquisition theory only 'plays a part' and needs to be supplemented by other theories. Theory does not take a leading role nor is it ignored – it is assessed for areas of usefulness. Participant L had free rein as to which theory he discussed therefore, if he has selected what he felt was the most appropriate theory, we can speculate that he considers other theories to be less useful. In reporting that practice and organisational culture come first

and that theory is adapted to suit these aspects participant L's work supports H2.

Participant M

I do not believe that a theorist can tell me how to teach, for me it is a natural instinct, but I believe reading these theories has helped me to understand how it has affected the learner and strengthened my teaching.

The opening section from participant M's assignment is rather bold and links with similar strong remarks made by participant A. Taking such a stance is quite difficult considering that this work was to be assessed against the initial question which can only suggest that, if M is not willing to overplay the significance of theory in this assignment, she cannot consider theory to be fundamental to practice. M regards teaching as coming from an intrinsic quality although she does concede that reading theories has helped her hone her practice. Here we see how reflection upon theory can help develop the skills of practice. In this instance we see practice-led development with theory used to strengthen 'natural' instincts, a position that supports H2.

Participant N

In conclusion, I have researched a theory that I think works well alongside my students which reflects the way they may learn. It also indicates to me how I can assist my learners through their course in a positive manner, by providing the correct environment, and by delivering the course in a way that caters to the individual. Through my research I feel my teaching practice has been affected by this theory. It has highlighted to me that a student needs to feel confident in all areas of their learning.

Participant N discusses theory in relation to her learners. She takes a rather student-centred approach: finding a theory that hopes to support her learners then applying this to highlight how she can be more 'positive' in her practice. Ball (1995) might argue that, without this theory, N may never have been able to adapt her teaching methods or develop her personal philosophy but this adaptation is only possible if we start with practice. The use of the words 'affected' and 'highlighted' in the closing section suggest that theory is not the driver of development but that N uses reflection on theory as a tool for extending her ability to 'deliver the course in a way that caters to the individual'. In this regard, N's work supports H2.

Participant O

The Atkinson-Shiffrin model strongly supports my teaching style with my learners.

I think that this theory supported by the Atkinson-Shiffrin Model will strongly influence my teaching/ learning activities and assessments.

I have applied the theory to promote learning in my teaching environment. I think it is an excellent model as it effectively links the influencing cognitions of the mind to the process of learning, which I feel I can use within my teaching practice.

For participant O, theory supports her teaching and, in making this claim, she relegates 'theory' to a secondary role. Despite her use of the word 'strongly' she places theory in a position of support not leadership. There is some quite interesting discussion in this passage as O moves between reporting that theory 'will' influence her to declaring that 'I have applied the theory' then closes by saying that she feels she 'can' use theory. The inconsistency in the

verb tense suggests that there is some doubt whether O has actually applied this theory to her practice or not. She may be writing about theory in this way to meet the requirements of the tasks without ever believing in what she is saying. If this is the case then we can certainly consider O's practice not to be theory-led but that she regards theory afterwards (possibly when pushed to do so). For this reason I suggest this assignment supports H1H2.

Participant P

By amalgamating theories such as gestalt, cognitive and behaviourist, it is possible to cater for the diversity of learners. However, it could be argued that the gestalt theory is best placed in the planning and delivery of lessons, as it requires definite progression and building upon of intelligence; something that should be innate in all areas of educational courses.

This extract from P's work starts by embracing H2 as she discusses 'amalgamating theories'. P's assignment is not about the rejection of theory nor is it about the value of the orthodoxy of theory but focuses on how she can select the best approach for her learners. It is also interesting that P chooses to discuss the notion of sudden insight (gestalt) as a planning tool. Here we find the suggestion that insight can be planned for and that practice can be formulated along certain lines so that learners are given the opportunity to have epiphanies. In this extract P suggests that some aspects of theory, and some theories, can provide means of prescribing practice however it is the role of the practitioner to decide if, and when, to employ theory. Here, P's work supports H2.

Participant Q

Thorndike's theory of "the law of effect and exercise" relates to my personal style of learning and teaching. Self learning, repetition and positive recognition are beneficial to my own knowledge gain and, most importantly, the retention of any newly discovered knowledge.

...the principals he applied to his theory of effect and response can be recognised in today's teaching and learning.

In the passage drawn from Q's work we can see how behaviourism 'relates' to Q's style of teaching and learning. In this example Q reports that self learning and repetition aid her knowledge acquisition and that this is why she has decided to discuss Thorndike's theory. This is quite an interesting position as she removes the behavioural aspect from this behaviourist theory and leaves us with a theory that is reduced to a memory aid tool. In this example Q has selected a theory that she feels is relevant to her own learning and then, from this, suggests that it can be applied to 'today's teaching and learning'. Initially it would seem that this extract supports H3 but this is not a straightforward case of theory guiding practice - Q's assignment shows how she personalises the theory and considers it in regards to her own learning before she applies parts of it that work for her. In this case, 'theory' is adapted and guided by the individual; therefore the work supports H2.

Participant R

...most of what I teach them is all new information and the skills that they learn are often taught from scratch. This is why I have chosen to look at Fitts and Posner's theory, the phases of learning, as they believe that people move through specific phases as they learn.

...I always try to remember that learners achieve at different rates and by looking closely at this theory, it has made me more aware of this...

I agree with Fitts and Posner's theory but am aware that it is not so for every single learner.

R selected a theory that is broken down in a step by step manner and reports that she selected this because it fits the way that she teaches and the way she believes her students learn. Here R's personal theory means that she rejected other theories that might have offered new insights or new methodologies in favour of one that allowed her to continue teaching in way that she has always done. Because of her personal pedagogy R selected a theory that seems useful and applicable; however, she recognises that the theory is not suitable for all learners. In this example we see theory being selected as it supports a personal position not because it offers anything new. For this reason I feel R's work supports H1H2.

Participant S

At first I found this assignment fairly difficult as I could not decide what theorist to use. Once I had read up on Fitts & Posner, I felt much more positive as this fitted perfectly within my subject area.

I also feel that a lot of their suggestions like the three stage skills acquisition of cognitive, associative and autonomous is spot on in the way in which I teach.

The first part of participant S's work shows how she considered a range of theories (and theorists) before selecting one that 'fitted' her subject area. In this case it would seem that the practice came first and there is no evidence of any underpinning theories that have guided it thus far. S does not mention

how theory has 'influenced' her practice but reduces Fitts & Posner's work to 'suggestions' that describe the way she currently teaches. This is a clear case of selecting a theory that described what is already happening. It could be argued that S's current practice is guided by theories that she is unaware of but there is no evidence to support this in her work. For this reason I feel her Task 3 data supports H1.

Participant T

I believe there is a place for Bruner's discovery learning in a post 16 mathematics class. However, activities must be carefully planned and inductive support needs to be in place for students who struggle to understand a concept.

The extract from participant T's Task 3 assignment shows the practically biased perspective that is evident in many of the other participants' assignments. T does not accept wholesale importation of Bruner's work on discovery learning, rather she feels that 'there is a place' for it in the PCET sector. For T, the appropriate learning activities and support must be in place in order to allow discovery learning to occur and in this regard T sees theory as coming second to the practicalities of teaching. T acknowledges a role for theory but not a leading one. In this short extract we can see a movement from inductive to deductive methodologies, and, by making this point, T questions the orthodoxy of both. For this reason her work supports H2.

Participant U

I believe that in education today the application of theory to teaching and learning practice is trend driven. Since the comprehensive system was introduced in the late 1960's students have been the victims of poorly applied theories of how we learn and should be taught, teachers are required to implement such theories in day to day teaching practice.

Participant U makes an interesting point in her discussion on theory being 'trend driven' and there is some merit in this argument if we look at how certain theories become 'the fashion of the moment' (Pring, 2005:166). If U is right that the application of theory is trend driven then we can assume that theories will come and go; that they are products of their time, and that they will lack universal generalisability. U makes a rather bold (and unsubstantiated) claim about students being 'victims of poorly applied theories' and in doing so shows an aversion to the guiding role of theory. However, her discussion does suppose that theories are applied in a prescriptive manner (as she discusses 'application' and 'implementation') and it is for this reason her work supports H2H3.

Participant V

Does Gestalt theory have any relevance to me in the teaching of graphic design? Yes it does, it runs as a constant theme through my teaching. I have evolved two theories that I find help students to make sense of the complex visual subject that is graphic design.

Participant V's discussion on gestalt is very interesting as we see the notion of gaining sudden insight evolve into two practitioner theories that V creates to

address his students' specific needs. Gestalt itself does not have an influence on his teaching or on the learning of his students but his adaptation of the theory has led to practical outcomes. V makes the case for the role of gestalt theory but feels that we must consider and personalise theory in order to make it useful. Here theory is separate from practice but can be manipulated by the practitioner; therefore, theory does not prescribe or describe as it is transformed into a practitioner-crafted tool. This proposal supports H2.

Overview of responses

In drawing together all 20 Task 3 assignments we can see a broad pattern in the work and a bias towards H2, where theory is considered from the perspective of the practitioner and is then adapted to suit the learning context. The theories that participants selected were probably chosen as they were covered in the PGCE/Cert Ed (PCET) course content – only D selected a theory that was not discussed during the course. The main reason given for selecting a theory was that it was appropriate to participants' subject specialisms, which is unsurprising as they would be unlikely to discuss a theory that they felt was 'other' to their practice. Most participants focused their work on the theory rather than the theorist and, in examining if they did this I did not find any data that seemed significant. Nine participants made arguments for theory describing their practice; six suggested that theory might prescribe practice, and it was not clear what the remaining five considered the role of theory to be. I expected that the assignments where theory was discussed as being prescriptive would also (mainly) support H3 and those who spoke of theory being descriptive to support H1 but this was not the case

as Figure 19 shows. It may be (and I suspect it is) that this discrepancy is a result of the leading nature of the assignment brief. Figure 19 suggests that those who reported that theory was important to their practice often adapted or personalised this theory and that those relegated theory to a secondary role then later used this theory as a reflective tool.

	<i>Theory selected</i>	<i>Does participant focus on theory (Y) or theorist (T)?</i>	<i>Do they discuss theory in a prescriptive (P) or descriptive (D) manner</i>	<i>Does participant's task support any of the hypotheses?</i>
A	Fitts & Posner	Y	D	H1H2
C	Spencer	Y	D	H1H2
D	Phil Race	Y	P	H2
E	Ausubel	Y	D	H1
F	Bloom	Y	unclear	unclear
G	Kolb	Y	P	H2H3
H	Kolb	Y	P	H2H3
J	Fitts & Posner	Y	P	H2
K	Maslow	unclear	unclear	H2
L	Fitts & Posner	Y	D	H2
M	Vygotsky	unclear	D	H2
N	Maslow	Y	P	H2
O	Atkinson & Shiffron	Y	P	H1H2
P	Gestalt	Y	D	H2
Q	Thorndike	T	D	H2
R	Fitts & Posner	Y	D	H1H2
S	Fitts & Posner	Y	D	H1
T	Bruner	Y	unclear	H2
U	Bloom	Y	unclear	H2H3
V	Gestalt	Y	unclear	H2

Figure 19, Overview of Task 3 analysis

The key finding coming from this analysis is that, despite Task 3's rather biased question, participants did not wholly embrace the orthodoxy of theory but tended to reduce the role of theory to a tool for refining existing practice.

Analysis and conclusion

The Task 3 data supports Pring's comment that 'the practitioner must acquire the arts of practice and the art of seeing the relevance of particular theoretical considerations' (2005:177). Participants E, F, N, Q and S make similar points in arguing for the relevance of theories that fit their specific contexts. Tyler (1969) suggests that education can be made effective through practitioners' application of organising principles and that 'for educational experiences to have a cumulative effect, they must be so organised as to reinforce each other' (p.83). We can see some of these principles at play in the data as the participants consider how theory helps structure teaching and learning but, as the participants tend to consider theory after-the-fact, participants mainly use theory as a reflective tool in order to justify or adjust personal practitioner pedagogies (Beck & Kosnik, 2001; Eagleton, 1990). Participants D, G, H, P and V propose similar points but emphasise the importance of adapting aspects of 'theory' to suit their concepts of how their particular subject area should be organised. Here we have two positions that support H2, whereby practitioners are responsible for creating and/or adapting theories based on what they see to be the needs of actual practice.

Participants J and O suggested that theory had influenced their practice but that the subject specific conditions 'determine to an extent which theory is

best utilised' (J). In making such points their claims regarding the ability of theory to prescribe practice are tempered as they offer a view of theory that has 'influenced' and 'supported' rather than directed.

Four participants (K, L, R & T) made comments that tended towards a critique of certain theories for not being appropriate for all the learners in their curriculum area and participant C highlighted this further in reporting that he switched between theoretical approaches 'as the need arises'. Participant U discussed theory as being 'trend-driven' and her assignment supposes a view of theory as being more of the zeitgeist than of intrinsic worth. For these participants 'theory' was merely a term used to illustrate current methodologies or satisfy institutional proclivities. Here we can see a correspondence to Carr's assertion that the 'practical influence of educational theory thus has ... everything to do with the rhetorical role that this mode of discourse is able to play in a particular educational context at a particular historical moment' (2006:152).

Participants A and M discussed teaching as a 'natural instinct': a 'hands on' and 'dynamic' process that is not directly defined by theory. Where M conceded that reading Vygotsky had had a strengthening effect upon her practice we might see this as her adopting a pseudoconcept where studied concepts are reformed through specific experiences (Cook et al, 2002) leaving her with an adapted form of theory that she feels enhances her established pedagogy. Ball (1995) argues that without theory practitioners may find themselves in a self-replicating cycle of doing what they have always done but M's work suggests that it is not the 'theory' that has created a new

methodology but the act of practitioner reflection upon the theory and the creation and refinement of practitioner theory.

Chapter summary

In this chapter I have analysed the 20 written assignments individually and then drawn this information together in order to gain an overview of the responses. The assignments were written as part of the PGCE/Cert Ed (PCET) portfolio where ITT students are asked to give an account of a theory of learning; explaining why they found it useful and how it informed their practice. In analysing this data, this chapter has highlighted the practical bias in participants' responses and has suggested that participants tended to use theories as reflective tools and that this reflection was part of the process of developing personal practitioner pedagogies. Elliott (1998) argues for reflective practice as an epistemology, where reflection can lead to change in practice and (possibly) a change in institutional policy. In analysing the Task 3 data it is clear that the participants were not merely adopting or rejecting 'theory' but were considering its worth to their situation and using this reflection as a means to improve their practice. These findings suggest that there is support for Hypothesis 2 in that 'theory' is reflected upon and refined by practitioners depending upon their subject area and is used to create and refine their practitioner perspective. The next chapter starts the triangulation process by analysing the individual interviews in order to discover if they support these findings.

Chapter 8: Analysis of Individual Interviews

This chapter is set out as follows:

- There is discussion on the participants involved in the individual interviews; the questions asked, and the format of data presentation
- I present and analyse responses to four key questions
- I present and analyse the interview transcripts using the three coding templates
- There is an overview of key terms used during the interviews
- I present a final analysis and conclusion of the individual interview data
- A chapter summary is given showing links with the next chapter

Participation

There were 12 participants (A-M) involved in this area of data collection. As it was my intention to investigate their individual perspectives the semi-structured design allowed for participants to offer answers that were in line with their particular subject specialism and personal experiences and emphasised the importance of 'the interviewee elaborating points of interest' (Denscombe, 2007:176). All 12 participants were asked the four key questions (below) in the same order (although the semi-structured and discursive nature of the interviews meant that the exact wording of these questions varied).

Four key questions

1. *Can you describe the format of your typical lesson?*
2. *What influences your planning decisions?*
3. *Do you think that educational theory influences your practice?*
4. *Do you think that theory describes or prescribes your practice?*

Some participants were asked additional questions and some probes and prompts were used in an effort to 'achieve depth of answer in terms of penetration, exploration and explanation' (Legard, Keegan & Ward, 2003:141). The probes were mainly open questions that suggested to participants that they could elaborate. The prompts involved me specifically mentioning a topic/area that I felt could be discussed. The coded transcripts of these interviews are shown in Appendix N and examples of additional questions, probes and prompts can be found in Appendix M. The data is presented in the following format:

- Firstly the data is analysed question by question looking at the 'First level responses' (what was actually said) and what this might mean. These questions were asked to all participants and allow for an overview of all the participant responses in these core areas. In this section I have only analysed the responses to the four key questions and the probes or probes related to these questions.
- In the second section I have analysed all the data drawn from interviews (including that drawn from any additional questions, probes and prompts). This was done in an effort to look beyond the key questions and explore the 'Second level responses' (coded data suggesting the meaning behind the responses). Three coding templates were applied during this stage – the 'Aspect' template, the 'Domain' template and the 'Hypotheses' template.
- In the third section I have offered a 'Overview of responses' using two quantitative tables that show how often certain 'Key Terms' were used. These terms are words such as 'theory', 'reflection' and 'teach'. This was done as an overview of terms in an effort to illustrate where emphasis was given by participants regarding their discussion on theory and their practice.
- Finally, all the data is drawn together and it is from this that I have drawn my 'Analysis and conclusion' regarding the individual interview data.

First level responses

Question 1:

In their responses to question 1, *Can you describe the format of your typical lesson?*, 11 of the 12 participants described lesson structures that involved a series of phases. F did not discuss phases within a lesson but drew a picture of progression where she had to initially *'teach all the learners about all the equipment and everything that they actually need to know'* suggesting that there would be different phases as the lessons progressed. Participants were not asked if these phases were based on theory and none of the participants volunteered such an opinion. Seven participants (one after prompting) discussed the use of aims and objectives in the initial phase of their lessons but, again, none suggested the source of this technique.

All 12 participants described teacher-led lessons, although M developed this and reported that she tried to have *'about three activities during the lesson'*. K suggested that her lessons involved an approach based around activities to support individuals but in saying that she would *'allow'* for interaction her language betrays more teacher control than she might be willing to confess. Two participants (D & M) were further probed on how they came up with their lesson structures. D replied that it had been taught to them during their studies for PGCE/Cert Ed (PCET): *'from day one I think [course lecturers have] made it really important for us to know how to set up a lesson'*. M commented that this lesson structure offered her a chance to cater for *'all of the learners' different needs'*. Both these responses imply a level of direction: the first one shows a PGCE/Cert Ed (PCET) student applying the practitioner theory passed on from her lecturers and the second one suggests possible links to

differentiation and learning styles but neither explicitly show an orthodox implementation of theory.

Some participants were more straightforward in their discussions on lesson structure and made it clear that the content and format came from the practitioner rather than elsewhere. E used 12 'I' statements during a rather brief answer and also spoke about the need to '*keep them busy*' and G went slightly further and commented that demonstrations were often repeated in a '*monkey see monkey do*' manner.

In all, the participant responses to question 1 suggest that their lessons were organised and teacher-led with some consideration of students' needs. Most spoke of their lesson format as a series of activities and focused on the practicalities of teaching. There were suggested links to concepts such as learning styles and differentiation but no participant made explicit links to any theoretical underpinnings to their lesson structure.

Question 2:

The purpose of the question, *What influences your planning decisions?*, was to allow participants to discuss the influencing factors behind of their lesson plans. Once again I deliberately left out any explicit mention of 'theory' but hoped that the responses would give some clue as to its role. In the end no participants spoke of theory guiding their lesson planning.

Six participants emphasised the importance of employability: making sure their learners were '*commercially viable*' (H); understanding '*the job*' (F); drawing from '*professional experience*' (J); bringing '*realism*' to learning (A); linking to

'the real world' (C), and linking learning *'to where they work'* (M). These responses show participants considering the pragmatic and practical aspects of their lessons and focussing on developing the next generation of beauticians, bricklayers or child carers rather than focussing on less tangible concepts such as theory.

Five participants offered evidence that personal interpretations of the curriculum rather than theoretical guidance were underpinning factors in lesson planning and mentioned the importance of the curriculum and examining bodies in regards to planning. L added to this by highlighting the *'need to be aware of developments'* and the importance of *'the awarding body's objectives'*. After prompting, J developed his initial response that his practice was based on standards set by *'the curriculum'* and explained that the *'influence from my supervisors is not that great'* and that *'they rely on my professional expertise to deliver what needs to be delivered'*.

Two participants (C & D) commented on the influence of their studies for the PGCE/Cert Ed (PCET) on lesson planning. C reflected that *'what I knew about lesson planning was very very sketchy'* and that the PGCE/Cert Ed (PCET) course had offered a *'fairly proven structure'*. D emphasised the influence of comments made during PGCE/Cert Ed (PCET) lesson observations and how they had *'changed totally the way I feel that learners need to get information from me'*. After being prompted regarding the impact of employers and colleagues on her lessons, M also mentioned the guidance given by PGCE/Cert Ed (PCET) lecturing staff and by her colleagues. Participant A responded that the main influence on his planning was his knowledge and, like E, suggested that *'if I feel that I'm kind of lacking some areas I have to go and*

do a bit of research'. The responses given by A and E suggest that the research undertaken was about content rather than format which implies that they were focussing on what they were teaching rather than how they did so. The learners' background and the actual topic being taught were reported as influencing the planning decisions of K and M. F, who responded that *'time'* was the main factor, also mentioned that other important factors were her experience in industry and funding: *'if they don't pass it affects the next year because I don't get the funding'*.

The responses to question 2 show that the main influences on lesson planning were employability, the curriculum, subject knowledge, time and learners' needs. Some participants highlighted how practical guidance had helped them develop their lesson formats and some explained how their studies had been an influence. All participants gave the impression that their planning was about creating logical and realistic formats for passing on information and none of the participants made any mention of theory supporting this.

Question 3:

The third question asked during individual interviews asked participants, *Do you think that educational theory influences your practice?* In their responses to question 2 none of the participants made mention of theory having influenced their planning decisions and the responses to question 3 add further weight to this with 11 participants clearly suggesting that theory did not have a direct influence on their practice but that it tended to describe what they were actually doing. Although many gave responses similar to L's where

he said that theory helped him in *'challenging what I have done in the past'*, we can see that theory, in such an instance, is being used as a reflective tool for honing practice rather than a formulated influence on methodology.

Three participants suggested that theory 'helped' develop their practice. K responded that *'knowing of the theorists and what they thought and how theories came about in the first place does influence my teaching'* however in describing theory as *'really helpful'* she is also implying that no one guiding theoretical principle had offered clear direction on how to teach but that she had adapted aspects of theory that she felt worked for her into her own practitioner theory. E suggested that theory affected her practice but in focussing her discussion on the differences between teaching in further education and teaching in higher education she is implying that it is the format of her lessons that had changed and this is more likely to be a result of changing environment and changing institutional perspectives than of the application of a theory.

Four participants clearly considered theory to be a description of what they were already doing. A said that *'it's only since I've done my theory of learning [assignment] that I've really understood that actually what I do fits that model'*. B reported that he thought he *'was probably doing it all unconsciously in the first place'*. C spoke of natural progression and how educational theory was a *'reflection of what we do anyway'*. In reporting that she could see *'how much I actually do without realising it'* H is suggesting that it is only after the fact that she realised how her mode of practice could be described by theory. It is interesting that these four participants described similar lesson structures in question 1 but the theorists that they discussed in the Task 3 assignments,

and possibly the theories they are referring to above, are all so different. Whilst there is some uniformity of structure there does not appear to be a unifying theory behind this.

Two participants (D & F) mentioned that theory could be confusing: '*over my head*' (D), and although F claimed she '*could actually put some of what they said into place*' both seemed to take a practical stance and decided that if a theory did not make sense then it was not relevant to their practice.

Two participants reported that theory was a tool for the analysis of practice: that it '*certainly made me think about my own practice*' (J) and was useful for '*stopping and re-examining what we are doing*' (L). Again, in both these examples we are offered the perspective of theory as a tool that can be applied after teaching rather than before.

In all, the participants discussed 'theory' as being helpful and that, by using theory as a reflective tool, practitioners could make improvements to their practice. They gave little detail as to how this might happen and their concepts of what entailed 'theory' ranged from studied theory to practitioner hints and tips. The picture that the participants paint is one of adapted theory whereby they mixed ideas that they felt were in line with their own personal pedagogical perspectives and ignored or rejected 'theory' that they regarded as 'other', outdated or irrelevant. If this is the case then such decisions were made from a practitioner point of view rather than a theoretical one – where, even if a theory did have the power to define practice it had been rejected in favour of another theory that was more aligned with the practitioner's own model of teaching. Here, the perfect theory may be redundant if it does not reflect current practice.

Question 4:

When asked, *Do you think that theory describes or prescribes your practice?* None of the participants discussed theory as having a prescriptive orthodoxy regarding their practice with L stating that *'trying to make things fit'* a theoretical format was *'probably a dangerous thing to do'*. None felt that theory was dogmatic and several participants commented that theory gave them ideas regarding practice. Interestingly, D, who had previously said that theory tended to be out of date or beyond her, also referred to some specific aspects of theory that she said did affect her practice and reported that the *'storehouse method and the way that people are inductive and deductive'* were influential. In this example she seems to be referring to the work of Atkinson & Shiffrin (1968), Ausubel (1968) and Bruner (1966) and in mixing these aspects of theory she was, again, adopting a selective approach (in line with her personal pedagogical perspective) and adapting 'theory' into her own practitioner model. E declared that *'rather than taking word for word and doing it'* she also adapted theory to support her practice. G spoke of the influence of theory and how she had *'a list of [learners'] learning styles'* that *'changes how I would actually do my lessons'*. In this last instance, G seems to be doing two things: firstly she seems to uncritically import the notion of learning styles and secondly, she adapts her practice to support these learning styles. (Learning styles are commonly cited in FE colleges – most often VARK (Fleming & Mills, 1992) and Honey & Mumford (1986) – but few of these learning styles stand up to test-retest reliability, internal consistency, construct validity or, possibly most importantly, predictive validity (Coffield et al, 2004)).

Five participants stated that they felt theory was descriptive in that it *'describes what we are naturally doing well'* (C) and, when probed to develop his answer, A went so far as to say that *'I don't think I will really ever look back on the theory of learning'*. This last statement tells us two things: firstly, that A sees theory as 'other' and that practice can continue without it, and secondly, in saying *'the theory of learning'* [my emphasis] he was collecting and labelling all theory as if it were a single homogenous concept. B also felt that 'theory' was outside of his practice and that practitioner theory developed organically through the actual practice of teaching: *'I suppose you could say I was creating me own theory as I was going along'* (sic).

Three participants highlighted the role of theory in developing their skills of critical reflection. M commented that theory encouraged her to *'go into it deeper'* meaning that her reading of theory encouraged her to be more analytical and more thoughtful and J suggested that it helped him *'think more deeply'* and that *'you might reflect a bit more on what you're doing and maybe how you can improve it'*. H made specific mention of how *'Kolb's theory... made me realise that I actually do it already'* (in reference to Kolb's experiential learning model, 1984).

Once again, we find participants discussing theory as a 'mix 'n' match' set of ideas, a catalyst for practitioner analysis and a reflective tool. When discussing the role of theory the participants discussed it as a means of defining what they already did; a helpful influencing idea, and a means of improving practice. The participants tended to consider 'theory' as a set of ideas that they could reject or a set of ideas they could adapt and commented that theory could not be adopted verbatim and that to do so might be dangerous.

Second level responses

Three coding templates were applied during this stage:

- the 'Aspect' template which breaks the data into ten coded aspects
- the 'Domain' template which breaks the data in four domains
- the 'Hypotheses' template which applies my hypotheses to the data

These templates and codes were applied to all the interview data rather than just the four key questions so that all areas of the participant responses were analysed. Whilst the question by question analysis showed participants surface responses, the application of these three templates looks 'for things behind the surface content of the data' (Denscombe, 2007:247) in an effort to analyse the meaning that these responses might hold.

Aspect template:

In total the individual interview transcripts were coded 181 separate times using the 'Aspect' template (see Fig 20):

CODE	Definition	Pieces of data coded for this
NA	Learning new approaches	19
LC	Learning from colleagues	15
CF	(gaining) confidence	10
SP	(gaining) specific skills	15
UN	Understanding underpinning issues/theories	60
RE	Importance of reflection	26
EX	(gaining) experience	9
LT	Learning from ITT teachers	8
CP	Changed perspective during year	9
EM	Learning through empathy	10

Figure 20, Individual interviews coded using 'Aspect' template

There were 19 passages coded as NA and the factors that instigated these new approaches ranged from formal learning (PGCE/Cert Ed (PCET)) to

having the right *'skills mix'* (A). L suggested that teachers *'need to be aware of developments'* and others commented that research might help this. Six of the coded pieces of data referred to development as a result of input from PGCE/Cert Ed (PCET): *'I have learned a lot of things while doing my PGCE'* (E) and five of these made direct links to theory, with D reporting that *'I always go away with some ideas from this lesson and often theorists have come into that'*. Some of the data coded as NA highlights the importance of context on developing practice and some emphasises input from colleagues. The responses that discussed theory tended to discuss it as something that participants felt they could *'add'* (M) to their teaching rather than something that could organise practice.

The 15 passages coded as LC suggest that colleagues were an important feature of ITT development. Some of this covered functional aspects of teaching and B discussed how he worked with colleagues to *'create the scheme of work at the beginning of the year as to what we think is a sensible order to do things'*. Other sections coded as LC showed wider concepts of support: *'we can bounce ideas off of each other'* (J). Interestingly, the sources of development seem to be quite close to participants. Many mentioned the people they worked with or their *'supportive boss'* (D) but few mentioned any managerial influence and C even commented that management were *'a little too distant from what happens in the classroom to influence what actually happens'*. Here development is thought to be as a result of things close at hand – experience, mentors, study, colleagues etc. but, that things that are less hands-on are less influential. If this is the case then perhaps the

perceived gap between theory and practice is one of the reasons that theory was not reported as being influential.

There were ten passages coded showing participants gaining confidence (CF) over the two year period of their PGCE/Cert Ed (PCET) study. Some of these sections of data suggest that this confidence was gained, at some level, through theory: *'it's reassuring'* (B). There was also evidence that some participants regarded theory as comforting and supportive of their practice with M saying that *'I think I'm really clever 'cos I'm already doing it'* and C reporting that *'it's a great feeling when you realise you're doing it right for once'*. Other coded aspects referred to confidence gained from colleagues and D reported that any anxieties she felt when teaching were *'quelled by [learners] responding to me'*.

15 passages were coded as showing participants felt they had gained specific skills (SP). Many of these suggested that this was a result of their studies for PGCE/Cert Ed (PCET), others focused on how research developed participants' skills – especially those that were felt to directly impact upon practice. Most research seemed to concentrate on activity planning and the content of lessons, or, as M said *'I need to know more than my learners know so I would research'*. Once again, reflection was evident as a factor in gaining new skills and whilst J reported that he *'pretty much devised most things on my own to begin with'* C reported that *'it's picking the good bits that work'* that resulted in improved practice. Overall the passages coded as SP suggest that any skills that were developed were drawn from the PGCE/Cert Ed (PCET) course and from actual practice with theory used as a sporadic enhancement.

The aspect of data that was coded the most was UN. There were 60 passages coded showing the understanding of underpinning issues/ theories. Of course, this was to be expected as I had asked questions specifically on this matter and the interview questions were formed from the PGCE/Cert Ed (PCET) Task 3 which asked ITT students to discuss theory in relation to their practice. So, although there were significantly more pieces of data coded as UN this cannot easily be considered as having specific significance. The data here fell into three areas: some participants spoke of the underpinning theories of their subject; some spoke of theory as forming '*background knowledge*' (M) but most spoke of theory as a reflection of what they were already doing. G supported her earlier discussion on learners' preferred learning styles by saying that '*a lot of them within our field of beauty it's / it is visual / and kinaesthetic*'; D discussed how theories allowed her to '*bring in different ideas*', and K made mention of Maslow five times but tended to regard his hierarchy of needs (Maslow, 1943) as not being '*scientific but I think there are lots of truths in there*' suggesting another personal adaption of theory.

The 26 passages of data coded as RE emphasised the importance of reflection. Some participants reflected upon their professional backgrounds and previous studies and emphasised how '*coming from industry*' (C); having '*experience of being a student*' (A), and having '*all that knowledge*' (F) helped underpin their practice. Others discussed how reflection on practice had been helpful whilst reflection on 'theory' had been more difficult. J commented that '*there are so many theories aren't there about education and teaching*' and F mentioned that '*some of them are quite deep*' and while many of the pieces of

coded data refer to theory at some level they also tended to emphasise its otherness. Here we see that reflection is referred to as a means of creating lessons that are in tune with learners' needs and, while some participants reported that theory was beneficial here, it does not appear to be as important as personal experience.

There were nine pieces of data that were coded showing that participants had developed through gaining experience (EX). Some of these passages show that this experience was gained through study for PGCE/Cert Ed (PCET). C reported that the experience gained from the course influenced his planning and D commented that, now she was coming to the end of her studies, teaching '*seems easier*'. K's response suggests that the 'theory' learnt during PGCE/Cert Ed (PCET) had helped her and she reported that '*it's given me a wider world*'. E emphasised that the contrast between teaching in FE and her previous experience of teaching in HE led to her changing her approach so that she now had a '*number of things going on in the class*'. Other passages coded as EX show that the actual experiences of '*being in lessons*' (C) and teaching were the main factors that helped to develop further practice.

Eight passages were coded as showing the influence of the PGCE/Cert Ed (PCET) teaching team (LT) on the participants. Some of these passages referred to specific teaching staff and the way they '*made it really important for [ITT students] to know how to set up a lesson*' (D). Several aspects of data show the importance of observation and feedback with D suggesting that '*the observation comments that I've taken on board // have changed totally the way I feel that the learners need to get information from me*'. A reported that the

observations supported his feeling that he was '*on the right track anyway*' and acknowledged the influence of feedback and comments from ITT lecturers: neither he, nor any other participant, suggested that 'theory' had this level of influence.

Nine sections of data were coded to show that participants had changed their perspective (CP) during the two years of their PGCE/Cert Ed (PCET) studies. Most of these coded passages suggest that participants had moved from a position where, on reflection upon earlier practice, they initially did not think there was a '*theory behind it*' (A) to using theory to '*think about my own practice a bit more*' (J). Some of the coded passages show that participants had changed their approach as a result of teaching experiences. Other pieces of data coded as CP suggest that participants felt that PGCE/Cert Ed (PCET) was responsible for this changed outlook with D reporting that '*Cert Ed had sort of given me that push*'.

There were ten sections of data coded that showed participants felt they could now better empathise (EM) with their learners. B reported that he did not feel you could gain this understanding and develop a rapport through theory and that it was '*more a personality thing*' and A explained that it was important to teach '*based on [your] own experience of being a student*'. Once again the idea that reflection was important was raised and F '*reflected back ... and then used that as my base*'. Interestingly, without prompting, M mentioned '*Vygotsky and social learning*' (Bandura) which was one of the few responses in which theory was explicitly discussed. It is worth noting that M lectured in Child Care which is often supported by three theorists: Piaget, Vygotsky and

Bandura and that this reference to ‘theory’ is likely to be based on her studies for her specific subject qualifications rather than for PGCE/Cert Ed (PCET).

Domain template:

Coding the individual interview data using the ‘Domain’ template involved a third pass of the data (see Appendix N) and analysis of these codes are in line with the results above, as Figure 21 shows:

CODE	Definition	Pieces of data coded for this
COG	Cognitive	21
AFF	Affective	18
PSY	Psychomotor	23
CON	Conative	1

Figure 21, Individual interviews coded using ‘Domain’ template

This table suggests that participants saw a balance between the cognitive, affective and psychomotor aspects of their practice. The 21 codings for COG imply that participants considered learning and understanding of their subject to be important. The needs of the curriculum, course criteria and standards were all highlighted as important in supporting the cognitive aspects of learning. Consideration of relationships with, and between, learners meant that the 18 codings for AFF illustrate the need for affinity, interaction, attention and a positive personality in participants’ practice. The physical practicalities of teaching (PSY) were also highlighted through this coding pass with the responses given by participants showing their teaching to be based on the ‘nuts and bolts’ (A) of practice. There was only one instance coded as relating to the conative domain where J remarked ‘*enthusiasm // I think is important*’ and this seems surprising as the effort involved in teaching and learning are

plain to see. Perhaps the lack of passages coded as CON suggests a lack of consideration of this area. This breakdown of domains suggests that participants considered teaching to be about the physical process of developing understanding supported through positive relationships with little consideration given to the effort involved in doing so. Where, above, I have highlighted the common theme of reflection, we can now see that there is surprisingly little reflection on the effort involved in teaching.

Hypotheses template:

In line with the results above, when coding the data for the three hypotheses (see Appendix N) there was a clear inclination towards a practitioner based theory of operation (H2) as Figure 22 shows:

HYPOTHESIS	Pieces of data coded for this
H1	14
H2	41
H3	3

Figure 22, Individual interviews coded using ‘Hypotheses’ template

This table shows that, although there were three pieces of data coded as suggesting that theory is an essential part of practice and there were 14 pieces of coded data that completely rejected any orthodoxy of theory, there was a significant amount (41) of data coded as promoting a practitioner-centred position on theory. E explained that, in her practice, she felt she had to adapt; could not teach *‘from the book’*, and that *‘you just bring in different ideas and do it together’*. Others, such as B reported that he was *‘probably doing it all unconsciously in the first place and it’s just a matter of sudden*

consciousness that there is a theory behind what you are doing - showing that there appeared to be a theory-practice link but that it is initiated by practice. Even the pieces of data that were coded as H3 were not particularly convincing regarding the orthodoxy of theory with D suggesting that some theory was merely *'in tune with what I like'*. In this example, although D implied that her practice could be guided by theory, she was also clear that the particular theory must be in line with her personal perspective, which, once again, hints at a practitioner-orientated philosophy. The data that was coded as suggesting theory had failed to be about practice ranged from participants who described theory as *'slightly over my head'* (D) to C and H who referred to theory as a label that had been applied to what they were *'naturally'* or *'automatically'* doing – a view that sees theory as a simple description after the fact.

In all, the coding for the 'Hypotheses' template produced a clear preference for H2 and produced a picture of 'theory' as an abstraction of individual participant's assumptions regarding practice. There was some rejection and some embrace of theory but these tended to be personalised and none suggested a particularly strong bias.

Overview of responses

During the individual interviews a number of 'Key Terms' were used. These were words such as 'theory', 'teach' and 'reflect'. Figure 23 shows the number of instances that such terms were used and from this we can see that, during the individual interviews, there was a bias towards discussing the practical (teach/teacher/teaching).

Term Used	Instances Recorded	TOTAL
The word 'theory'	71	
The word 'theorist'	24	
The word 'theoretical'	1	111
The word 'theorist'	15	
<hr/>		
The word 'teach'	99	
The word 'teacher'	6	173
The word 'teaching'	68	
<hr/>		
The word 'reflect'	6	
The word 'reflection'	1	8
The work 'reflective'	1	
<hr/>		
Mention of a specific theorist	15	
Reference to a specific theorist	6	21

Figure 23, Overview of Key Terms used during individual interviews

It should be noted, that although 111 terms relating to 'theory' were highlighted only 73 of these were uttered by the participants and I was responsible for the other 47. Figure 23 shows the lack of specific reference to any theorists and Figure 24 (below) develops this further by showing instances where participants actually mentioned theorists by name and where they referred to theorists through implication. For example when M commented on '*social learning*' I have attributed this to the work of Bandura (1977). I was able to make this link through the reflexive nature of my research, in that I knew M well and had previously had discussions with her regarding Bandura's work. I was also able to make this assumption as M works as a lecturer in Child Care where Bandura (alongside Piaget and Vygotsky) is a key theorist. It should also be noted that although there were 322 terms highlighted as being 'Key Terms' in Figure 24 this is a tiny proportion of the overall interview data as there were over 11,000 words spoken in total over the 12 interviews. This

result is interesting as, despite my focus on ‘theory’ during question 3 and question 4, overall the instances that discuss ‘theory’ are quite rare.

Participant	Specifically mentioned	Implied
A	Fitts & Posner (3) Wellford (1) Honey & Mumford (1)	Fitts & Posner (1)
C	Spencer (1)	
D	Phil Race (3)	Atkinson-Shiffrin (1) Ausubel (1) Bruner (1)
G		Fleming & Mills (4)
H	Kolb (1)	Fleming & Mills (1)
K	Maslow (5)	
M	Vygotsky (1)	Bandura (1)

(number in brackets shows the number of times the theorist was mentioned/implied)

Figure 24, Overview of theorists discussed by participants

Analysis and conclusion

The individual interview data supports Pring’s (2005) assumption regarding the practical reality of teaching and his contention that knowledge is created through action and reflection. The interviews also support Carr’s (2006) assertion that understanding is not dependent on theory but on living and thinking. Thomas (2007) argues that the word ‘theory’ is misused and proposes alternatives to the word ‘theory’. The individual interview data seems to most clearly fall under what Thomas called ‘craft knowledge’ in that participants mainly considered the practical aspects of their teaching rather than any abstract theoretical directives. Although Thomas argues that ‘theory’ is a misplaced title the participants did not produce such a bold response nor did they suggest that ‘theory’ was an essential aspect of their practice.

If we look at the data coded during the interviews it is hard to see any orthodox perspectives on theory (H3). There were three instances coded for this (see Fig. 22) but, as the above discussion suggests, these codings and references are rather weak. Instead the interview data shows participants discussing concepts such as thinking, reflecting, knowledge and 'know how' – none of which Thomas (2007) accepts as 'theory'. A few of the participants seemed to find comfort in the fact that their practice related to some wider body of knowledge and there were several participant accounts that claimed some level of influence of (what participants called) theory but, in the main, participants discussed theory as describing what they actually did. In this regard there does appear to be some relationship between the participants and theory and, although participants reported that they were not easily directed by theory, they did seem to consider 'theory' to be a useful tool that could be adapted as and when required. Therefore, the findings suggest that there is support for Hypothesis 2 in that 'theory' comes from practice and the application of 'theory' is guided by the practitioner as and when they consider it to be useful.

Chapter summary

I have used this chapter to present my analysis of the 12 individual interview transcripts. These were scrutinised by examining the responses to four key questions and through analysing data coded using the 'Aspect', 'Domain' and 'Hypotheses' templates. It was found that participants described lessons that worked as a series of activities with some regard for concepts such as learning styles and differentiation but few explicit links to 'theory' as a defining

principle. Participants reported the factors underpinning their teaching to be knowledge and curriculum based and they highlighted the role played by colleagues and peers in developing practice. 'Theory' was described as a tool to be used as a means of reflection; a tool to be adapted to suit individual practitioner perspectives, and as an abstract concept that did not relate to actual practice. Participants recognised a relationship between theory and practice but tended to report theory as subservient to practice. This chapter has shown that participants considered 'theory' at some level and it has also shown some of the factors that lead to the development of practitioners' personal pedagogies. The analysis of the individual interviews shows a bias towards Hypothesis 2 and supports the findings reported in the previous chapter. The next chapter analyses the third area of data in order to discover if the focus group data supports the findings so far.

Chapter 9: Analysis of Focus Groups

This chapter covers the following:

- There is discussion on the participants involved in the focus groups; the questions asked, and the format of data presentation
- I present and analyse responses given during the four phases of the focus groups
- I present and analyse the focus group transcripts using the three coding templates
- There is an overview of key terms used during the focus groups
- I present a final analysis and conclusion of the focus group data
- A chapter summary is given showing links with the next chapter

Participation

There were 12 participants involved in this aspect of data collection. The participants consisted of the 12 members of the PGCE/Cert Ed (PCET) group who had taken part in individual interviews. In order to limit my 'control' of the make-up of the two groups I split them alphabetically so that focus group 1 (FG1) consisted of participants A – F and focus group 2 (FG2) consisted of participants G – M. Both focus groups lasted for around 20 minutes and had semi-structured formats. I decided to use two focus groups based on the number of participants. I wanted there to be enough participants in each group to allow for discussion but not so many that some would feel intimidated. In discussing this data I have not compared FG1 with FG2 as my purpose is not to 'check' one against the other. There were, of course, differences between the groups and the make-up of the groups may have affected the way that topics were discussed but, since the purpose of the

focus groups was to allow participants to develop more thoughtful and more detailed responses regarding the four key areas, I felt it was valid to gather the responses and the two sets of data from the two focus groups are assembled to form a collated understanding of participant responses.

I used the 'four key questions' asked during the individual interviews as points for discussion so as to aid triangulation. However, the dynamic nature of the focus groups meant that I found the phrasing and the timing of the questions difficult. I did not want to interrupt the groups nor did I want to steer them, but I did have a research agenda and felt that there were points where I had to interject. Morgan & Krueger (1997:48) suggests that 'the researcher's list of questions or topics should help channel this discussion without necessarily forcing the group into a predetermined mold' and, in running the focus groups, I found myself working to maintain a balance between channelling the discussion and driving the discussion: in the end, I veered towards the former as the focus group transcripts show (see Appendix O). Again, because of our teacher-student relationship the participants seemed to allow my interjections and did not seem fazed or directed (as part of their PGCE/Cert Ed (PCET) course there had been group tutorials that had followed similar formats and participants may have expected me to interrupt at certain stages). If I had read or asked the questions in a direct or formal manner it would have seemed odd to the group (and to me) so I introduced the questions in a more subtle way that built upon the point being discussed at that time and allowed for additional questions, probes and prompts (see Appendix M). Figure 25 shows the relationship between the four key questions and the 'actual' questions asked during the focus groups. In the end the data from the focus

groups shows that both contained four phases of discussion that correspond to the key questions. Appendix O contains transcripts marked to show where specific codes were applied.

Individual Interviews	Focus Group 1 (FG1)	Focus Group 2 (FG2)
Can you describe the format of your typical lesson?	Do you feel that you've changed your teaching over the two years of the PGCE/Cert Ed?	...has learning about teaching or studying about teaching / has that affected your practice?
What influences your planning decisions?	What do people think has been the aspects of the PGCE/Cert Ed course that have most influenced them?	Feedback is an important thing / what other things do people feel affects their practice?
Do you think that educational theory influences your practice?	So how do people learn? And would you say that your studies helped you understand that / has it been part of something you've learned?	What about things such as educational theory does this affect things / I mean / we've got passion we've got peers we've got observation we've got development of people..
Do you think that theory describes or prescribes your practice?	Do we think that there's theory behind these things? Why do you say that?	Do people label what they are doing / do people say oh I'll do this in a behaviourist way?

Figure 25, Relationship between questions in interviews and focus groups

Robson (2002:288) reports that the 'data, analysis and interpretation of data from focus groups must take account of the context and circumstances in which the data are gathered' and I have addressed this by highlighting the subject-specific dialogue and by adopting a heterotopic perspective in my analysis.

The focus group data is presented in the following manner:

- The first section of data analysis takes an immersive perspective regarding the focus group data in that I summarise the discussion from each phase of the focus groups in order to 'get a sense of the whole' (Tesch, 1990:142). As with the individual interviews this section is a précis of what was actually said under the heading 'First level responses'. The simultaneous nature of each focus group meant that responses were not always specific to my questions but were often dependent upon other participant responses. Participants 'built' answers together; through agreement and through disagreement, so it is not helpful to look at individual participant voices at this stage, nor would it be a good use of group-created data to separate it into individual responses. Therefore, the first section of analysis offers an authentic account of what was said overall.
- The second section of data analysis applies the three coding templates (Aspect, Domain and Hypotheses) to the focus group data. Much like the individual interview analysis, this hopes to look beyond the discussion and look for 'meaning' within the data, This section is headed 'Second level responses' and 'involves the search for things that lie behind the surface content of the data' (Denscombe, 2007:247).
- The third section of data analysis uses two quantitative tables that show how often 'key' words such as 'theory' and 'reflection' were used. The quantitative here is used as a means of directing the qualitative, in that the number of times a word was used may offer some hint as to the worth that word has for the participant. This section is headed 'Overview of responses' and the approach is like that taken in the analysis of the individual interviews to aid triangulation.
- Finally all the focus group data is drawn together to form my 'Analysis and conclusion' which 'concentrates on a thorough portrayal of only what is most important' (Morgan & Krueger, 1997:64) to ease any tension between the authenticity of the discussion and the richness of the data itself.

First level responses

Phase one

In the responses given during the first phase of the focus groups, which concentrated on typical teaching strategies and any impact PGCE/Cert Ed

(PCET) study had upon these, participants described improvements in their practice. They reported becoming more flexible; adopting new strategies; building their confidence; developing their creativity, and the benefits of observation. Participants reported that they now felt more aware of the needs of their learners. In both focus groups we can see that the format of a typical lesson is reported as being affected by participants' study for, and reflection upon, PGCE/Cert Ed (PCET).

Participants also discussed the role of feedback and its impact upon teaching. They reported on the value of input from other colleagues and how they now felt more able to try new approaches. There was also a little discussion regarding factors that were perceived as having a negative influence on practice – organisational barriers; the lack of time to develop new ideas, and a shortage of opportunities to try new teaching methods.

Overall the participants' responses during the first phase of the focus groups suggest that they felt their teaching had developed over the course of their study and that their lessons were better planned and more focused on the needs of the learners. There was no explicit mention of 'theory' leading this transition and it seemed that practical opportunity and an element of reflection were the drivers of development.

Phase two

In the second phase of the focus groups participants discussed influences on their practice. I had hoped that participants might offer some insight into any influence that 'theory' might have upon them but, in the end, there were only two theory-related discussions: there was some discussion on learning styles

and there was mention of different teaching styles. In neither of these two instances was the discussion specific or deep – there was just a tacit acceptance that people learn in different ways and that people teach in different ways; which seems more pragmatic than abstract. Some might regard ‘learning styles’ and ‘teaching styles’ to be ‘theory’ but these terms don’t necessarily even involve the protagonist thinking or actively addressing them, in which case ‘theory’ simply becomes a descriptive label.

Most of the discussion in this phase of the focus groups focused on participants working to improve their practice through support from colleagues; through reflecting upon their skills; through developing new approaches, and through considering the importance of making an effort (for both teacher and learner). Participants described the influences on their practice as being that which they encountered in their day-to-day professional context. Their role was to teach (their subject) and to be taught (PGCE/Cert Ed (PCET)) and from both these facets they tended to draw practical ideas and practical guidance.

Phase three

During the third phase of the focus groups participants discussed how they thought learning occurred and if their studies and/or ‘theory’ influenced this. The participants in FG1 mentioned a range of theorists but reported that it was best to pick and choose from different theoretical approaches in order to find out what works best in practice. They recognised that some theories clashed and that some can be adapted but gave no clear examples to support

this. In the end, the participants in FG1 considered 'theory' to be a tool for adapting and reflecting.

The participants in FG2 recognised that people learn in different ways but did not apply any theoretical terminology to this; instead they focused on the importance of experience, effort, desire to learn, and willingness to try things out. In all, they took a predominantly functionalist position and considered their practice to be about developing through *doing* and through reflecting upon the teacher-learner dynamic.

Neither focus group specifically identified how theory might influence their practice nor how theory had helped their pedagogical understanding – except to say that it had opened their minds to the possible range of teaching and learning methods.

Phase four

In the fourth phase of the focus groups there was further review regarding the influence of theory on practice. It was clear from the discussions that participants did not consider theory to prescribe practice and there was no evidence to suggest that participants felt theory described practice. Both focus groups could do no more than name theorists but once again suggested that the role of theory was to underpin practice – not by giving explicit guidelines but by helping practitioners feel they were teaching from a more 'solid' position.

There are two passages that neatly summarise the relationship that participants had with 'theory'. In the first passage we can see participant A rejecting the notion that he was even subconsciously using theory and in the

second passage we can see 'theory' being used as a tool or lever that can offer weight to an argument although it seems almost irrelevant what the theory is or if it is applied 'correctly'.

FG1

A : I personally don't ever refer to theories / I would evaluate but I'm not conscious of what theory I'm using...

D : ...maybe what we are saying is that subconsciously you are using a theory...

A : ...you are / but I'm not...

FG2

L : ... we are in a world where everything has got to be evidence based so if you can reference this type of stuff then you have more power to your elbow...

The 'First level responses' show an overview regarding how participants responded during the focus groups. Apart from the two brief passages above I have tried to summarise the focus group data under the four phase headings so as 'not to ascribe views and comments to individual speakers in the interview, but to represent them as artefacts of a shared encounter' (Watts & Ebbutt, 1987:30). These shared encounters produced data that, initially at least, rejects the orthodoxy of theory in favour of a practitioner-formed and learner-focused pedagogy that is created through a synthesis of all that is at hand and deemed to be useful. Participants seemed happy to review, adapt and corrupt 'theory' in order to best develop their practice.

Second level responses

The three coding templates (Aspect, Domain & Hypotheses) were applied to the focus group transcripts at this stage. These templates and codes were applied to test the analysis of the first level responses and ‘interconnect themes into a storyline’ (Creswell, 2003:194) through triangulating them with the data from Task 3 and the individual interviews.

Aspect template

In total the focus group transcripts were coded 131 separate times using the ‘Aspect’ template as Figure 26 shows:

CODE	Definition	Pieces of data coded for this		
		FG1	FG2	BOTH
NA	Learning new approaches	7	2	9
LC	Learning from colleagues	6	4	10
CF	(gaining) confidence	5	6	11
SP	(gaining) specific skills	2	1	3
UN	Understanding underpinning issues/theories	24	18	42
RE	Importance of reflection	9	5	14
EX	(gaining) experience	9	9	18
LT	Learning from ITT teachers	13	3	16
CP	Changed perspective during year	1	0	1
EM	Learning through empathy	5	2	7

Figure 26, Focus groups coded using ‘Aspect’ template

There were nine pieces of data that were coded as showing the participants discussing learning new approaches (NA). C discussed the importance of, ‘*adopting and changing ideas from other people*’; A felt that his studies had given him an opportunity ‘*to try ideas and actually get away with it*’, and H reported that ‘*the day that you get to a stage where you think you are not learning any more ... is the day you stop*’. Several sections of data coded as

NA focused on participants' willingness to explore '*different avenues*' (F) in their practice. There was also mention of participants changing their teaching style through learning from others and C reported that '*I've asked this question but I'm getting no reaction / so I change tack*'. Schon (1987) may have called this reflection-in-action but C discusses it without regard to theory, reporting it as a practical skill he has developed through his PGCE/Cert Ed (PCET) study and through his experience.

There were 10 passages coded as showing participants learning from colleagues (LC). Two types of observation were discussed as a means of learning from colleagues: formal peer assessment and feedback (A, C & K) and less formal situations where '*you watch someone's lesson and think oh that's a good idea*' (G). Other participants reported that the PGCE/Cert Ed (PCET) class offered '*forums where you can listen to what other people do*' (C) with peers '*supporting and helping out*' (E). M warned that '*if you get negative feedback from your managers it has a negative impact on your teaching*' but generally the responses coded as LC were positive and participants felt that colleagues were a useful source of development.

In coding the data that shows participants gaining confidence (CF) nine of the 11 coded passages referred to how participants now '*feel more confident in teaching*' (D). Participant A felt that his experiences over the two years of study had allowed him to consider his teaching methods and that his increased experience and increased confidence had allowed him to '*let [learners] take control of their own learning*'. Most others focused on finding

their 'voice' (K) and developing the 'confidence to stand up' (C). One of the participants (M) reported that her study of 'theory' during PGCE / Cert Ed (PCET) had given her the confidence 'to learn more about child development psychology' but this was the exception and she did not discuss educational theory per se – rather she discussed 'theory' linked to her subject area; which others may call 'subject knowledge'. These coded passages suggest that increases in confidence empowered participants although there is no evidence to suggest that this increase was theory-directed. M's comments suggest that there is some evidence that practitioners knowing more about the theoretical aspects of their specific subject may be one of the factors that helps increase this practitioner confidence.

Only three pieces of data were coded as showing participants gaining specific skills (SP) during the two years that their PGCE/Cert Ed (PCET) course ran. This low number may be linked to the generic nature of the course or to the broad range of subject specialisms within the cohort. Furthermore, two of the passages codes as SP only hint at the development of specific skills: E discussed 'techniques how to get them to learn' and G felt that her studies for PGCE/Cert Ed (PCET) had helped her to be 'more creative' within lessons. Only D gave an explicit example of a skill she had developed in 'how to deal with somebody who is dyslexic' and, despite the volumes of text available on this particular area, reported that this was the product of one of her PGCE/Cert Ed (PCET) lectures. In all there was little data that suggested specific skills have been learnt. Participants saw their studies as having an impact on practice yet they did not feel directly guided by 'theory' and they did

not report the development of specific skills as a result of their studies, so what was it that helped them feel more confident? Perhaps the answer to this question can be found in examining D's full response where she indicates that PGCE/Cert Ed (PCET) tutors had helped her learn specific skills – showing that guidance from others rather than theoretical perspectives had a direct impact on confidence and on practice.

In all there were 42 passages coded as showing participants understanding underpinning issues / theories (UN). This corresponds with the 60 coded passages in the individual interviews and is also likely to be a result of my deliberate focus on this area. Therefore the fact that this aspect was coded many more times than any other should not be over-interpreted. In both focus groups we can see participants showing a level of understanding of theory and in both there is discussion reporting that it was '*dangerous*' (L) to be led by a particular theory and that '*you don't think right I'm going to adopt some of Honey and Mumford now*' (A). Participants discussed 'theory' as an aid to pedagogy in that, they felt 'theory' could help develop new ideas and could give credence to established ones. K reported that Maslow's (1954) hierarchy of human needs was '*important for personal development confidence and self esteem*' but she was not blindly faithful to this and was '*open to other theorists as well*'. H discussed 'theory' as an aid to reflection and not as a recipe for practice: '*you are aware of the theory rather than sort of making you work to it / you are more aware of what you are actually doing*'. In the end the discussion on underpinning theory showed that participants were aware of, and could list, theories and theorists, and that they felt this somehow gave

them a '*deeper understanding*' (M) but that '*it's not important whose theory it is*' (B) rather that, from theory '*you get the ideas*' (E) and it is up to the practitioner to translate these into practice (or not).

14 passages were coded as showing the importance of reflection (RE). The discussion on reflection covered reflection during teaching sessions (C, D, G & K): '*when you're standing up there in front of a class*' (C); reflection after a teaching session (E & G): '*it allows you to realise that by doing a lot more planning for the actual lesson itself ... as opposed to just standing there*' (G); reflection in the longer term (A, C & K): '*in reflection after the two years I really feel that this has been worthwhile*' (C), and reflection as a general means of analysis (J & L): '*it can make you self-analyse*' (L). The concept of reflective practice is one that permeates much modern teaching practice and was intended to be one of the underlying themes of the PGCE/Cert Ed (PCET) course. The number of times that this aspect was mentioned may suggest its level of importance for the participants; however, there was no data to show *how* this reflection might occur and participants gave no hints as to the format or process that they used for reflection.

Participants in the focus groups made many mentions of gaining from experience and 18 passages were coded as EX. In a short discussion in FG1, when I asked, 'So how do people learn?' the participants responded:

C : *Thousands of different ways.*

D : *...interacting / being engaged / doing / watching / needing / all sorts really...*

C : *...experiencing...*

E : ...*experiencing yeah...*

A : ...*living I think is the right answer ... living and learning / and I think that to me one word sums it up because we learn from the minute we wake up in the morning to the minute we go to sleep and even in our sleep we are still learning because our subconscious is learning...*

In this example we see how experience is explicitly highlighted by C and E as central to learning, and that the first three ways of learning mentioned by D are hands-on practical experiences. In examining the influence of her learning experiences upon her teaching, K mentioned how she had '*picked out the bad and the good and taken bits from all over*' hinting, once more, at the importance of development through consideration of actual incidents. M highlighted the affective side of experience when discussing how feedback from her manager had '*crushed*' her and how this had helped her understand how her learners might feel if she was to offer feedback in a similar manner. In all, the importance of experience was discussed as a positive developmental process where even negative experiences were re-assessed and used for positive means. Here, experiences, and reflection upon them, led to the construction of new ideas and often the creation of new approaches.

16 pieces of data were coded as showing participants learning from ITT teachers (LT). These instances ranged from a straightforward exportation of features of the PGCE/Cert Ed (PCET) course into participants' teaching: '*we learned a lot of things and we implemented in our classrooms*' (E), to K discussing how the '*passion*' of her teachers had had an effect upon her. D spoke of how observations of her teaching by ITT teachers had improved her

practice and J discussed how the course teachers had helped him to think about how he teaches where '*rather than give the information out and expect them to understand it I'm thinking more about how to get them to understand*'. In these passages we can see participants adopting what they consider to be good practice and adapting their own practice because of the input from the ITT teachers. As before, it is the actual experience that is the driving force here and there was no mention of theoretical frameworks or processes.

There was only one piece of data coded as showing participants having changed perspectives (CP). This does not mean that there was little change, and the focus group data suggests a great deal of change overall, but in this instance we can see a participant freely admitting to changing from someone who was rather dubious regarding the merits of PGCE/Cert Ed (PCET) study into someone who felt that it was a worthwhile experience. Other reported 'changes' were connected with skills, techniques and ideas but this was the only instance coded showing affective changes in participant outlook. Where others reported being more open to new ideas, A reported that '*everyone knows how negative I was at first*' but that he eventually saw the benefit of study. In the passage where participant A discusses this he develops his point and reports that the teaching of the PGCE/Cert Ed (PCET) course and his reflection upon it had led to this change. Participant A focuses on structure, experience, knowledge and the learning environment and takes a pragmatic view of his development. Interestingly A was also the participant who, earlier, rejected the idea that he was even subconsciously applying theory – therefore

we can assume that this change has come about on primarily a conscious functional level.

There were seven passages coded as EM showing participants learning through empathy. These tended to reflect the dual role of the participants (teacher and learner) and highlighted how their experiences helped them understand what their learners were going through. C reported how *'it's been a great experience to be tutor and a student at the same time and be able to see both sides of the coin'*. K also emphasised how this dual role allowed the PGCE/Cert Ed (PCET) students to *'reach [their] learners'*. In D's comment we can see the empowering role of empathy as she discusses how her learning about dyslexia had helped her teach a student: *'it's so much easier for her to understand 'cos I understand it'*. In all, this empathy was built through active engagement and consideration and participants made no mention of 'theory' supporting in this.

Domain template

Applying the 'Domain' template involved a third pass of the data and analysis of these codes supports much of the discussion above, as Figure 27 shows:

CODE	Definition	Pieces of data coded for this		
		FG1	FG2	BOTH
COG	Cognitive	13	21	34
AFF	Affective	9	7	16
PSY	Psychomotor	18	11	29
CON	Conative	5	7	12

Figure 27, Focus groups coded using 'Domain' template

Participants mainly focused on practice as a *thinking* and *doing* activity rather than an *emotional* and *exertive* one and Figure 27 suggest that the experiences participants discussed in the focus groups were led by cognitive and psychomotor processes. Tyler (1969) suggests that this focus on learning processes and learning outcomes is a key principle in attaining educational objectives but also concedes that ‘the teacher must have some understanding of the kinds of interests and background the students have’ (p.64). Whilst the participants focused on cognition and activity the number of passages coded as AFF (16) and CON (12) suggest that participants were still aware of learners’ needs, desires and levels of engagement. Some participants discussed learners’ needs in terms of learning styles (E, F & L); some spoke of learners’ emotional requirements (B, G, K & M); others considered their relationship with the learners (A, C, H & J), and D spoke of supporting specific learning difficulties. From this combination of imparting knowledge and enhancing the learning experience, Tyler claims, practitioners develop their own theory of learning (or practitioner theory) and there is evidence to support this in the focus group data. Here we see a model of practice that is led by a knowledgeable practitioner performing the physical act of teaching; being informed by their curriculum and fine-tuning their practice through reviewing the learners’ needs.

Another point worth considering in relation to this table is that participants may have been guided by their institution or curriculum to reflect on *knowledge* and *process* as these would be the areas in which their learners would be tested. Many of the participants taught ‘practical’ subjects (Motor Vehicle Studies, Bricklaying, Sports Massage, Computer Programming etc.) where the

assessment of their learners tended to be a mixture of the cognitive and the psychomotor; therefore, their curriculum and their teaching context may have influenced their focus group discussions. Participants' professional identities could have been crafted by institutional and professional contexts (van den Berg, 2002) and this heterotopic perspective may mean that their responses and reflections were limited by the space they worked within.

Hypotheses template

The final template that was applied to the focus group data was the 'Hypotheses' template using the three hypotheses (see Fig. 28). In applying this template we can see that a model of theory that is derived from practice and constructed by practitioners is favoured:

HYPOTHESIS	Pieces of data coded for this		
	FG1	FG2	BOTH
H1	1	0	1
H2	8	10	18
H3	2	3	5

Figure 28, Focus groups coded using 'Hypotheses' template

From Figure 28 we can see a clear preference for H2 where the role of theory is closely aligned to practice. Participants tended to consider the theories they discussed as being 'other' to what they actually did and spoke of how they interpreted and adapted the theories they encountered. From this, and from their day-to-day practice, they then refined their practitioner perspective. Participants appeared to have a private-shared understanding about how creating this approach was important. Participants did not set out manifestos

for practice and did not share clearly defined philosophies but there was a general understanding that current practice guided future practice.

There was only one piece of data coded to suggest that theory did not relate to practice at all. Participant A rejected the notion that he consciously or subconsciously used theory but no other participant was quite so bold as to reject all theory in such a way. There were five instances coded as suggesting a counter to A's position where theory could be used to guide practice. Three of these passages focused on how considering theory might enhance professional development (L & M) and two of these felt that, whilst some participants could '*attach names to the theories*' (C), it was the general guiding principles, derived from theory, that were important when developing new teaching approaches (B). These five passages support Ball's position on the possibility of theory allowing practitioners to move beyond that what they have always done and develop upon personal pedagogies.

Intellectuals cannot simply seek to reinhabit the old redemptive assumptions based on an unproblematic role for themselves in a perpetual process of progressive, orderly growth or development achieved through scientific or technical 'mastery' or control over events or by the assertive re-cycling of old dogmas and tired utopias.

Ball (1995:267-8)

In the five passages coded as H3 and in the quotation from Ball we can see a practitioner-mediated application of theory which suggests that the coding here does not support an unadulterated orthodoxy of theory and may be better coded H2H3. This would mean that all but one of the coded passages would offer some support for H2.

Overview of responses

From the individual interviews I created a table of 'Key Terms' and here I use these same key terms to review the focus group data. Figure 29 shows the number of times that such terms were used. It should be noted that I was responsible for five of the references to theory; seven of the references to teaching, and one specific reference to behaviourism; however, this does not dramatically change the overall trend of the data.

Term Used	Instances Recorded			TOTAL
	FG1	FG2	BOTH	
The word 'theory'	13	3	16	29
The word 'theories'	3	5	8	
The word 'theoretical'	0	0	0	
The word 'theorist'	3	2	5	
The word 'teach'	4	7	11	35
The word 'teacher'	3	1	4	
The word 'teaching'	11	9	20	
The word 'reflect'	2	1	3	5
The word 'reflection'	2	0	2	
The work 'reflective'	0	0	0	
Mention of a specific theorist	4	6	10	21
Reference to a specific theorist	7	4	11	

Figure 29, Overview of Key Terms used during focus groups

Where it might be expected to find passages discussing theories and theorists, and where it might be likely to find a lot of discussion on teaching – it is rather surprising that participants only made five references to the concept of reflection. This seems odd as the participants were clearly involved in a substantial reflective act (focus groups) and had already 'reflected' during their individual interviews and in writing the Task 3 assignments. The concept

of reflective practice was referred to a number of times in the PGCE/Cert Ed (PCET) course and exists hand in glove with modern teaching practice; therefore this does seem a very small number. This might be symptomatic of a lack of consciousness regarding this activity; in that, whilst it is evident that participants were reflecting and using this to inform their discussions, they did not seem aware of this reflective activity.

In analysing other 'key' words I reviewed the transcribed focus group data to find instances where participants mentioned theorists by name or by implication. I used the same reflexive approach that I used in the 12 individual interviews and Figure 30 shows these references to theorists:

Participant	Specifically mentioned	Implied
A	Honey & Mumford (1)	
D	Bruner (1)	Fleming & Mills (3) Honey & Mumford (3) Bruner (1) Ausubel (1)
E	Bruner (2)	
F		Fleming & Mills (2) Honey & Mumford (2)
G	Kolb (1)	Fleming & Mills (1)
J	Fitts & Posner (1)	
K	Maslow (1)	
L	Fitts & Posner (1)	

(number in brackets shows the number of times the theorist was mentioned/implied)

Figure 30, Overview of theorists discussed by participants in focus groups

Over the two focus groups 21 references were made to specific theorists or theories and all of these were covered in the teaching of the PGCE/Cert Ed (PCET) course (see Appendix D) which suggests that, if the theory was not

taught to participants it did not inform practice and, the theories that were taught only had a reduced influence (if any at all). Many of the participants in this research were conscientious and inquisitive professionals who were actively engaged in developing their practice; however there is no evidence to show that this involved considering 'theory' that was not presented to them. In this regard, engagement with the drivers of practice was context bound and theories that seemed 'other' to the space of their practice had very little influence.

Analysis and conclusion

In analysing the data from the focus groups we see participants discussing the impact of their colleagues and their studies upon their practice. Participants considered developing their practice through collegiate support and understanding and through developing teaching methodologies that they felt best suited their subject specialisms and the context of their practice.

For Bruner (1966) the nature of a theory of instruction is prescriptive as it 'sets forth rules concerning the most effective way of achieving knowledge or skill' and normative as it 'sets up the criteria and states the conditions for meeting them' (p.40) and he sees this theory of instruction as taking account of the subject, the learner and the uniqueness of the teaching situation. Participants reported similar perspectives and described personal pedagogies that we might call practitioner theories. These practitioner theories allow individuals to teach according to their own set of internalised pedagogical 'rules' and assess their own practice according to internalised (and often unexamined) criteria.

Participants could recognise key components of learning, teaching and theory and tended to be open to new experiences that they felt could have a positive impact upon their practice-orientated philosophies. Participants' personal perspectives created practitioner theories where 'theory and practice are mutually constitutive aspects of one another' (Kemmis, in Carr, 1998:15) and any new 'theory' rejected if it could not be adapted to support this established position.

Ball (1995:266) suggests that theory 'offers a language for challenge and modes of thought, other than those articulated for us by dominant others' but there was no evidence that participants regarded theory in this way. For the participants, theory's 'destructive, disruptive and violent' potential stopped them from finding use in it and led them to reject it. Where Ball argues that the 'purpose of theory is to de-familiarise present practices' (op cit) participants seemed to see this lack of familiarity as meaning that the theory was not relevant to their specific circumstances. The focus group data shows a rejection of the hypothesis that theory is a guiding principle. Instead, we see personal experience leading to a personal theory on teaching – then, through experience, participants reviewed and modified this to create their own practitioner theory that was later refined through reflection. For the participants abstract theory was part of this final reflective process and only useful if it could support their established practitioner theory; therefore new 'theories' were always likely to describe what participants were already doing otherwise they would be rejected as having nothing to do with practice. Pring (2005) suggests that the trouble with theory is that the 'language and the consequent understandings of the practitioner are not respected, and concepts,

distinctions, categories, theoretical frameworks are imposed upon them that distort the practical reality' (p.176) and there is some evidence here to support this. Pring calls for theory to be drawn from practice and 'validated by its practical consequences' (p.167) and I would suggest that many of the participants in this study were doing just this.

Eagleton (1990:26) describes theory as 'practice forced into new forms' and, although the participants were not able to verbalise their own practitioner theories, it is clear that they were working from a perspective where their practice was developed through deliberation on how their specific subject should be taught in the specific context that they found themselves working within. Bruner (1966) calls this practitioner perspective a 'theory of instruction' and suggests that such a theory 'is concerned with how what one wishes to teach can best be learned' (p.40). The participants did not call their perspectives 'theory' but it is clear that they were *theorizing* about their practice and that these practitioner theories were drawn from practice and regulated through consideration of it. Therefore the findings suggest that there is support for Hypothesis 2 in that theory is developed from practice and refined through practitioner reflection.

Chapter summary

In this chapter I have analysed the data from the two focus groups by examining the discussion during the four phases that made up each focus group and by analysing data coded using the 'Aspect', 'Domain' and 'Hypotheses' templates. The chapter started by showing how these phases

linked to the four key questions asked during individual interviews and then took an immersive perspective in reviewing the discussion during each phase. Participants made no explicit mention of 'theory' in relation to their lesson formats and reported that the things that influenced their practice came from their day-to-day professional context and their reflections on their experiences. Neither focus group described 'theory' as defining practice but there was a suggestion that consideration of specific aspects of specific theories could help develop new approaches. The analysis of the focus group data supports the findings reported in the previous chapters. Participants reported that initially they were teaching as they were taught (G) and that their own experiences had created a model of '*the way [learners] are meant to be taught*' (F) but that their studies and their teaching experience had allowed them to review and develop their practice. If we relate this discussion to one of the critical debates that form the framework and hypotheses of this research we can see further support for Hypothesis 2 where theory starts from practice and is then further refined by the practitioner. The next chapter triangulates my research findings; relates them to my research question and aims; considers the significance of the research context, and offers a meaningful conclusion.

Chapter 10: Conclusion

In concluding, this chapter is set out as follows:

- I return to, and assess, my research aim
- Triangulated data is reported
- I return to, and answer, my research question
- A meaningful conclusion is offered to substantiate this answer
- Recommendations, based on the research data, are made
- I review the contribution I feel my research makes

Research aim

My research aims to...

...contribute to academic and practitioner understanding of 'theory' in relation to practice and examine how a practitioner-led philosophy of FE might be developed

In asking participants to look back over their practice and discuss their teaching in relation to 'theory' I aimed to analyse how one specific group of practitioners felt educational theory related to their practice. This was done through thick description (Geertz, 1973) and through an examination of what 'truth' might be in the participants' local situation: adopting a heterotopian perspective where the focus is not on the application of research findings but on the analysis of their meaning in relation to the research context.

Most research in FE focuses on, *inter alia*, policy, administration, targets and initiatives: it is hard to find research that draws from those who actually practice in this environment or to find anything that might help form a philosophy of FE (Halliday, 1996). I hoped that, in adopting such a

practitioner-centred approach, my study would help start to create a practitioner-led philosophy of FE drawn from an analysis of theory, practice and context. It was never my intention to examine the worth of any one theory or to assess whether I felt the participants had applied 'theory' in an appropriate manner. My focus was on examining how participants regarded the relationship of 'theory' to their practice. I am confident that I have worked within the boundaries that I have set myself and that, in doing so, I have met my research aims and can claim my research to be faithful in that regard.

Triangulated data

There were three areas of data collection in this study: 20 Task 3 assignments; 12 individual interviews, and two focus groups. The analysis of the Task 3 data used extracts from the participants' assignments that highlighted how they felt a particular theory had informed their practice. Then the data was analysed and coded using the 'Hypotheses' template.

The analysis of the individual interviews and the focus groups followed similar formats: initial responses were outlined and reviewed then the three coding templates (Aspect, Domain and Hypotheses) were applied and an overview of responses given, finally a conclusion was drawn from this process. All three areas of data closed with an overall analysis and conclusion. Here I conclude my findings by triangulating the three coding templates – drawing them together to form an overall representation of the participants' perspective and use this to form a model showing how personal pedagogies may be developed.

Hypotheses template

In coding the three areas of data, the 'Hypotheses' template was applied 101 times – showing 76 pieces of data wholly or partially supporting H2 (see Fig. 31):

HYPOTHESIS	Pieces of data coded for this			TOTAL
	Task 3	Individual Interviews	Focus Groups	
H1	2	14	1	17
H1H2	4			4
H2	10	41	18	69
H2H3	3			3
H3	0	3	5	8

Figure 31, Total amount of data coded using 'Hypotheses' Template

In combining the data produced by applying the 'Hypotheses' template to the three areas of data it is clear that participants broadly rejected the orthodoxy of theory and were not comfortable importing 'theory' in a verbatim manner. However, participants did not reject the notion of 'theory' completely and there was a small amount of data showing that participants felt 'theory' could offer some guidance - the reason for this appears twofold: firstly Task 3 was leading in its nature and secondly the position and credence offered to 'theory' may have influenced this result.

In all, the 'theory' participants discussed as having an impact upon their practice was a practitioner-refined amalgam; blending individual readings of 'theory' with personal subject-specific recollections on their own learning and context-specific reflections upon their experience of being a practitioner.

Aspect template

When coded using the 'Aspect' template, the analysis of the individual interviews and focus group discussions show broadly similar trends. There were 60 passages from the individual interviews coded as participants showing an understanding of underpinning issues/theories (UN) and 42 from the focus groups. In total this meant 102 pieces of coded data highlighting links to theory. Figure 32 should be read carefully as my questions were specifically about 'theory' and participants knew that this was the area of research focus. The 40 passages coded as showing the importance of reflection should also be considered carefully as the nature of the data gathering involved participants reflecting. Overall (considering these two points) the triangulated data here does not show any clear results or bias and the combined data drawn from the 'Aspect' template is not enough to suggest any particular conclusions; however, the data coded as UN and RE become more relevant when combined with the other templates and the précised data.

CODE	Definition	Pieces of data coded for this		
		Individual Interviews	Focus Groups	TOTAL
NA	Learning new approaches	19	9	28
LC	Learning from colleagues	15	10	25
CN	(gaining) confidence	10	11	21
SP	(gaining) specific skills	15	3	18
UN	Understanding underpinning issues/theories	60	42	102
RE	Importance of reflection	26	14	40
EX	(gaining) experience	9	18	27
LT	Learning from ITT teachers	8	16	24
CP	Changed perspective during year	9	1	10
EM	Learning through empathy	10	7	17

Figure 32, Total amount of data coded using 'Aspect' template

Domain template

In applying the 'Domain' template to the two focus groups and the individual interviews a slight imbalance is highlighted. The participant data (see Fig. 33) suggests a bias towards consideration of thinking and action in relation to practice:

CODE	Definition	Pieces of data coded for this		
		Individual Interviews	Focus Groups	TOTAL
COG	Cognitive	21	34	55
AFF	Affective	18	16	34
PSY	Psychomotor	23	29	52
CON	Conative	1	12	13

Figure 33, Total amount of data coded using 'Domain' template

There is data to suggest that relationships and connections were important but there was little to suggest that effort (by teacher and/or by learners) was central to participants' consideration of practice. This last point seems surprising as I would have expected participants to mention the effort (or lack of effort) that their learners put into their studies. Possible reasons for this outcome might include: participants focused more on one area and just overlooked this; participants actually felt that cognition and psychomotor functions were more important than others; participants held back in their discussions on these areas, and researcher mis-coding. The 'Domain' data raises questions and highlights areas that need more attention, and it is only when all areas of data are combined that we can begin to see the 'truth' of this situation.

Overall

The triangulated data supports Hypothesis 2 in that the selection, modification and application of 'theory' is directed by the practitioner. Although there were some differences in the analyses of the three areas of data, the 'Hypotheses' template (developed from the three critical debates and my research framework) was a feature of all three. The analyses developed from the 'Aspect' and 'Domain' templates are important for two reasons: firstly they allowed me to analyse the data in detail and draw out key components, and secondly they verified the relationship between the data and the application of the 'Hypotheses' template.

As well as applying the templates to the data a holistic overview of all the transcribed data allowed for a general pattern to emerge. Drawing from the triangulated data I have set out below a series of stages that highlight how participants might have developed their personal pedagogies through experience, practice, reflection and consideration of the learning context. This model (see Fig. 34) shows a staged process developed from Schön's five elements of reflection (1992):

1. Knowing-in-Action
2. Reflection-in-Action
3. Conversation with the Situation
4. Reflection on Knowing- and Reflection-in-Action
5. Reflective Conversation with the Situation

By relating the participant data to these elements we can see that the participants' subject specialism and situation influence the development of their personal pedagogies. Through embracing the space that the participants work in (their situation) this model emphasises the heterotopic nature of

participants' understanding of practice and their consideration of 'theory' in relation to this practice.

1. Participants reported that they initially taught without actively analysing what they did. Their everyday practice was unexamined and often routine:
(A) *you just get out and facilitate learning*
(H) *you sort of do it automatically*
2. Over time, participants reported, they learned (through professional discussions, experience and their studies) to adapt during their teaching:
(E) *trying out new things doesn't scare you anymore*
(C) *I use both inductive and deductive styles in my teaching and find myself switching between the two as the need arises*
3. Participants suggested that they later came to understand how their context had an influence upon their teaching practice and upon their selection of methods and materials:
(K) *it depends on your environment as well and I think it's adapting isn't it / to what situation you are in*
(L) *as you can imagine [in] the health environment we get swamped with new initiatives*
4. Participants described that, towards the end of their studies, they were able to look back over past events and consider how they could take action to improve upon previous experiences:
(D) *it could just have been that they were listening but I wasn't teaching them in the correct way*
(J) *you might reflect a bit more on what you're doing*
5. Participants reported that they were then able to create new methodologies by considering how the learning context could be improved or made sense of:
(L) *there are three ways of looking at it / you're looking at the learners' experience your experience and the organisational experience*
(T) *there is a place for Bruner's discovery learning in post-16 mathematics*

Figure 34, Model showing staged development of personal pedagogies

Moon (2000) discusses the creation of 'theory' through the process of reflection and it would seem that this is what has occurred. Participants were reflecting 'in-Action' (Schön, 1992) and may not have been aware that, in doing so, they were building their personal pedagogies. Some participants were aware of how their subject and context might influence their practice. Other participants were able to reflect 'on-Knowing' or 'with the Situation' to fine tune their practice. In all these instances 'theory' was always likely to describe practice as the theorizing was initiated by the participants and came from their actual practice (Hypothesis 2).

Returning to the research question

How do those completing initial teacher training in the post-compulsory education and training sector consider 'theory' in relation to their practice?

My research was interested in examining how a specific group at a specific FE college and at a specific time considered 'theory' in relation to their practice. The data suggests that whilst the participants in this study tended, on the surface, to consider 'theory' to be something that was separate from their practice and something that was developed externally they were actually involved in creating their own personal pedagogies. There were two versions of theory here: one that deems 'theory' to be the product of academic procedures from a position outside of actual practice and a second version where the participants create their own way of doing things - their own

approach/style/method - and from this develop their own understanding about how they should do their job. In this second instance the participants did not call their conception of teaching a 'theory' per se, but, I would argue that it was just that - a personal practitioner theory.

Participants in this study regarded 'theory' from these two perspectives: from outside and from inside. Participants reported that 'theory' from the outside did not truly relate to practice (although aspects of such theories could be adapted to suit pre-existing ideas) but analysis of their responses shows that their practice was guided by ideas from the inside and from the development of their own personal pedagogies. In this regard, theory starts from practice and can be adapted by practitioners (Hypothesis 2).

Meaningful conclusion

As I have shown, participants were working within, and continually developing, their own personal pedagogy; however, they did not call this a 'theory'. Instead the word 'theory' seemed to refer to something else: possibly something from text books or ivory tower academics. For the participants involved in this study the word 'theory' tended to be other to their practice. 'Theory' was discussed in a number of ways – some participants regarded it to be beyond their understanding; some felt that different theories could be picked at and blended together; some felt that theories gave credence or substance to their position; some focused on subject-specific theories, and some rejected the notion that 'theory' was even relevant to practice.

Despite the somewhat leading nature of the PGCE/Cert Ed (PCET) Task 3 assignment, participants did not seem easily able to describe how 'theory' informed their practice, tending instead to discuss theories that they felt were aligned to what they were actually doing: here participants mainly considered 'theory' to be a description of their practice. During the individual interviews and focus groups there was no discussion on 'theory' radically redirecting practice and there was no evangelical zeal for the guiding role of any theory. The theories that were discussed tended to support participants' established personal pedagogies. Theories were not adopted verbatim but were adapted and often rejected. There was no discussion on 'theory' offering new directions or forcing participants to fundamentally question their practice. When participants felt a theory was not aligned to their mode of practice they tended to reject it as 'other'.

Participants reported the influencing nature of their subject, their colleagues, their studies, their professional context, their learners, and their experiences. Even their specific circumstances (the 'spaces' of their practice) were reported as being more influential than 'theory'. Eagleton (1990:27) reports that theory is 'just human activity bending back upon itself, constrained into a new kind of self-reflexivity. And in absorbing this self-reflexivity, the activity itself will be transformed' and for the participants in this study professional identities and personal pedagogical understanding had allowed them to create their own practical reasoning linked to their practical reality: something that we might call 'personal practitioner theory'.

Carr (2006) might argue that the participants here were not articulating a theory but 'a set of beliefs ... which provide them with their interpretive

understanding of their practice and the contexts within which their practice takes place' (p.146). For Pring (2005) this might be called 'curriculum theory' where theory and practice are linked and 'curriculum theory therefore must be theorizing about this practical reality' (p.167). For Thomas (2007) the knowing-how of practice is a matter of action and reflection and to label this 'theory', 'curriculum theory' or even 'personal practitioner theory' is overstating the case and 'seems to want to evoke some arcane explanatory process lying behind the action itself' (p.72). But Pring, Carr and Thomas are not discussing 'theory' in the same way as the participants. Where the three professors look for definition and explicit understanding through public-defined terminology the participants did not problematise words but used their private-shared language to discuss 'theory' in relation to their practice.

Wittgenstein (1953:§43) remarks that 'the meaning of a name is sometimes explained by pointing to its bearer' - therefore, the meaning of 'theory' is dependent upon its use by the participants. In this instance the word 'theory' is defined by its user, its use and its surroundings. However, for the participants the definition of 'theory' was never explicitly examined in this way – it was its application that was considered. And, while we see that the orthodoxy of 'theory' is rejected, participants were able to build and use their own models of practice. The participants did not give a name to their personal pedagogical perspectives but they were developing their own (to use the word loosely) 'theory'. In this sense we can see that the data supports Hypothesis 2 in that theory comes from practice and can be adapted by practitioners.

Throughout this research I have tried to examine what 'theory' might mean but there is no evidence of the participants analysing the word 'theory' in this way;

therefore the meaning of 'theory' was always publically influenced and privately defined. It was not my intention to open Wittgenstein's 'beetle' box and give a positivistic description of 'theory' – but, through my examination of the data and my reflexive approach, I was able to identify broad perspectives on 'theory'. These perspectives are socially constructed through participants' personal educational experiences; through their practice; through their studies for PGCE/Cert Ed (PCET) and through their reflection. In applying the various templates and levels of analyses, it became clear that I could cluster the participants' discourses in regards to 'theory' under three headings. Here I have translated my analysis of the participant data into three rhetorics of theory.

The first rhetoric

The first rhetoric of theory is 'Theory as Other'. This covers what that might be thought of as the 'ivory tower' perspective where academics discuss 'theory' in the abstract (or near-abstract). This aspect seems unlikely to influence practitioners as they tend to see such abstraction as being other to their practice and of little actual worth. Tyler argues that teachers must work from some theory of learning and a 'philosophy of education is necessary to guide in making these judgements' (1969:4) but this argument is not reliant upon this 'theory' coming from sources external to practice. I have never encountered a practitioner who could easily describe their practice as being unconditionally informed by 'external' theory such as behaviourism, constructivism, cognitivism, Marxism or any other *ism*. This does not mean that theory is not connected with practice and practitioners might find comfort

in the fact that their practice is related to some wider body of knowledge; however, the consoling nature of connectivity cannot be the aim of any theory and to consider 'theory' in this light is to relegate any possible worth it may have. 'Theory as Other' refers to practitioners' 'image of theory as incomprehensible "jargon" that has nothing to do with their everyday problems' (Carr, 1998:29) yet somehow manages to be held in high regard. This first rhetoric tells of 'theory' having an unexamined supposed worth where its very existence appears to offer legitimacy to practice even if practitioners don't quite know what to do with it.

The second rhetoric

The second rhetoric of theory is 'Theory as Guidance'. This rhetoric focuses on how an individual might learn and/or how practitioners might support this. This could be thought of as 'text book theory' or 'training-day theory' where a theory is given a cursory once-over and its usefulness extracted. Where ivory tower theory might be thought of as 'heavy', this is theory-light. Theory-light focuses on how practitioners and their students might actually teach and learn. Here we encounter notions of learning styles, teaching styles, developmental phases and skill acquisition (see, for example: Kolb, 1976; Honey & Mumford, 1986; Gardner, 1993; Maslow, 1943; Fitts & Posner, 1967; Atkinson & Shiffrin, 1968). 'Theory as Guidance' focuses on the pragmatic and is used in an unproblematized manner in an effort to give old dogs some new tricks. In this regard the second rhetoric of theory speaks of functional direction through the simplification of conceptual thinking into a system of practitioner guidance related to the actual procedures of practice.

The third rhetoric

The third rhetoric of theory is 'Theory as Personal Pedagogy'. Here we find practitioners developing an individual and often unexamined set of principles that guide day-to-day practice. This rhetoric highlights Wittgenstein's discussion on private/public language. Here practice is spoken of as if it is a coherent and shared concept, but in fact there is no one practitioner perspective on practice but many individual practitioner theories and 'theory' is developed through individual practice. Within this rhetoric 'theory' has been developed through practical activity and reflection upon it. For anyone involved in education it seems unlikely that they have not encountered some specific external theory and this may or may not have impacted upon these personal perspectives. Here, personal perspectives create practitioner theories where 'theory and practice are mutually constitutive aspects of one another' (Kemmis, in Carr, 1998:15) and any new 'theory' rejected if it cannot be adapted to support this established position. Within this rhetoric we encounter a version of 'theory' that Thomas might label approach, method, technique or procedure. There was no evidence that the participants in this study called their personal perspective 'theory' but there was evidence of thoughtful, systematised methodologies. In this regard the third rhetoric of theory is the day-to-day 'know how' of practice. This is the theory that is not called 'theory'.

The three rhetorics

These three rhetorics do not exist in isolation and in any discussion on 'theory' these rhetorics may be applied in a variety of mixes without clear distinction.

(This approach is common to our everyday discussions – when we discuss ‘love’ we don’t always use qualitative adjectives. Surely ‘romantic love’, ‘familial love’ and ‘brotherly love’ are different rhetorics but, when we use the word ‘love’ we don’t usually feel the need to make these distinctions – instead we allow our shared human understanding and private/public language to make these distinctions internally.)

There was evidence in my data that participants regarded the construct ‘theory’ to be of some significance but that they did not feel guided by ‘theory’ nor did they feel that ‘theory’ specifically related to their practice. This situation seems rather ironic in that ‘theory’ is deemed to be both important yet of little practical use: without thoughtful consideration of ‘theory’ we are left with an empty construct – an unexamined singularity placed upon a pedestal.

In offering three rhetorics of theory I do not wish to suggest that all language should be defined or exact. I merely suggest that we should not leave unquestioned something that is apparently so significant and that, without analysis, the veneration of ‘theory’ is false.

Recommendations

This research has examined how ‘theory’ was considered by the participants and has suggested how the construct ‘theory’ may be regarded by others. In doing so, I have also introduced ideas that might add to the development of a philosophy of FE practice. In undertaking this research I have made several interesting discoveries and from these I wish to make the following recommendations:

1. That practitioners and academics consider what they mean by 'theory'.

My research was not about the worth of any one theory but, in examining the key literature and my research data, it became clear that 'theory' tends to stand in a place of high regard – conversely I found that the word 'theory' is used in a broad and unexamined way. If practitioners do feel a need for 'theory' then they might at least make it clear just what they are talking about! Understanding one's own perspective and paradigm through understanding one's own language could help secure the development of a practice that is reliable, analytical, valid and assertive.

2. That the place of research should influence the methodology of study.

In relating Foucault's heterotopology to an FE college I felt that my methodology and analysis were more sympathetic to the specific research situation. I recommend that other researchers spend time considering the 'space' of their research and how it might affect participants. There are two main considerations here: firstly that the 'truth' of research established within one environment might not be easily transferable to another environment. Secondly, what participants report in one environment might differ from what they report in another. Neither of these points necessarily reduce the validity of data and it may be that embracing a heterotopic perspective allows for a more individualised and more authentic understanding of participants within certain spaces.

3. That those who wish to impose a ‘top-down’ influence on practitioners (Government, management teams and PGCE/Cert Ed (PCET) awarding bodies) consider the point of trying to do so.

This research was developed through my examination of the PGCE/Cert Ed (PCET) course and through my questioning the validity of the Task 3 assignment. This assignment started from the premise that ‘theory’ did/could influence practice but, upon examination, I do not feel this to be so straightforward. Therefore, if something that is so highly regarded as ‘theory’ does not influence practice in the way that might be generally assumed, then possibly other things won’t (policies, directives, ethos, mission statements) – perhaps then a practitioner-led approach to practice development should be embraced (if this is the situation anyway). If managers and policy-makers wish to develop new policies/procedures then they may wish to consider Elliott’s (1998:171) concept of reflective practice as a means of addressing ‘barriers to the implementation of policy-driven change’. My research argues that practitioner perspectives and practices are drawn from experiences and that ‘other’ influences are embraced only if they are felt to be useful. Managers and policy-makers may wish to consider this when they try to implement new procedures – as practitioners’ personal pedagogies are likely to impact on the success of any new initiative.

Contribution

Bathmaker & Avis (2005b:49) suggest that within FE ‘competitiveness and efficiency are paramount, and targets and measurement all pervasive’. This

has led research in this field to focus on the analysis of policy or procedural intervention; tending towards the political and managerial, and addressing how initiatives, market forces and funding councils impact on the role of the sector and the professionalism of its staff. My research has, instead, focused on the local situation as experienced by practitioners completing their PGCE/Cert Ed (PCET) studies. The key contribution that my research makes is in examining the way that 'theory' might be considered. For the participants in this study, 'theory' starts from the practical experience of learning a subject and is developed through the experience of teaching that subject. For this group of FE practitioners, 'theory' came from an individual practical understanding of how best to teach their subject and external 'text-book theory' was later adapted or rejected with regards to how it might support these existing practitioner perspectives.

On the whole, participants regarded 'theory' to be other to their practice but they were happy to select and adjust aspects of 'theory' that they felt could offer tangible benefits. Through this process, participants created their own practitioner theory (although they did not call it this). In answering my research question I feel I have helped start the formation of a practitioner-led philosophy of FE practice drawn from my model showing the development of personal pedagogies (see Fig. 34). This initial philosophy of further education practice could be held to be that:

Teaching in FE is a contextually-bound practical process that is developed *from* experience and *through* experience. Abstract ivory tower theory is not essential to practice. Practitioners are not aware of personal theory-building. Reflection can lead to practical improvement. Practical improvement is the mark of progress.

From my research I feel that I have also made two further contributions that merit future investigation:

1. I have developed three rhetorics of theory: 'Theory as Other'; 'Theory as Guidance', and 'Theory as Personal Pedagogy'. These rhetorics are not meant as rigid descriptors that work to define language but as a way of understanding some broad discourses on 'theory' and what might be meant when this term is used.

2. I have started to outline the principles of constructing a heterotopian research paradigm which recognises the nature of the space of the research and the juxtaposing dimensions within such a space. This paradigm also recognises that the space is changeable, that it impacts upon those within it, and that it relates to the wider society (but is not of it). And in doing all this, a heterotopian research paradigm embraces the individual perspective and looks for meaning rather than application.

Final thoughts

Some parts of this research went well and some areas did not go so well. I was pleased that I was able to collect all that data as planned and felt that the contribution made by participants was full and honest; for which I thank them. I was especially pleased that all the participants gave their permission for their work to be used and also verified the transcriptions of interviews and focus groups – no participants objected at any stage of this process and none asked for censorship. It would have been helpful to have had the involvement of all

the participants in the individual interviews and focus groups but this was their choice and I respect and support their decisions. There were moments during the interviews and focus group discussions when participants went off-track and the resultant data did not suit my purpose, but these moments were short lived. There are also areas in the data where I feel, upon reflection, that I could have pushed for more detail or could have asked clarifying follow up questions – but hindsight is likely to find such faults. In the end, I feel that the data produced during this research is rich and significant and that I have been honest in my analysis of it.

Some things were beyond the scope of my research and some things were deemed by me to be outside of my specific research focus; however, it is important to recognise that these may have had some bearing upon the results. In developing my research methods; in implementing my data collection tools, and in analysing the resultant data I made no provision for differences in, *inter alia*, gender, age, ethnicity, culture or personal history. Nor did I consider the minutiae of the specific subjects that participants taught and how these might affect their personal perspectives. There was no attempt made to balance the research through gaining the perspectives of the college personnel who were responsible for managing the practice and professional development of the participants nor did I draw any research data from the perspective of those who set up and validated the PGCE/Cert Ed (PCET) course. Future research may wish to address some (or all of these areas) in an attempt to clarify their possible relevance in regards to any general significance my data holds but I do not feel that these factors invalidate my findings as I had always set out to research a specific local situation. Future

research may also wish to try and identify other heterotopic sites and assess their impact upon those who work/study within them.

Since this research has established the significance of practice in regards to the consideration of 'theory' I shall close by highlighting areas of consideration regarding practice. The PGCE/Cert Ed (PCET) course, and education in general, seems to regard 'theory' as being of great worth yet the meaning of 'theory' and the merits of this construct are not always examined. If practitioners' consideration of 'theory' is reliant upon practical engagement and teachers teach according to their own experiences, then this should be embraced in ITT course design. There should be more scope for reflection to allow practitioners to clarify their own personal pedagogies and there should be more forums for discussion allowing practitioners to share their experiences with each other. There is a place for 'theory' in ITT but individual theories should be honestly examined rather than venerated. No theory can stand alone and no instance of practice offers the perfect recipe for success. It is in a considered 'mix up' that we might find the pragmatically best approach; therefore, Government, managers and course designers should not merely draw their inspiration from abstract 'theory' but should listen to the discourses of practice.

Appendix A:

University of Birmingham's School of Education Ethical Approval Form (EC2)

NAME : Erik Blair

COURSE OF STUDY: EdD

POSTAL ADDRESS FOR REPLY: [REDACTED]

CONTACT TELEPHONE NUMBER: [REDACTED]

EMAIL ADDRESS: [REDACTED]

DATE: 25/04/07

NAME OF SUPERVISOR: [REDACTED]

PROPOSED PROJECT TITLE: A study of Further Education (FE) Initial Teacher Training (ITT) students looking at how/if educational theory impacts upon their teaching practice.

BRIEF OUTLINE OF PROJECT: (100 – 250 words)

Most lecturers in Further Education are employed based on their subject knowledge – they do not need a teaching qualification to gain employment. However they must gain a recognised FE teaching qualification within 3 years of employment. The main qualification in this area is the Certificate in Education in Post-Compulsory Education and Training (for those who do not hold a degree) and the Post-Graduate Certificate in Education in Post-Compulsory Education and Training (for those who hold a degree). Those studying for the PGCE/ Cert Ed (PCET) come from a wide range of subject specialisms and the teaching of the course is not subject specific. I am interested to find out if the theory that these students learn as part of their studies actually affects their practice. There is a module of the PGCE/ Cert Ed (PCET) that asks for “An evaluation of a theory of learning that you have found particularly relevant in your professional context.” I would hope that by investigating further into this question I could find out how FE lecturers are affected by learning theories; how it affects their teaching, and how it affects their assessment of learners. My project is a case study in which I hope to review the answers of ITT students at my college to this module. I also hope to triangulate this review through individual interviews and focus groups.

MAIN ETHICAL CONSIDERATIONS:

The participants in this study are all adult FE lecturers. My main ethical concern is that the source of this data is an assignment that Cert Ed / PGCE (PCET) students need to pass to gain their qualification. This means that I have to be careful how I publish responses as they may then be open to future plagiarism; to this end I have decided that I shall not publish large sections of the texts. I have already contacted the University of Greenwich regarding the ethics of collecting this data and the Head of School has given me written permission to do so. He has also made the following points:

- Permission from each student whose work is selected to give consent to his/her work being used for such a purpose. The students own the work, not the university.
- Such permission would have to be sought in advance of submission. There is always a question about validity of findings where respondents know in advance that their work will be used for research in addition to the purpose designed.
- We would not be able to supply resources for any this additional work.
- Your analysis of students' work would have to be ab ovo and without regard to any assessment (formative or summative) made by marking tutor(s) which suggests that you need clean copy anyway, supplied directly by the students and independent of any tutor assessing notes.

[REDACTED] email received 05/12/06)

With regard to these points I will seek written consent from all participants in advance of their submission of this assignment (8th June 2007); I will also make it very clear to the participants that taking part in this research is not related to the outcome of their studies and that the focus of their work must only be as intended (as part of their PGCE/Cert Ed (PCET) assessment); I shall not ask the University of Greenwich for any resources, and shall ask participants to give me an unmarked copy of their work on the date of

submission so that I am not influenced by marking tutor comments. This last point may be tricky as I am the tutor and marking tutor on this course – therefore it is important that I clearly separate myself into my two roles (teacher and researcher) and do not allow one to impact upon the other. To this end I shall perform my normal teaching/tutoring role until the PGCE/Cert Ed (PCET) work has been summatively marked (by me) and moderated by the University of Greenwich (26th June 2007). At this point I shall use the unmarked copies for my research.

There is a concern that the written data produced may not actually give a true picture as participants may be writing to meet assessment criteria rather than stating the case as it is. I recognise this and, to this end, will try to triangulate information through interviews and focus groups. I hope to conduct individual interviews and focus group discussions after students have submitted their assignments and participants will be informed that taking part in these is not part of their programme of study and will not impact upon their gaining their qualification. I feel that performing these interviews at this time will mean that participants do not feel under pressure regarding their studies. I will also seek written permission for their participation. I shall tape these sessions and send participants a copy of the transcript for their approval.

RESEARCH FUNDING AGENCY: none

DURATION OF PROPOSED PROJECT:

Collection of written data – June 2007

Interviews and focus groups – June 2007

Transcription of interviews and focus groups (2 months) - September 2007

Collection of wider data (one year) – September 2008

Analysis of data (one year) – September 2009

Publication of results (thesis) – 2010

DATE YOU WISH TO START DATA COLLECTION : 27th June 2007

Please provide details on the following aspects of the research:

1. What are your intended methods of recruitment, data collection and analysis?

Participant recruitment: I shall write a document explaining research and hand it out to all members of the current PGCE/Cert Ed (PCET) cohort at my FE college. I shall highlight ethical concerns in this document and ask for volunteers.

Data Collection: I shall collect the written assignments on 8th June 2007 but not analyse them until after they have been moderated at the University of Greenwich on 26th June 2007. I shall also perform individual interviews and run focus groups. Wider data shall be collected through academic papers, books and journals.

Data Analysis: I shall look for trends in the written assignments; I shall attempt to triangulate the written data with the taped interviews and focus groups to see if trends continue or if the written assignments are predominately written to meet assessment criteria. I shall look to see if my case study is in line with other research in this area. This will mainly be qualitative as the main data is subjective, but I feel that since this is a study of one cohort at one FE college this is fair and valid.

2. How will you make sure that participants understand the process in which they are to be engaged and that they provide their voluntary and informed consent? If the study involves working with children or other vulnerable groups, how have you considered their rights and protection?

I will seek written consent from all participants in advance and will also make it very clear to the participants that taking part in this research is not related to the outcome of their studies and that the focus of their work must only be as intended (as part of their PGCE/Cert Ed (PCET) assessment). There are no children or vulnerable participants involved in this research.

3. How will you make sure that participants understand their right to withdraw from the study?

The consent form shall give information about the process that participants are involved in and shall also allow for withdrawal of consent.

4. Please describe how you will ensure the confidentiality and anonymity of participants. Where this is not guaranteed, please justify your approach.

I shall ask candidates to remove their names from their submitted written work. I shall assign a letter to each candidate and keep the records of this secure and separate from any written outcomes I produce. The transcriber of the taped interviews will not be told the identity of the participants but given their assigned letter to describe them.

5. Describe any possible detrimental effects of the study and your strategies for dealing with them.

My main concern going into this study is that participants may link the study to their PGCE/Cert Ed (PCET) assignment. I hope to deal with this as described above; clear explanation; written information, and open discussion. I am also concerned that participants may read the final thesis and say, "I didn't say that!" to combat this I shall provide each participant with a transcript of their interview for their approval.

6. How will you ensure the safe and appropriate storage and handling of data?

All data is kept in accordance with the Data Protection Act under lock and key. There is no open access to data, and no data is available through multi-access media such as the internet.

7. If during the course of research you are made aware of harmful or illegal behaviour, how do you intend to handle disclosure or nondisclosure of such information?

The information I hope to gather is mainly 'professional' and regards lecturers' reflections on theory and practice, therefore I do not expect to encounter such information. However if I am made party to a disclosure I would alert the proper authorities. Whilst giving participants anonymity and protecting their rights I shall make no claim as to breaking the law to protect illegal behaviour.

8. If the research design demands some degree of subterfuge or undisclosed research activity, how have you justified this and how and when will this be discussed with participants?

There is no subterfuge element to this work.

9. How do you intend to disseminate your research finding to participants?

I shall give copies of transcripts to participants; I shall send copies of papers that I write that involve participants to them, and I shall send participants copies of my thesis findings.

Appendix B:

Letter given to prospective participants outlining what might be required from them if they wish to volunteer (Informed Consent)

Dear Colleague,

I am currently doing some research into the role of theory in regards to actual teaching practice and would appreciate your help. I would be grateful if you would agree to take part in all or some of the following areas of my study:

1. Task 3 of your PGCE / Cert Ed PPP2 asks for: 'An evaluation of a theory of learning that you have found particularly relevant in your professional context'

I would be grateful if, once you have finished this task, you forward a copy of it to me as I wish to analyse this task on a broad scale looking at the range of theories discussed and how individual's regard these theories in relation to their practice.

2. A short, taped interview discussing teaching and theory

I would like you to take part in a short one-to-one interview to gain your perspective regarding teaching and theory in relation to your practice. This is not a test, it is simply a chance to talk through a few areas of your practice. There are no right answers here and it is your particular point of view that I am interested in.

3. A short, taped focus group discussion discussing teaching and theory.

I would like you to join with some of your colleagues from the PGCE/Cert Ed class and further discuss the points covered during the individual interviews. The group will be around 5-8 students and will be a chance to develop key ideas. Once again, I am not looking for the right answers and whatever you have to say will be valued.

KEY POINTS TO CONSIDER:

- Participation in my research is voluntary and, if you decide to contribute, you can withdraw at any later date. You should not feel obliged to take part and I would welcome any questions you might have about this research project.
- My research is **not** part of your course of study and you should continue your PGCE/Cert Ed studies as normal
- You are the owner of your work
- Your name and details shall not be released as part of this work. Your identity will be protected and all data will be treated ethically.
- You are entitled to view the relevant results of my work once finished, and may object to any findings at that stage.

I would be most grateful if you could assist with this research and would really value your contribution. If you wish to be part of this study, or wish further information, then please email me at the address below so as to register your intent.

Kind Regards,

Erik Blair



Appendix C:

Guidance given to prospective participants further detailing the way that their Task 3 data will be used (Informed Consent)

Dear Colleague,

Thank you for initially agreeing to take part in my research into the role of theory in regards to actual teaching practice. After our meeting the other day I have redrafted this guidance sheet to give more detail about how your Task 3 data will be used:

Task 3 of your PGCE / Cert Ed PPP2 asks for: 'An evaluation of a theory of learning that you have found particularly relevant in your professional context'

I would like you to forward a copy of your Task 3 assignment to me as I wish to analyse this task on a broad scale looking at the range of theories discussed and how individual's regard these theories in relation to their practice.

During our meeting some people were concerned that future PGCE/Cert Ed students could read and plagiarise their work. It was agreed during the meeting that, if you are concerned about this, then I will only use a maximum of 100 words from your assignment in my research and I wish to confirm that this is my intent.

During the meeting some of the class said that they would be happy for their whole assignment to be published. I am really grateful for this and would like to select one assignment at random and publish it in the appendices of my research to show readers an example of the completed task. I will remove any names and details from this assignment and treat it confidentially.

WHAT NEXT?

Please could you email me and let me know that you are still happy to agree to take part. In your email can you make it clear if you want me to use **100 words** or **ALL** of your work – the simplest thing to do is just to start your email:

Dear Erik 100 or Dear Erik ALL

I really do appreciate your help with this work. Please feel free to email any questions you might have and I will be happy to clear things up

Kind Regards,

Erik Blair

██████████

REMEMBER

Participation in my research is voluntary and, if you decide to contribute, you can withdraw at any later date. You should not feel obliged to take part and I would welcome any questions you might have about this research project. My research is not part of your course of study and you should continue your PGCE/Cert Ed studies as normal. You are the owner of your work and I shall not publish any large sections of it, I will only publish a maximum of 100 words from your Task 3 assignment unless you agree otherwise. Your name and details shall not be released as part of this work. Your identity will be protected and all data will be treated ethically. You are entitled to view the relevant results of my work once finished, and may object to any findings at that stage.

Appendix D:

PGCE/Cert Ed (PCET) Scheme of Work: Year 2 2006/7

Session	Learning Outcomes, Learning Activities & Assessment (including key materials/authors)
1	An overview of the course content and assessment details Teaching & Learning Styles (Maslow, Honey & Mumford)
2	The learning environment The teaching environment (course handbook)
3	Whole class teaching Group/Pair/Individual work (course handbook)
4	Asking questions Answering questions (course handbook)
5	Praise Pointed praise (course handbook)
6	ICT training session
7	Independent work and/or tutorial to develop portfolio
8	Independent work and/or tutorial to develop portfolio
9	Identifying and assessing the impact of diversity on learning and teaching Differentiation and diversity: how they might affect practice (Bloom)
10	How to differentiate by content, process, outcome and environment Review and assess how we overcome barriers to learning (Tomlinson)
11	Manifestations of cultural diversity among learners Areas of diversity and various constituents of cultural diversity (Renzulli)
12	Concepts of diversity and planning for difference – cultural diversity Language as an instrument of cultural definition (Secada)
13	Understanding student diversity through discussion on class and gender Effects of heterosexism and homophobia: Equal Opps. (Osborne)
14	Independent work and/or tutorial to develop portfolio
15	Independent work and/or tutorial to develop portfolio
16	Information processing: the relationship between learning and memory. Perception and information retrieval (Ausubel, Bruner, Atkinson & Shiffrin)
17	Attitude change with regard to teaching and learning strategies Cognitive dissonance (Festinger, Bandura)
18	The concept of the reflective teacher Identify learning styles (Schön, Kolb, Fleming & Mills)
19	Examine a range of questionnaires and other instruments of evaluation The reflective teacher: evaluation and feedback (Schön, Bloom)
20	Using language to model a task with reasonable ease and accuracy Learning and the acquisition of skills (Spencer, Skinner, Fitts & Posner)
21	Review the assessment applications of topics to date Evaluation and feedback as instruments of reflection (Kolb)
22-26	Independent work and/or tutorial to develop portfolio

Appendix E:

Participant P's Task 3 Assignment in full (shown as an example)

A critical account of the Gestalt theory with some implications for teaching and learning on an Access to HE History module.

Introduction

This report will investigate some of the positive and negative effects of the gestalt theory of the acquisition of skills, their impact upon teaching and learning and a critical account of the shortcomings of applying this theory. Gestalt theories originate from investigations by Wertheimer, Koffka and Kohler in 1912. Although based upon animal research, it could be argued, this would negate any psychological bias in the results, relying on physiological responses and, therefore, adding credence to these theories. Unlike the behaviourist theories, gestalt focuses on 'insight learning' or a sudden realisation when confronted with stimuli as a whole, as opposed to 'the sum of all parts'. Wertheimer deduced there were 4 laws governing the organisation of learning:

- Proximity: '...the proximity of the [stimuli] parts in time and space affects the learner's organization of the field.' (Knowles et al 2005:29)
- Similarity: 'Objects similar in form, color [sic], or size tend to be grouped in perception...' (Knowles et al 2005:29)
- Closure: 'Learners try to achieve a satisfying endstate of equilibrium; incomplete shapes, missing parts, and gaps in information are filled in by the perceiver.' (Knowles et al 2005:29)
- Continuation: 'Organization in perception tends to occur in such a manner that a straight line appears to continue as a straight line, a part circle as a circle, and a three-sided square as a complete square.' (Knowles et al 2005:29)

As with the later cognitive theories that built on gestalten, the laws allow for a constant, continual growth of 'intelligence'. In this respect, through constant and continued stimulation, the perceiver has the ability to develop and build upon their understanding.

Criticisms

There are problems with the gestalt theories, not only in concept, but also in application. The concept of gestalten, where a sudden realisation can be attained through an acquisition of 'gap-filling' perception, offers the learner an opportunity to come to an instant understanding of a concept, 'completing' the 'circle'. However, it could be argued that, if the perception of 'closure' or 'continuation' were skewed, the 'sudden insight' may not be the intended outcome of the practitioner. Therefore, the onus on the tutor to supply a comprehensive array of stimuli, in an ordered fashion, that leaves no room for misinterpretation, is, arguably, huge. In order to cater for the diversity and ability of all the learners' individual perceptions, the tutor would have to have a comprehensive understanding of each individual learner and *their* perception of their background. The theory, arguably, relies on an 'holistic' approach, whereby the interlinking of perception to stimuli creates an experience not achieved through individual, separate responses to each. In this respect, previous experiences have a direct impact on immediate stimuli, as the learner seeks 'closure'. As Jarvis comments, '...the idea of insight or intuition, almost demands that it should be rooted in an earlier process...so that it would be unwise to regard all learning in such an inspirational manner.' (Jarvis 1983:78)

How this informs the choice of teaching/learning activities & assessment

Taking the criticisms into account, the practical application for gestalten and, therefore, cognitive theories, is, arguably, in the organisation of materials and the planning of lessons. As Rogers comments, 'The material needs to be marshalled into meaningful units and then mastered...the focus is on how the content of learning is structured, building up from easy to more difficult knowledge and skills, and on the practice of intellectual exercises.' (Rogers 2005:90) In this respect, the arrangement of the whole History module offers a gradual progression and introduction to all of the necessary historical study skills, encompassed within each unit. However, when viewed as a whole, the 'inspirational insight'

has been planned to appear during the final unit, when the learner has the opportunity to achieve 'closure' and the sudden realisation that they have acquired all the necessary skills to understand how to study academic history. The assessment methods are designed to gradually build on the acquisition of knowledge and 'the development of the ability to cope with increasingly complex knowledge' (Rogers 2005:90), possibly perceived through many minor epiphanies, or in the ultimate insight during the closing unit of the module.

However, this application to the whole module takes place over 9 months; a lengthy time for under confident learners who may need more continuous, on-going affirmation of their abilities and enthusiasm. In order to broach this, each unit covers one aspect of History, intending to 'appeal' in its own right. The learners are, in this respect, given the opportunity to experience 'minor epiphanies' into an *area* of History as opposed to just the 'major epiphany' encompassing the *study* of History. By planning for the on-going stimuli, the learners' enthusiasm progresses as they are able to apply 'intelligent' acquisition of knowledge to many different and diverse aspects of History.

One of the attractions to gestalten and cognitive theories, is that, 'such views are not confined to the acquisition of knowledge or the development of new understandings; they apply to learning skills and attitudes as well.' (Rogers 2005:90) Consequently, by applying these theories to the academic study of History, there is, arguably, an opportunity for the learner to understand many aspects of their lives, as a *whole*. This can have an enlightening effect, an 'epiphany' of a whole life experience, perhaps 'closed' with a skewed perception that, if viewed from an alternative perspective, may have another outcome. The Access to HE programme caters for adult learners that have, invariably, had 'life experience', demonstrated through the diversity of learning styles, ability, socialisation, ethnicity, sexual orientation, gender, age and background.

Summary

By amalgamating theories such as gestalt, cognitive and behaviourist, it is possible to cater for the diversity of learners. However, it could be argued that the gestalt theory is best placed in the planning and delivery of lessons, as it requires definite progression and building upon of intelligence; something that should be innate in all areas of educational courses. By adhering to the gestalt theory, it is possible as a practitioner, to have a major influence on the lives of the learners, as a whole. Although daunting, I would argue, this is also a privilege as invariably, the learners leave with an enlightened view, not only of education but also of their past, present and future.

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Appendix F:

Example of Data Coding Pilot : FG1 Open Coding First Pass

RESEARCHER:	Do you feel that you've changed your teaching over the two years of the PGCE Cert Ed?	
Mixed voices:	..yes..	
R:	How has this happened?	
E:	With time / because we were / as we were going along we learned a lot of things and we implemented in our classes yes..	Comment [e1]: Changed practice. Tried new approaches
D:	...lots of ideas lots of...	
C:	...best practice / I think that has sort of been the biggest bonus / in a room with other people and picking up other peoples' ideas and thinking / oh I can do that [D~ yeah] or that wouldn't work for me but I can see why it works for you and adopting and changing ideas from other people as much as anything else [D~ definitely]..	Comment [e2]: Learning from peers Comment [e3]: Adopting others' ideas
A:	..equally I think having that umbrella of I'm a teacher under training has allowed you all lot more flexibility to try ideas and actually get away with it / so if it's going wrong and people have observed it going wrong there's not much they can do really 'cos you're still under training so you're still looking for support and guidance and that / I think / well for me certainly has been a help (...) [D~ yeah] it's been an opportunity to try things that I wouldn't necessarily / well perhaps now with the experience I've got / the knowledge / which is quite limited I can take a lot of what I've learnt forward / but I've got less opportunities perhaps maybe to try and implement new ideas because in my view the timing isn't really there any more now..	Comment [e4]: Umbrella of teacher training Comment [e5]: Support and guidance through ITT
D:	..now you're qualified you mean?	
A:	Yeah well / hopefully I'll qualify.	
D:	You will.	
A:	I think the expectation is then that you can just get on and facilitate the learning and there's less opportunities to practise yourself because of time constraints.	Comment [e6]: After ITT the expectation is that they get on with it
R:	Do you recognise an increase or improvements in your teaching practice?	
Mixed voices	yeah .. yeah for sure..	
C:	Confidence more than anything / confidence to stand up and think okay I should be and not..	Comment [e7]: Growing confidence
D:	..yeah absolutely / totally committed to it and..	
E:	..and plus trying out new things doesn't scare you anymore / you just / you want to give it a try..	Comment [e8]: Not scared to try new things
C:	..yeah / let's see if it works if it doesn't you've got a little bit of experience to jump into something else / whereas before if you didn't do it..	Comment [e9]: Learning through trying new approaches

Appendix G:

Example of Data Coding Pilot : FG1 Open Coding Second Pass

RESEARCHER:	Do you feel that you've changed your teaching over the two years of the PGCE Cert Ed?	
Mixed voices:	..yes..	
R:	How has this happened?	
E:	With time / because we were / as we were going along we learned a lot of things and we implemented in our classes yes..	Comment [e1]: Changed practice. Tried new approaches
D:	...lots of ideas lots of...	Comment [A2]: LT
C:	...best practice / I think that has sort of been the biggest bonus / in a room with other people and picking up other peoples' ideas and thinking / oh I can do that [D~ yeah] or that wouldn't work for me but I can see why it works for you and adopting and changing ideas from other people as much as anything else [D~ definitely]..	Comment [e3]: Learning from peers Comment [A4]: LC Comment [e5]: Adopting others' ideas Comment [A6]: NA
A:	..equally I think having that umbrella of I'm a teacher under training has allowed you all lot more flexibility to try ideas and actually get away with it / so if it's going wrong and people have observed it going wrong there's not much they can do really 'cos you're still under training so you're still looking for support and guidance and that / I think / well for me certainly has been a help (...) [D~ yeah] it's been an opportunity to try things that I wouldn't necessarily / well perhaps now with the experience I've got / the knowledge / which is quite limited I can take a lot of what I've learnt forward / but I've got less opportunities perhaps maybe to try and implement new ideas because in my view the timing isn't really there any more now..	Comment [e7]: Umbrella of teacher training Comment [A8]: S Comment [e9]: Support and guidance through ITT Comment [A10]: LT NA LC Comment [A11]: NA Comment [A12]: EX
D:	..now you're qualified you mean?	
A:	Yeah well / hopefully I'll qualify.	
D:	You will.	
A:	I think the expectation is then that you can just get on and facilitate the learning and there's less opportunities to practise yourself because of time constraints.	Comment [e13]: After ITT the expectation is that they get on with it Comment [A14]: AT
R:	Do you recognise an increase or improvements in your teaching practice?	
Mixed voices	yeah .. yeah for sure..	
C:	Confidence more than anything / confidence to stand up and think okay I should be and not..	Comment [e15]: Growing confidence Comment [A16]: CF
D:	..yeah absolutely / totally committed to it and..	
E:	..and plus trying out new things doesn't scare you anymore / you just / you want to give it a try..	Comment [e17]: Not scared to try new things Comment [A18]: CF
C:	..yeah / let's see if it works if it doesn't you've got a little bit of experience to jump into something else / whereas before if you didn't do it..	Comment [e19]: Learning through trying new approaches Comment [A20]: LT

Appendix H:

Linking first and second pass of open coding

The first pass of open coding led to 60 coded instances covering 51 different concepts:

1.	Changed practice. Tried new approach
2.	Learning from peers
3.	Adopting others' ideas
4.	Umbrella of teacher training
5.	Support and guidance through ITT
6.	After ITT the expectation is that they get on with it
7.	Growing confidence
8.	Not scared to try new things
9.	Learning through trying new approaches
10.	Used to think there was only one way
11.	Now aware of different learning styles
12.	Learning specific skills/approaches
13.	Learners have noticed the change
14.	Learning from peers
15.	Learning from other colleagues
16.	Learning through skills in managing the learning environment
17.	Understanding underpinning issues
18.	Learning through reflection
19.	Gaining experience, knowledge and skills
20.	Sharing with colleagues
21.	Learning from tutors
22.	Changed perspective on course
23.	Group growing together
24.	Peer support
25.	Feeling like their students (empathy/sympathy)
26.	Applying self-knowledge to others
27.	Drawing insight from PGCE/Cert Ed tutors
28.	(Consciously) unaware of own learning style
29.	Range of ways of developing
30.	Learning through experience
31.	Learning through experience
32.	Learning through experience
33.	Learning through experience (part of life/natural)
34.	Learning through new teaching approaches
35.	Learning how to get them to learn
36.	Taking a more student-led approach
37.	Not completely comfortable with student-led approach
38.	Taking a facilitating role
39.	Changing teaching style
40.	Allowing learners to take the lead
41.	Encouraging learners to find out things for themselves
42.	'aware' of theory behind approaches
43.	Trying to identify theorist
44.	The theorist isn't important – you just 'do' things
45.	The theorist isn't important – you just 'do' things
46.	The theorist isn't important – you just 'do' things
47.	The theorist isn't important – you just 'do' things
48.	The theorist isn't important – you just 'do' things
49.	The theorist isn't important – you just 'do' things
50.	Not using theory as a recipe
51.	Recognising theory when reflecting
52.	The theorist isn't important – you just 'do' things
53.	Not actively 'using' theory
54.	(possibly) subconsciously using theory
55.	Learning from studies
56.	Link to taught theory
57.	Reflection in-action
58.	Looking back and working out what to do
59.	Ability to change during lesson
60.	Being 'the teacher'. Being in control

The 51 different concepts were then grouped into 16 categories:

3. Adopting others' ideas	}	Learning new approaches
9. Learning through trying new approaches		
10. Used to think there was only one way		
11. Now aware of different learning styles		
34. Learning through new teaching approaches		
38. Taking a facilitating role		
2 & 14 Learning from peers	}	Learning from peers
23. Group growing together		
24. Peer support		
15. Learning from other colleagues	}	Learning from colleagues
20. Sharing with colleagues		
4. Umbrella of teacher training	}	Safety net of ITT
7. Growing confidence	}	(gaining) confidence
39. Changing teaching style		
59. Ability to change during lesson		
60. Being 'the teacher'. Being in control		
12. Learning specific skills/approaches	}	(gaining) specific skills
35. Learning how to get them to learn		
17. Understanding underpinning issues	}	Understanding underpinning issues/theories
37. Not completely comfortable with student-led approach		
42. 'aware' of theory behind approaches		
43. Trying to identify theorist		
44, 45, 46, 47, 48, 49 & 52 The theorist isn't important – you just 'do' things		
50. Not using theory as a recipe		
51. Recognising theory when reflecting		
53. Not actively 'using' theory		
56. Link to taught theory		
18. Learning through reflection	}	Importance of reflection
26. Applying self-knowledge to others		
28. (Consciously) unaware of own learning style		
57. Reflection in-action		
58. Looking back and working out what to do		
19. Gaining experience, knowledge and skills	}	(gaining) experience
29. Range of ways of developing		
30, 31 & 32 Learning through experience		
33. Learning through experience (part of life/natural)		
41. Encouraging learners to find out things for themselves		
1. Changed practice. Tried new approach	}	Learning from ITT teachers
5. Support and guidance through ITT		
8. Not scared to try new things		
16. Learning through skills in managing the learning environment		
21. Learning from tutors		
27. Drawing insight from PGCE/Cert Ed tutors		
55. Learning from studies		
22. Changed perspective on course	}	Changed perspective during year
25. Feeling like their students (empathy/sympathy)	}	Learning through empathy
36. Taking a more student-led approach		
6. After ITT the expectation is that they get on with it	}	Looking forward – after ITT
40. Allowing learners to take the lead	}	Aware of new approaches
3. Learners have noticed the change	}	Students have noticed a change
54. (possibly) subconsciously using theory	}	Not consciously applying theory to learning

Upon review, the 16 categories were reduced to the ten 'Aspect' codes used thereafter:

NA	Learning new approaches
LC	Learning from colleagues
CF	(gaining) confidence
SP	(gaining) specific skills
UN	Understanding underpinning issues/theories
RE	Importance of reflection
EX	(gaining) experience
LT	Learning from ITT teachers
CP	Changed perspective during year
EM	Learning through empathy
S ¹	Safety net of ITT
LP ²	Learning from peers
AT ³	Looking forward - after ITT
NB ³	Aware of new approaches
SN ³	Students have noticed a change
NC ⁴	Not consciously applying theory to teaching

¹ This category was later amalgamated with LT

² This category was later amalgamated with LC

³ This category was removed during the fourth stage of the pilot as it replicated some of the other categories

⁴ This category was rejected during the seventh stage of the pilot as it only really related to one specific response

Appendix I:

Example of Data Coding Pilot: FG2 Template Coding using 'Foucault' Template

RESEARCHER:	Do you think that your teaching has changed over your course of study / over the last few years / has learning about teaching or studying about teaching / has that affected your practice?
Mixed voices:	..yes – yes – absolutely..
R:	..how did this happen / in what way has it affected you?
G:	I think you plan better / it allows you to realise that by doing a lot more planning for the actual lesson itself and you having a lot more content in it and to be more creative within your lesson / as opposed to just standing there how we were taught and someone talking to you it's just not good enough / and you've got to have lots of tasks and lots of activities to keep them going and I think that's taught you to be creative within your lesson itself / if you can / if you're not restricted with what you have to teach but I think a lot of us / not everybody around the table / can be more creative within our lessons and doing tasks and activities and bringing a bit of fun to it / to a certain amount but obviously keeping it focused on what you're doing.
R:	You mentioned your teachers / how do people feel about the way they were taught?
Mixed voices:	..boring – yeah – very boring – it's just somebody standing there dictating to you..
K:	..for me it's been different / I've had a total mixed bag of experience of being taught in different areas at different times and I think for me ultimately I've put lots together and I think I've picked out the bad and the good and taken bits from all over and so that's been my experience / my school experience I have to say was a bit bland / could have done with a bit of spice / a bit of salt and pepper / however I think as I've got older and also I think I've found my voice really to challenge more / for me it's been a lot different / a lot of variety.
L:	How it's affected me I think there are three ways of looking at it / you're looking at the learners' experience your experience and then the organisational experience so for two years I think you learn to look a lot more about the learners / what their needs are / rather than grouping them as a group you tend to look more at them as individuals and their learning needs / you as in individual as G said about challenging your own way in terms of delivery and analysing how you are doing that and the effect it has on others / and maybe on the negative side / the organisation / because you want to improve and you want to progress then the barriers you start to bang into / you've got to have some barriers / new barriers will come up and then it's how you deal with that from an organisational side of things..
K:	..and for me / sorry / having started a brand new programme which I had to co-write myself and again do a bit of research and put it all together / it has been invaluable having the feedback of something that I've had to put together myself from scratch virtually from my observers / so the feedback from them has really helped me to interact with my group better.

Comment [e1]: P1

Comment [e2]: P1

Comment [e3]: P2

Comment [e4]: P3

Comment [e5]: P5

Appendix J:

Example of Data Coding Pilot: FG2 Template Coding using 'Domain' Template

RESEARCHER:	Do you think that your teaching has changed over your course of study / over the last few years / has learning about teaching or studying about teaching / has that affected your practice?
Mixed voices:	..yes – yes – absolutely..
R:	..how did this happen / in what way has it affected you?
G:	I think you plan better / it allows you to realise that by doing a lot more planning for the actual lesson itself and you having a lot more content in it and to be more creative within your lesson / as opposed to just standing there how we were taught and someone talking to you it's just not good enough / and you've got to have lots of tasks and lots of activities to keep them going and I think that's taught you to be creative within your lesson itself / if you can / if you're not restricted with what you have to teach but I think a lot of us / not everybody around the table / can be more creative within our lessons and doing tasks and activities and bringing a bit of fun to it / to a certain amount but obviously keeping it focused on what you're doing.
R:	You mentioned your teachers / how do people feel about the way they were taught?
Mixed voices:	..boring – yeah – very boring – it's just somebody standing there dictating to you..
K:	..for me it's been different / I've had a total mixed bag of experience of being taught in different areas at different times and I think for me ultimately I've put lots together and I think I've picked out the bad and the good and taken bits from all over and so that's been my experience / my school experience I have to say was a bit bland / could have done with a bit of spice / a bit of salt and pepper / however I think as I've got older and also I think I've found my voice really to challenge more / for me it's been a lot different / a lot of variety.
L:	How it's affected me I think there are three ways of looking at it / you're looking at the learners' experience your experience and then the organisational experience so for two years I think you learn to look a lot more about the learners / what their needs are / rather than grouping them as a group you tend to look more at them as individuals and their learning needs / you as in individual as G said about challenging your own way in terms of delivery and analysing how you are doing that and the effect it has on others / and maybe on the negative side / the organisation / because you want to improve and you want to progress then the barriers you start to bang into / you've got to have some barriers / new barriers will come up and then it's how you deal with that from an organisational side of things..
K:	..and for me / sorry / having started a brand new programme which I had to co-write myself and again do a bit of research and put it all together / it has been invaluable having the feedback of something that I've had to put together myself from scratch virtually from my observers / so the feedback from them has really helped me to interact with my group better.

Comment [e1]: PSY COG

Comment [e2]: PSY

Comment [e3]: COG

Comment [e4]: PSY

Comment [e5]: CON

Comment [e6]: COG

Comment [e7]: COG

Comment [e8]: COG

Comment [e9]: AFF

Comment [e10]: COG

Comment [e11]: AFF

Comment [e12]: AFF

Appendix K:

Example of Data Coding Pilot: FG2 Template Coding using 'Kolb' Template

RESEARCHER:	Do you think that your teaching has changed over your course of study / over the last few years / has learning about teaching or studying about teaching / has that affected your practice?
Mixed voices:	..yes – yes – absolutely..
R:	..how did this happen / in what way has it affected you?
G:	I think you plan better / it allows you to realise that by doing a lot more planning for the actual lesson itself and you having a lot more content in it and to be more creative within your lesson / as opposed to just standing there how we were taught and someone talking to you it's just not good enough / and you've got to have lots of tasks and lots of activities to keep them going and I think that's taught you to be creative within your lesson itself / if you can / if you're not restricted with what you have to teach but I think a lot of us / not everybody around the table / can be more creative within our lessons and doing tasks and activities and bringing a bit of fun to it / to a certain amount but obviously keeping it focused on what you're doing.
R:	You mentioned your teachers / how do people feel about the way they were taught?
Mixed voices:	..boring – yeah – very boring – it's just somebody standing there dictating to you..
K:	..for me it's been different / I've had a total mixed bag of experience of being taught in different areas at different times and I think for me ultimately I've put lots together and I think I've picked out the bad and the good and taken bits from all over and so that's been my experience / my school experience I have to say was a bit bland / could have done with a bit of spice / a bit of salt and pepper / however I think as I've got older and also I think I've found my voice really to challenge more / for me it's been a lot different / a lot of variety.
L:	How it's affected me I think there are three ways of looking at it / you're looking at the learners' experience your experience and then the organisational experience so for two years I think you learn to look a lot more about the learners / what their needs are / rather than grouping them as a group you tend to look more at them as individuals and their learning needs / you as in individual as G said about challenging your own way in terms of delivery and analysing how you are doing that and the effect it has on others / and maybe on the negative side / the organisation / because you want to improve and you want to progress then the barriers you start to bang into / you've got to have some barriers / new barriers will come up and then it's how you deal with that from an organisational side of things..
K:	..and for me / sorry / having started a brand new programme which I had to co-write myself and again do a bit of research and put it all together / it has been invaluable having the feedback of something that I've had to put together myself from scratch virtually from my observers / so the feedback from them has really helped me to interact with my group better.

Comment [e1]: T

Comment [e2]: T

Comment [e3]: R

Comment [e4]: R

Comment [e5]: T

Comment [e6]: E

Comment [e7]: T

Comment [e8]: E

Appendix L:

Example of Data Coding Pilot: FG2 Three Templates Layered

RESEARCHER:	Do you think that your teaching has changed over your course of study / over the last few years / has learning about teaching or studying about teaching / has that affected your practice?	
Mixed voices:	..yes – yes – absolutely..	
R:	..how did this happen / in what way has it affected you?	
G:	I think you plan better / it allows you to realise that by doing a lot more planning for the actual lesson itself and you having a lot more content in it and to be more creative within your lesson / as opposed to just standing there how we were taught and someone talking to you it's just not good enough / and you've got to have lots of tasks and lots of activities to keep them going and I think that's taught you to be creative within your lesson itself / if you can / if you're not restricted with what you have to teach but I think a lot of us / not everybody around the table / can be more creative within our lessons and doing tasks and activities and bringing a bit of fun to it / to a certain amount but obviously keeping it focused on what you're doing.	<p>Comment [e1]: PSY COG</p> <p>Comment [e2]: T</p> <p>Comment [e3]: PSY</p> <p>Comment [e4]: P1</p> <p>Comment [e5]: COG</p> <p>Comment [e6]: T</p> <p>Comment [e7]: PSY</p>
R:	You mentioned your teachers / how do people feel about the way they were taught?	
Mixed voices:	..boring – yeah – very boring – it's just somebody standing there dictating to you..	<p>Comment [e8]: CON</p> <p>Comment [e9]: R</p> <p>Comment [e10]: P1</p> <p>Comment [e11]: R</p> <p>Comment [e12]: COG</p> <p>Comment [e13]: P2</p> <p>Comment [e14]: COG</p>
K:	..for me it's been different / I've had a total mixed bag of experience of being taught in different areas at different times and I think for me ultimately I've put lots together and I think I've picked out the bad and the good and taken bits from all over and so that's been my experience / my school experience I have to say was a bit bland / could have done with a bit of spice / a bit of salt and pepper / however I think as I've got older and also I think I've found my voice really to challenge more / for me it's been a lot different / a lot of variety.	<p>Comment [e15]: T</p> <p>Comment [e16]: P3</p> <p>Comment [e17]: E</p> <p>Comment [e18]: COG</p> <p>Comment [e19]: AFF</p> <p>Comment [e20]: T</p> <p>Comment [e21]: P5</p> <p>Comment [e22]: COG</p> <p>Comment [e23]: AFF</p> <p>Comment [e24]: E</p> <p>Comment [e25]: AFF</p>
L:	How it's affected me I think there are three ways of looking at it / you're looking at the learners' experience your experience and then the organisational experience so for two years I think you learn to look a lot more about the learners / what their needs are / rather than grouping them as a group you tend to look more at them as individuals and their learning needs / you as in individual as G said about challenging your own way in terms of delivery and analysing how you are doing that and the effect it has on others / and maybe on the negative side / the organisation / because you want to improve and you want to progress then the barriers you start to bang into / you've got to have some barriers / new barriers will come up and then it's how you deal with that from an organisational side of things..	
K:	..and for me / sorry / having started a brand new programme which I had to co-write myself and again do a bit of research and put it all together / it has been invaluable having the feedback of something that I've had to put together myself from scratch virtually from my observers / so the feedback from them has really helped me to interact with my group better.	

Appendix M:

Examples of additional questions, probes and prompts used during Individual Interviews and Focus Groups

Additional questions, probes and prompts were used as a means to develop points and encourage participants to clarify their responses. As the individual interviews and focus groups were semi-structured, these tools were used as required and were not scripted or planned beforehand. In this way they embrace the semi-structured methodology.

Additional questions : questions other than the four key questions

Probes : an open invitation encouraging participants to develop a point

Prompts : a guided invitation asking participants to consider a specific example

Individual Interviews

Examples of additional questions asked by researcher

During interview with participant C: *Do you think that it's comforting when you read a theory?*

During interview with participant F: *So when you taught your very first lesson how did you know what to do?*

During interview with participant J: *Do you think that next year when there is no PGCE/Cert Ed / do you think that theory will still influence you?*

Examples of researcher probes

During interview with participant A: *So how do you come up with these ideas?*

During interview with participant D: *How did you come up with that system?*

During interview with participant M: *...so why did you decide to do that?*

Examples of researcher prompts

During interview with participant B: *What about things like your employer or colleagues would they influence decisions?*

During interview with participant H: *And is that comforting / do you feel?*

During interview with participant J: *Yeah / they must as employers give you some guidance?*

Focus Groups

Examples of additional questions asked by researcher

During FG1: *Do you recognise an increase or improvements in your teaching practice?*

During FG2: *...how did this happen / in what way has it affected you?*

Examples of researcher probes

During FG1: *Why do you think that?*

During FG2: *You mentioned teachers / how do people feel about the way they were taught?*

Examples of researcher prompts

During FG1: *So what do you think makes an effective class / if we're talking about sort of divisions within a class / what's an effective class?*

During FG2: *Do you think that experience / how important is experience?*

Appendix N:

Coded Transcripts of Individual Interviews

These transcripts are presented verbatim. Punctuation is kept to a minimum in an effort to mimic speech. The punctuation that is used is as follows:

/	signifies a pause of three seconds or less (approx.)
//	signifies a pause of more than three seconds (approx.)
(...)	signifies where a word is unclear or inaudible
..	signifies where one speaker is interrupted by another

	Participant A
RESEARCHER:	Can you describe the format of a typical lesson / your typical lesson // how it might run?
A:	Yes // it has a beginning a middle and an end with some flexibility that's my kind of rough outline in that // when I'm kind of / my beginning is when I'm planning it so I'm looking at my subject content / what I'm hoping to achieve in my lesson and how I'm going to achieve it with the group of learners / roughly knowing my group mix in whether I'm going to have people absent or people on sickness or what have you and then I then move into my lesson itself as I've planned it on my // from my lesson plan off my scheme of work / lesson plan // and then apply it in the classroom so that the middle of the lesson is really all about kind of the nuts and bolts of what I'm actually doing // so that can be for example setting activities / asking students to do some research / involving discussions / trying to elicit information for ideas // and then // then my part would then be // kind of bringing the lesson together which kind of forms two phases / one is that I'm trying to check if there is any learning so I'll be doing some questions and answers with my recapping and then I bring the lesson to a close with an actual question and answer phase.
R:	What sort of influences your planning decisions?
A:	Often my knowledge // or if I have less knowledge or experience in the subject because even though I may have overarching experience I may not have specific knowledge about a certain topic and I have a general knowledge so // what I'll do is // if I feel that I'm kind of lacking some areas I have to go and do a bit of research extra / so that I can bring that content into the lesson much more effectively.
R:	What about things like your employer or your colleagues would that influence anything?
A:	Yeah I do I bring often when I can guest speakers in but they're quite difficult to source / not because of what they are because of their own availability because they are all Public Service employees and where I can and I have done I do a (...) and take students out of the learning environment in the college and take them into an institution much like / I take them to the crown courts or to the Old Bailey in London or we go off to // into the

Comment [A1]: PSY

Comment [A2]: AFF

Comment [A3]: PSY

Comment [A4]: PSY

Comment [A5]: SP

Comment [A6]: NA

Comment [A7]: PSY

	countryside and do expedition skills and all the leadership command task.
R:	So how do you come up with these ideas?
A:	It's just // well I think a lot of it is because since I was a student it never happened to me and so I often reflect back upon my days of being a student and how I wasn't offered opportunities to go out and explore and see things and bring realism or bring life to learning.
R:	I like the sound of that. Do you think that // you know // we've been looking at / over the last two years education and thinking about education // do you think that // do you honestly think education and the thinking about it and the theory of education affects your practice?
A:	I understand the theory of learning now // the theory of education // does it really affect my practice / I suppose it does but I don't // I'm not conscious of it because I have a systematic process of teaching and learning // and it's only since I've done my theory of learning that I've really understood that actually what I do fits that model // so for example that Fitts & Posner model that fits what I do for expedition skills and pretty much all of what we do as a teaching team in Public Services from cognitive right through to the autonomous stage and it's that that I didn't / when I set out teaching two years ago I didn't realise / or think that what I was doing there was a theory behind it to me it was just a process of teaching delivering and facilitating learning.
R:	So the theory describes what you were already doing?
A:	Yes // yes it does to me // yes.
R:	That's quite interesting // do you think there is a chance then that there is another theory that might also describe what you are doing?
A:	Yeah well I think // that's deeper than me really that question because I only know what I know and to think of another theory would mean thinking outside the box and I don't think outside the box // I just see it as it is and if I see it and I have the skills mix I can facilitate learning // and if I don't know it I don't have the time to think about another theory I suppose there is always going to be another theory // but that's going to be brought about by some academic that's got the time and the money to invest into another theory.
R:	So broadly speaking would you say that for you theory has described your practice or has it told you what to do / has it prescribed your practice?
A:	I'd say that the Fitts & Posner model has highlighted the // what I do // based on the theory that we've studied // it's not to say that I set out when // like your first question / what are your four stages typical to a lesson / I wouldn't suggest that I kind of think Fitts & Posner or I think of Wellford or Honey & Mumford / I don't think about these models I just think about how I would like a lesson to be structured based on my own experience of being a student or a learner in previous years so in answer to your question I don't // I suspect that now that theory relates to my practice as a practitioner but I'm never conscious of it when I'm delivering.
R:	Do you think it will change now in the future / now that you are aware of Fitts & Posner?

Comment [A8]: PSY

Comment [A9]: RE

Comment [A10]: AFF

Comment [A11]: EM

Comment [A12]: H3

Comment [A13]: UN

Comment [A14]: CF

Comment [A15]: H2

Comment [A16]: UN

Comment [A17]: CP

Comment [A18]: RE

Comment [A19]: H1

Comment [A20]: H2

Comment [A21]: NA

Comment [A22]: H2

Comment [A23]: UN

Comment [A24]: RE

Comment [A25]: EM

Comment [A26]: UN

Comment [A27]: H2

A:	No.
R:	No?
A:	No because I believe / going through my lesson observations and comments that you've made in your feedback on my // for example my theory of learning // I believe that I'm actually on the right track anyway and I guess that it would just be a natural progression to always try and improve where I can // with either peer observations or through some kind of mentoring system further on // but I won't / I don't think I will really ever look back on the theory of learning // I may do // as // just as a point of interest but it won't be do I now go on and adopt this theory // shall I try and adopt that theory / because I don't believe there is enough time to do that in my practice as a practitioner at the moment.

Comment [A28]: LT

Comment [A29]: H2

Comment [A30]: NA

Comment [A31]: EX

Comment [A32]: UN

Comment [A33]: H2

Comment [A34]: RE

	Participant B
RESEARCHER:	Can you describe your / what you might call a typical lesson for you? A typical lesson yeah..
B:	..alright // so essentially when they've come in I'll have a mini Maths quiz on the board of about ten questions ranging in difficulty from times tables to converting metric measures things like that and then once we get further on into the year I'll get them to try and convert fractions into decimals or percentages things like that just as a warm up before the main topic // the main topic will last about half an hour / three quarters of an hour / on say fractions and percentages things like that and then after that it'll be down to individual work / what they feel they need picking up on or continuation sheets from what we've done in the first part of the lesson.
R:	So what sort of influences your sort of lesson planning decisions?
B:	The curriculum!
R:	The curriculum?
B:	In general it's // although yeah it's my choice as it were I'll think of an order of doing things that's like a scheme of work that we have agreed for the term and unless there's // you know // someone's had or the class as a whole has had difficulty with a topic in which case we'll continue that topic next week and the scheme of work goes out the window // but unless that happens then I try and keep to that certain structure going through the year until we get to revision time.
R:	What about things like your employer or colleagues would they influence decisions?
B:	They influence it on the // when we create the scheme of work at the beginning of the year as to what we think is a sensible order to do things so we all discuss that and some people say we should do division straight after multiplication and others say no we don't want to do that it's too confusing we should leave it be for a bit and then go on // but // yeah it's // once we've had the discussion at the beginning of the year and sorted ourselves out then // that's about it really.
R:	We've been looking / or studying together for the last two years // and discussed various aspects of theory would you // do you honestly feel that theory effects your practice or influences your teaching practice?
B:	That's a difficult one // I've noticed things during the lesson if you

Comment [A35]: PSY

Comment [A36]: AFF

Comment [A37]: COG

Comment [A38]: COG

Comment [A39]: PSY

Comment [A40]: AFF

Comment [A41]: LC

Comment [A42]: PSY

	see what I mean then I've suddenly thought oh that's that but I think was probably doing it all unconsciously in the first place and it's just a matter of sudden consciousness that there is a theory behind what you are doing.
R:	Do you find that useful or helpful to know that?
B:	I can't say that I did / no not really // I mean it's // I suppose // it's reassuring // I suppose that someone has thought about it in the same way as I'm doing it / sort of thing but I don't know if it's helpful.
R:	So broadly would you say that educational theory describes your practice or does it define your practice?
B:	Defines it really I would say // (...) // from my point of view obviously I haven't come through teacher training and all that I just came from the outside world and plonk in front of a class and teach them maths // [laughs] // which was interesting // to a certain extent I suppose you could I was creating my own theory as I was going along but // it seemed to gel with most other people's way of doing it as well // so // but then again I suppose I've got the background of having been taught maths as well you know at school although that was thirty odd years ago but you know // a certain amount of it / I think / has been retained.
R:	So do you think then that // is it knowing your subject or knowing about teaching that is more important?
B:	You've certainly got to know your subject // but I feel you've got to also be able to get a rapport with the students // now whether that's // you could get that through theory I don't think you can I think that's more a personality thing and empathising with the learner really.

Comment [A43]: RE

Comment [A44]: UN

Comment [A45]: H2

Comment [A46]: UN

Comment [A47]: CF

Comment [A48]: H2

Comment [A49]: UN

Comment [A50]: H1

Comment [A51]: RE

Comment [A52]: EM

Comment [A53]: EM

Comment [A54]: H1

	Participant C
RESEARCHER:	If we can start think about / I wonder if you could describe what you might call the format of the typical lesson for you?
C:	The typical lesson // the typical lesson we normally give students workbooks which // where we would have them write up points of the board / have a sort of two minute / maximum two minute video clip where they can probably get sort of a visual part of it / make sure we ask questions on the video / encourage them to make notes from that workbook and hopefully take the notebook away with them and revise from it and not throw it in the bin or leave it in the classroom as a lot of them do.
R:	Would you say there is a sort of beginning middle and end phase to sessions?
C:	I certainly try yeah // aims and objectives at the beginning and recap on the aims and objectives at the end so that they've got a clear end to the lesson / and then activity somewhere in the middle is the sort of aim / main aim.
R:	So what influence your lesson planning?
C:	Honest choice / what I've learnt on this course / I mean originally sort of what I knew about lesson planning was very very sketchy and then from sort of being in lessons and being part of lessons and watching what other people do has influenced the structure // // and obviously it's a fairly proven structure and appears to work so you know keeping to that influences the whole lesson and nine times out of ten it works / sometimes it goes horribly wrong but..

Comment [A55]: PSY

Comment [A56]: AFF

Comment [A57]: COG

Comment [A58]: LT

Comment [A59]: SP

Comment [A60]: EX

Comment [A61]: NA

Comment [A62]: LC

Comment [A63]: UN

Comment [A64]: H2

R:	..would you say that your employer or your colleagues influence decisions / planning decisions?
C:	My direct // sort of people I work with /yes // they sort of / good practice / bad practice / you know influence /sort of influence sort of twists and turns / I think the management are more jumping through hoops and probably a little bit too distant from what happens in the classroom to influence what actually happens / influence what you put on paper maybe but influence what actually happens no / because they are probably too distant from the real world.
R:	What about your own sort of subject specialism / how does that affect your teaching?
C:	Without it I wouldn't be able to teach // I think personally / coming from the industry and having sort of thirty some odd years of background I can bring in my own failings in the industry / my own mistakes / my own experiences / into the lessons and make them real for the students rather than / you know sort of / here is the theoretical what it's supposed to do / and they can appreciate I've been there / I've done it / I've made some mistakes / I've blown engines up and so on and so forth and had to put them right / that makes it real to them so / yeah I think that's a very important part you know / not just being a sort of paper based person I don't think without it I could do what I do.
R:	We've been working /studying together for the last two years / looking at various bits of education / teaching / learning /do you think that educational theory influences your teaching practice?
C:	Quite interested in this / I don't think it influences / I really don't think it influences / I think it recognises // I think – I believe I really believe / and talking to other people / we do what we do anyway / we naturally progress / we've naturally found through help and assistance and guidance what works best and when you look at what educational theorists say / if you look at it as we have done / most of us have been teaching you know sort of one or two years before / we look at what we are doing we look at how we are progressing then you look at what educational theorists say / it's a reflection of what we do anyway / it's highlighting it / toning it maybe / honing it and you know sort of pipping / okay that really isn't working leave that alone and go this way but I really think we do that anyway and it's highlighting and recognising it so much as making us do it if you see what I'm saying.
R:	I do / I do // so would you say there that educational theory describes your practice or does it sort of prescribes it / tell you what to do?
C:	I think it describes what we are naturally doing well / you know yes we are doing some things wrong and you know it helps but I think it's looking at what people naturally do well and describing that / not //and again I think it's picking the good bits that work and then probably showing other people / not sort of / oh this is an idea we will use that and / yeah that's good / even if it isn't / I think it's looking at what we actually do / what works and sort of going on that // I think it / especially looking at some of the projects we have been doing / looking back through history / you know we are doing it / some of us naturally some of us not so naturally doing certain tasks and then we look at what theorists say / we naturally

Comment [A65]: LC

Comment [A66]: H2

Comment [A67]: RE

Comment [A68]: EM

Comment [A69]: H2

Comment [A70]: UN

Comment [A71]: H2

Comment [A72]: NA

Comment [A73]: UN

Comment [A74]: RE

Comment [A75]: H2

Comment [A76]: UN

Comment [A77]: H1

Comment [A78]: SP

Comment [A79]: RE

	jump from one to another as the situation arises / we ask a question the answer don't come / we put a pointer in / then we look at what theorists say about it / that's what we should be doing / but we're naturally doing it anyway because we wouldn't get what we want without it.
R:	Do you think it's comforting when you read a theory..
C:	..I think it's fantastic yeah / yeah it's an absolutely brilliant thing / like you know these // these theorists / the sort of Spencers and so on and so forth they say / this is really really good and this is what we should be doing and you think / great I've been doing that /didn't realise I was doing it but I've been doing it and it's / yeah / it is good it's a great feeling when you realise you're doing it right for once.!

Comment [A80]: H1

Comment [A81]: UN

Comment [A82]: H1

Comment [A83]: UN

Comment [A84]: CF

Comment [A85]: H2

	Participant D
RESEARCHER:	I was wondering if you could sort of describe what you would call a typical lesson for you..
D:	..okay / it would have start a middle and an end hopefully // the start would be setting up the aims and objectives of the lesson the middle would be the most /part / the main content / activities feedback recap and then at the end it would also be more feedback and sort of checking the learning that has taken place and coming back to the aims and objectives.
R:	How did you come up with that system?
D:	Definitely [names interviewer] [laughs] // yeah from day one I think you've made it really important for us to know how to set up a lesson we've just been saying about writing assignments / coming slightly off the subject / we've just been saying that really from day / year one has set us up for year two and that's down to yourself because A and I said /yes we're glad it's over but actually it seems easier than year one because we kind of knew which way to go / and the same with lesson planning // so yeah yourself really.
R:	So when you first walked into the classroom what were you thinking then?
D:	Ever?
R:	Yes..
D:	..in Cert Ed? // I thought I was the underdog okay / because I hadn't been in education for myself for years / I assumed everyone would be new at teaching in terms of none of them had jobs particularly apart from similar to myself // I didn't think for one minute I'd be picking up people who had been working for years and actually then were just trying to boost their qualification or being told to boost their qualification / I thought I would be in the / I'd didn't think I'd be in the minority I thought I'd be in the majority of people doing it voluntarily // but I was scared / a little bit nervous to say the least.
R:	What about your first time as a teacher standing there in front of a group?
D:	Because I was a manager / although I was really nervous / I think the most nervous I've been has been when I'm being observed and // I just think the most important thing for me when I'm teaching is that if I've got the rapport with the learners / which I feel I get fairly quickly even if they are a new group // they just

Comment [A86]: PSY

Comment [A87]: LT

Comment [A88]: COG

Comment [A89]: RE

Comment [A90]: EX

Comment [A91]: LT

Comment [A92]: AFF

Comment [A93]: AFF

Comment [A94]: UN

	seem to // it's very much mutual respect I find / so if I'm nervous I think that's kind of quelled by them responding to me // the one instance was in [names teaching centre] where they completely refused to speak to me /so going back to that lesson that was horrendous / or several lessons with that group / but my first lesson ever / really nervous but felt that I was going along the right because Cert Ed had sort of given me that push to do it.
R:	So what would you say influences your lesson planning decisions?
D:	[[The observational //the observation comments that I've taken onboard // have changed totally the way I feel that the learners need to get information from me // I really really don't // I can't say just how important those observations have been really – they've you know // [lists observers] // all the colleagues when / you don't feel that if they walk in the room now that it's a problem do know what I mean / at the beginning if I thought a colleague was walking in I'd be thinking I don't even know if I'm doing this right / you know I'm assuming I'm doing it right because I've got the job / shouldn't be saying this on tape but you know / it was very much a case of / I was teaching myself the ropes before Cert Ed really.]
R:	Quite interesting.
D:	[Laughs]
R:	So we've been working together for two year thinking about education learning teaching / all these things / would you say that educational theory affects or influences your teaching practice?
D:	Yeah / I think certain theorists we've discussed / to me/ I think I even said this in my assignment / are slightly over my head but Race for example who is very very up to date I use a lot of what he does and he seems to sort of be very much in tune with what I like about learners / so/ very simple language / I don't do the old English particularly / again maybe that's what I thought when I came in that it would be a lot more high brow and I've been quite relieved that it hasn't been quite as bad as I thought // but yeah I do take onboard what they think / and also you know different sort of / I always write notes in our lessons as you know and I always go away / and I've said it in my PDR which you haven't read yet that I always go away with some ideas from this lesson an often theorists have come into that / so yeah definitely.
R:	So you think people like Phil Race would / does he describe your practice or does he define and tell you what to do / how does that work?
D:	He just comes up with some great ideas so / it's not just the one assignment I've done he's got a huge booklet of ideas // Phil Race does he describe? // he'll give me ideas or the website will give you ideas and / some of them I've of and some of them I haven't and then he'll tune them into / bit of both really / I'll take onboard what he'll suggest // but don't quote me on the theorists but things like your storehouse method and the way that people are inductive and deductive you know it's those things I think of when I'm writing the lesson plan – believe it or not.
R:	Would you say that your colleagues influence this as well / I mean you mentioned how the observations support / what about your employer or your colleagues would help to support your practice?
D:	I've got a very supportive boss / very supportive/ and very

Comment [A95]: CF

Comment [A96]: AFF

Comment [A97]: CP

Comment [A98]: NA

Comment [A99]: LT

Comment [A100]: H1

Comment [A101]: LT

Comment [A102]: LC

Comment [A103]: EX

Comment [A104]: H1

Comment [A105]: UN

Comment [A106]: H3

Comment [A107]: CP

Comment [A108]: NA

Comment [A109]: NA

Comment [A110]: UN

Comment [A111]: NA

Comment [A112]: UN

Comment [A113]: H2

Comment [A114]: UN

Comment [A115]: H2

	approachable / so if he came into a lesson he would certainly / if asked / make suggestions / and he often comes into lessons you know just walking passed // but yeah I mean the support is there if I ask for it I wouldn't say it's always being thrown at me but I'm not that sort of person I don't think / I think that if somebody was asking for support they'd get it / certainly from the business team and certainly from Cert Ed / anytime I've asked for help it's been there / and advice and // is that answering the question?
R:	Brilliant..
D:	..not sure if I'm going off the question here..
R:	..you can't go wrong..
D:	..okay.
R:	So would you say that / theory has a place in teaching then / for people learning about teaching?
D:	Yes / yes / because I think it goes back to the basics doesn't it of where it all stems from / how / if somebody was to tell me that the way that I was doing something was either correct or incorrect / it has to go back to why it was incorrect or why it was correct and / you know if somebody can say well there has been huge amount of research / then as long as it's not saying go back to 1054AD or whatever / but actually it's quite current and we can see it working in practice then yeah I think it affects it all.

Comment [A116]: LC

Comment [A117]: CF

Comment [A118]: LT

Comment [A119]: LC

Comment [A120]: UN

Comment [A121]: H2

	Participant E
RESEARCHER:	I want to start with you thinking about / if you could describe the format of typical lesson for you / if you are teaching a typical lesson what would it look like?
E:	A typical lesson // I'll start with a recap / a very typical lesson /recap then I'll do a small activity / probably on the recap get them to see how much they have learnt in previous lessons and once that's done I'll do a / I'll close it down and start with a new topic //and once I've start with the new topic / to check whether the learning / whether they have understood or not I'll do another activity / keep them busy and later on I'll close it down but I'll link this one with my next lesson / I'm kind of / I'm going to brief them out just a little bit just to say that this I the topic I am going to be covering so if anyone wants to read it beforehand they are most welcome to and // that's it / that would be my typical lesson.
R:	So what influences your planning decisions?
E:	Influences my planning decisions // I'm with the HE / and a lot of the things have been like given by the university and scheme of work is also given by the university to say / this is what needs to be covered in this lesson and not / so I look into the topic and I also look into what things are around and that's how I plan my lesson.
R:	What about things such as your own specialism / your subject knowledge / your colleagues / your employer / does that influence your planning?
E:	I don't understand – could you..
R:	..would you / your knowledge of your subject influence how you teach your subject?
E:	It does // it does in a way / I look into books and I do my research as well / before I go out / go on to teach I look onto books and what I have studied previously / the notes I have and things like

Comment [A122]: RE

Comment [A123]: PSY

Comment [A124]: COG

	that // that's how I do my lesson plans.
R:	How did you know to do that / how did you decide how to plan a lesson?
E:	How did I decide to plan a lesson?
R:	How did you work out / when you first taught a lesson how did you know what to do?
E:	I don't know how / I can't remember but it just / something which I learned at the university as well / they do a lesson plan and before I / when I started I saw my lecturers using that lesson plan and that's how you should be organising yourself before you into the lesson and that's how I learned // I learned from others yes / I learned from my team members and I / the mentor I had at university / I had a mentor who was helping me out so he kind of guided me saying that this is how a lesson plan should be planned and / that's it / different colleges / different institutes have got different lesson plans and I kind of changed my lesson plan based on whichever places I went to so the university had a different kind of format where activities were less / more emphasis was given in teaching / giving information / because you have very limited time and you have to cover so many things / activities were less focused but there were seminars that used to cover the activities / seminars and workshops so / that was different / when I came into college [names college] it was totally different / it was more of like / we treat them in higher education but at the same time we also look at / make them teach like an FE student / giving them lot of activities in the class and getting them to answer back and things like that / like / it's more of like testing / checking on whether they are going / checking whether they have studied / they have understood the topic all the way through / where the university is totally different / you just do it in one go and you don't / well they can stop you and ask you questions but it's just not you do check on the students whether they have understood or not / it is only when they go on to seminars and workshop or through their assignments you get to see the feedback.
R:	So why do you think the two institutions would have different ways of doing things?
E:	I think it's more to do with government policies and structure / the colleges have got this policy that / things that needs to be / like Ofsted and these all these things / and because of that they have this criteria that they have / you have to see where the teaching is taking place and things like that in colleges whereas at university I think that they have their own governing bodies and they've got a different strategy and this is why I think things haven't worked in university / varies from one university to another.
R:	We've been studying / working together for two years now / looking at teaching / learning / education / do you think / or do you honestly think that educational theory affects your teaching practice?
E:	It does / it does / I have learned a lot of things while doing my PGCE / when I was teaching at university it was totally different it was more of like I didn't know what to expect my students to / like whether they are learning or / to test and things like that / whether they are learning in class or not / to check on this and things like that // when once I started teaching at [names college] it was

Comment [A125]: RE

Comment [A126]: COG

Comment [A127]: SP

Comment [A128]: NA

Comment [A129]: PSY

Comment [A130]: NA

Comment [A131]: LC

Comment [A132]: EX

Comment [A133]: COG

Comment [A134]: NA

Comment [A135]: COG

Comment [A136]: PSY

Comment [A137]: UN

Comment [A138]: NA

Comment [A139]: SP

	more of like / my whole thing has changed / I now have a very small area and I kind of increase that and try to have number of things going on in the class / a lot of interaction with other whereas at university it was absolutely different.
R:	So / would you say that theory then describes what you do or does it tell you what to do?
E:	Theory kind of supports what I do / I can't just pick up from the book and then kind of just do it I have to / I can adapt the / I have I think at the back of my mind / but it kind of supports me in what I am doing / it's/ rather than taking word for word and doing it in the class no / I kind of change it as I go along I even change my lesson plans / whatever I have in the lesson plan I sometime don't even follow because I / because of the demand in the class / the students if they ask for further explanation I have to spend a little longer to explain that so the lesson plan goes out of the window.
R:	That's quite normal / do you think that theory's comforting in that way then?
E:	It's good to know theories / and / theories are something which kind of helps the people to think and bring in new ideas as well / like different people have got different theories and you can criticise them / it's not that / or take in their values so // the number of people who have come up with different theories and you just bring in different ideas and do it together.

Comment [A140]: SP

Comment [A141]: NA

Comment [A142]: EX

Comment [A143]: CP

Comment [A144]: UN

Comment [A145]: H2

Comment [A146]: UN

Comment [A147]: H2

Participant F	
RESEARCHER:	I was wondering if we could start by you describing what you might call the typical lesson for you / what is the format of the typical lesson that you teach?
F:	It's got to be the Media Make Up I was just having a gripe with H in the other room but yeah / what do you want to know about it?
R:	Does it have / do you have like a beginning middle and end / what's the structure like?
F:	Oh right / yes I do / we've got to actually first of all teach all the learners about all the equipment and everything that they actually need to know / and how to use it because without that /there's quite a lot of chemicals and things that are involved so if they don't actually know how to use it in the correct way then they can't actually move on to the next progression of you know actually getting the practice and using them as well / and then once they've got the practice of using them they actually then have demonstrations and I can you know / they can practice on their skills and timings and things like that / and then you've got the end result which is where they have their assignments and assessments and things like and then they produce whatever as the end result should be.
R:	What would you say influences or affects you planning when you come to plan a lesson / what's in the back of your mind?
F:	How much time I've got is really the main factor of how I'm going to get through and make sure that each individual learner understands because I don't like to move on unless everybody really understands what they're doing because I think it's very important / especially in the line of / you know / of the job / of the course that I teach / if they don't understand they can't actually produce / I mean they' be really probably good but if they can't

Comment [A148]: PSY

Comment [A149]: COG

Comment [A150]: COG

Comment [A151]: UN

	actually produce very good work / and sometimes you know once the penny's dropped they just kind of excel and they just / you know / can produce some really good work.
R:	What's the main thing that affects it / do you think it's about your knowledge / your industry knowledge / is it about your research / is it about your employer or your colleagues – what's..
F:	..it's a combination // I think it's all of those / combination of them all because I've got quite a lot of insight obviously into the industry and I've got all that knowledge and so even on the scheme of work / or what's required to pass the actual assessments / that knowledge that I've got is not actually down as a requirement so it's a thing of like thinking // do I throw that out or do I let them know / you know / and things like that so then I think oh it's another little added bonus and I just showed them even though it's not actually needed to pass the qualification / and then you get the pressure from the hierarchy as I call them when you know you need to get them through and pass the qualification 'cos it's all seats on bums and things / because my group is only like one group / it means that if they don't pass it affects the next year because I don't get the funding.
R:	We've been studying / working together for two years now / doing this course / we've looked at sort of teaching / education / all these theories // do you think that educational theory influences your teaching practice?
F:	I could have said last year / that no / because it took me a little while to understand what some of these theories were going on about because some of them are quite deep and when I read up on some I kind of lost my way basically // I could see the point of what they were trying to say so once I did grasp and start to have an understanding I could actually put some of what they said into place or you know identify some of my teaching practices with it // and that made it a bit easier should I say to understand / and some of it's a bit deep / you know what I'm like [laughes] yeah so to a certain extent / not a lot / I think the more modern ones I could probably relate to because I think everything changes and evolves at such a you know fast pace that / you know / if somebody said something back in like 1920 / to 2007 / to me is you know // I don't think it's gonna bear too much relevance in nowadays society.
R:	So when you taught your very first lesson how did you know what to do?
F:	Well I had a scheme of work and everything and // I can't remember / I can't think back that far now / yeah I had a scheme of work and everything like that and I just thought to myself what do the learners need to know first of all and – thank goodness 'cos I'd gone through the same type of / I didn't actually just go and find work through this way / I went and I went through education that way to learn my qualifications so I kind of took a bit of / what do they need to learn and reflected back when I was being studied and taught and then used that as my base /so I think that helped me/ and used that and think / right I learned that first this second and I think / right / down the same lines / also looking at the actual assessment books to see what they would need to learn first and then just start to put it into a scheme of

Comment [A152]: COG

Comment [A153]: UN

Comment [A154]: RE

Comment [A155]: H1

Comment [A156]: UN

Comment [A157]: RE

Comment [A158]: CP

Comment [A159]: H2

Comment [A160]: NA

Comment [A161]: CF

Comment [A162]: H2

Comment [A163]: UN

Comment [A164]: RE

Comment [A165]: RE

Comment [A166]: EM

Comment [A167]: RE

Comment [A168]: EM

work / it's worked so far / yeah / yeah / that's how I've done it.

Participant G

RESEARCHER: I was wondering if you could tell me about / what you call / the format of a typical lesson for you / what is the sort of structure of a typical lesson?

G: Just start with the aims and outcomes so they know where they are coming from really / what they're expected to do during the lesson and what they are going to achieve once the lesson's completed // obviously there's individuals that won't achieve everything during the lesson but that's obviously / that's where I come in to interact on a one to one basis really / so at the start of the lesson they know what they've got to do and what they've got to achieve by the end of it / that's in a practical lesson / and again I think really in the theory as well whereas / we lay out all the aim and outcomes / have tasks for them to do so that they're not bored during the lesson / a lot of the time we do demonstrations and then they have to repeat the demonstrations just to learn like monkey see monkey do.

Comment [A169]: PSY

Comment [A170]: AFF

Comment [A171]: PSY

R: So what sort of influences your planning decisions – is it your..

G: ..curriculum from the examining boards really / from VTCT / they set out the criteria what we have to cover / and we have set criteria in their assessment books that they have / so we have to meet every / and every three years they change it slightly / for example one year they might have / hot mix for your hands in a manicure but they might take that out for the following year / for some unknown reason / we don't know why / they might do and they might not they just change it and put something else in / so it's all set by criteria.

Comment [A172]: COG

R: So if / you know / you can think back to the sort of first lesson you taught / or the early lessons / how did you know what to do?

G: By talking to other tutors that are on the course / we've got a tutor co-ordinator // we've a scheme of work that we use for the whole of the year / and it doesn't really change that much//we have//a lot of it has been set in stone for a while even though we do have changes and tweaks / we know that we are teaching on what qualifications we are teaching and what really comes under that umbrella as in areas we have to teach / for example if you're doing a level one then in the level one they have to do practical / mini manicures and mini facials / we know they don't do the massage in that so we know we have to teach all about skin and skin type and how to cleanse the skin / masks / and how to take out impurities and types of mask but we don't tell them much else.

Comment [A173]: LC

Comment [A174]: H1

R: So when you've got all this sort of specialism / industry specialism / knowledge of that type of thing does that / is that more important than things like teaching theory or teaching practice theory /what's..

G: ..no // they're both as important as each other because they have to / you have to understand the underpinning knowledge of why you do things and the effects of things and while you're doing a practical treatment why you are doing a practical treatment and what the effects it will have on the client that you are doing / so it's not just / cleansing the skin / putting a mask on / taking it off an saying thank you very much / it's / you've got to understand that

Comment [A175]: UN

Comment [A176]: H3

	there are certain people that you can't do the treatment on and why you can't do the treatment on them / you've got to identify skin types and by identifying skin types so you can give them the correct treatment / if you give them the wrong treatment for the wrong skin type you can actually make their condition worse / if they've a very overactive acne skin / if you use a dry one for an oily it will just make the skin worse / you got to know / about / the layers of the skin and how the layers of the skin work and how it reproduces because the skin is the biggest organ in the body and it's a live and living organism / so they have to know all about those and how it's not just superficial it's deeper that / and /why they don't do things.
R:	Right // what about / if that is the sort of theory of your subject / what about the sort of theory of teaching?
G:	You need to know about /as in how they work?
R:	As in how you teach!
G:	How I teach / at the very beginning we ask them to do a questionnaire and we try and identify their learning styles / so by identifying their learning styles and / the one we use mainly is when you identify if they are audio / visual / linguistic or kinaesthetic / so by that you can understand that by / well you just don't want to stand there and talk to them all day because they're just not going to take it all in / they've got to be able to touch and feel / mainly a lot of them within our field of beauty it's / it is visual / and kinaesthetic / by touching / that's what they really come under so by watching and doing really / so you need to make sure that you're doing good demonstrations / you're interacting with them once you've done your demonstration to make sure they can do it / if they're doing it wrong you can interact with them again / and re-demonstrate and make sure that they are actually hands on / by touching and doing.
R:	So / we've been working together /studying together for two years now / doing this course / do you think that things like / you know / we look at teaching / learning / theories / do you think that educational theory influences your teaching practice?
G:	What do you mean by that then?
R:	Well some of the theories that we've discussed in class that..
G:	..yeah they do now.
R:	What do you mean <i>now</i> ?
G:	By doing this course it has because I think it identifies that you can actually get better response from your learners / everyone can learn doesn't matter what level you are at / that's what I have learnt / but it doesn't matter what level you are at everybody can achieve and everybody can learn if you understand their learning style // so / I've learnt that by doing these lessons // whereas beforehand I would have been yeah right.
R:	So does that change what you do in the classroom?
G:	Yeah it does / it changes that / I have a list of their learning styles so I know what they do so it changes how I would actually do my lessons / that I don't do too much standing up and talking / I have lot more / I have handouts for them and I do a lot more hands-on practicals and tasks in theory lessons as well / otherwise you just lose them / you can see them go / their eyes just drift to the back of their head / and they're gone / so it really does make / I think it

Comment [A177]: UN

Comment [A178]: H2

Comment [A179]: UN

Comment [A180]: SP

Comment [A181]: UN

Comment [A182]: H2

Comment [A183]: NA

Comment [A184]: CP

Comment [A185]: SP

Comment [A186]: NA

	makes a difference because you have the concentration with them and they're interested and it's how they're learning / they are taking it in.
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Comment [A187]: UN

	Participant H
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RESEARCHER:	If we can start by / if you can sort of describe the format or structure of a typical lesson for you / how you teach a typical lesson?
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H:	A typical lesson for me // I always start off with my aims and objectives displayed on the whiteboard / go through it with the students so they know exactly what they're going to be doing in the lesson / what they're going to achieve from the lesson // then I give them clear instructions of what they need to set up for / we then go through a little bit of theory and then straight into practical / demonstrations and then practicing what they've actually learnt so far.
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Comment [A188]: PSY

R:	Okay / so what influences your lesson planning / what affects it?
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H:	What affects it? // the performance criteria that we need to deliver // also the type of learners that I've got.
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Comment [A189]: COG

R:	What do you mean <i>type of learners</i> ?
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H:	Any sort of differentiation that I need to include / any that need support // just their type of learning styles / I try to just make sure I've got a lot of variety of teaching in there so that I'm keeping everybody's attention / and focused on what we're doing.
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Comment [A190]: AFF

R:	What about things like your employer or your colleagues / does influence how you teach?
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Comment [A191]: UN

H:	Yeah we're always / or I'm always aiming to make sure that we're teaching our learners to make them / commercial / try make sure they're commercially viable / to make sure they're employable // we're always aiming within the department to make sure that we're all teaching our groups exactly the same so we have lots of course meeting to make sure we're all teaching to the same standard / we're all teaching the same criteria and in the same way.
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Comment [A192]: LC

Comment [A193]: UN

Comment [A194]: COG

R:	We've been working together two year now / PGCE / Cert Ed / you know / covered a lot of ground / you know / teaching / learning theories and what not / do you think that educational theory has influenced your teaching practice?
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H:	It's made me think about my teaching practice more so / yes definitely and / it's made me / when / it certainly when I did the theory of learning assignment / it made me realise how much I actually do without realising // so yes it has to certain extent.
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Comment [A195]: UN

Comment [A196]: RE

Comment [A197]: H2

R:	So do you / would you / are you saying that the theory describes what you do or tells you what to do?
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H:	I think it describes what I do.
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Comment [A198]: H2

R:	And is that comforting / do you feel..
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H:	..yes / yeah it is actually because I've never thought about it before so / yes // it was / it sort / you know you sort of do it automatically so when you then you think about what you're doing it made me realise that the theory / especially Kolb's theory / what I actually looked at / made me realise that I do actually do it already anyway.
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Comment [A199]: UN

Comment [A200]: H1

Comment [A201]: RE

R:	Right / how would you feel about a theory that told you what to do?
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H: It depends because in this bit our criteria tells us what we have to do anyway so // in that respect it's good because it give you something / a guideline to follow // in another respect if somebody's saying / I don't know / if somebody was saying / you can't do this you've got to do this that would be a little bit different so it depends how it relates to my subject area.

	Participant J
RESEARCHER:	If we can start by // if you can describe the format or the structure of what you might call an average lesson that you teach..
J:	..right okay // well my subject is very practical as you know / it is very practical and after an introduction I try and make it as relevant to them as I can / so they have to buy into it if you like and believe the what I'm going to deliver is important to them and I try and tie that into work as much as I can as well / you know / when you are on site you will come across this because / and you need to know about this because // and so basically I would go through the key factors that I am trying to get across / putting in some verbal questions along the way and try and use some actualities / some real bits and pieces and materials and tools to demonstrate that / but after a recap at the end I will be then looking to go into some mini tests just to test the summative learning really.
R:	So what influences your planning decisions?
J:	The curriculum // it is very much based on the standards that I am working towards / the knowledge requirements that they need to have to pass their core knowledge tests at the end so when I sit down and devise my theory sessions I am taking it from the curriculum / pretty much // I do transgress a little bit where I think there are areas that I think they need to know even though it's not in there / from my own professional experience I suppose / and I do two or three sessions that are not actually in the curriculum but I think they need to know it.
R:	So what about the impact of things like your employer or your colleagues does that affect how you teach?
J:	The impact of my employers?
R:	Yeah / they must as employers give you some guidance?
J:	Yes / well we have internal observations obviously / as quality checks / apart from that the influence from my supervisors is not that great to be honest / I think they rely on my professional expertise to deliver what needs to be delivered / pretty much.
R:	So how did you know what to do when you first arrived in the classroom? How did you know..
J:	..simply answer to that is I didn't / I didn't know what to do first time I was in the classroom I'd not had any formal training whatsoever that came along the way if you like // it was pretty much a case of / okay this is your group / this is what they're learning / there's your keys and away you go // there was no other / nobody else trade specific / same as myself to guide me at the time // when I first went in / so I pretty much devised most things on my own to begin with / and quite a daunting experience at the time.
R:	So did / do you now have colleagues who have similar trades?
J:	Yes / yes I do now // yes we have other trowel occupations tutors

Comment [A202]: PSY

Comment [A203]: UN

Comment [A204]: UN

Comment [A205]: RE

Comment [A206]: COG

Comment [A207]: LC

Comment [A208]: CF

Comment [A209]: AFF

Comment [A210]: SP

	there yeah which we can bounce ideas off of each other / and it's quite useful if you get somebody new come in who has just come of site if you like they can bring new ideas to it as well which is always useful.
R:	As part of this course we looked at some sort of theories of / theory of education type stuff / do you think that the educational theory affects your practice?
J:	Yeah I think so / very much so / I didn't realise until I started the Cert Ed how much it really does and I found it really interesting to look into it and be made more aware of these theories / you know / it certainly made me think about my own practice a bit more // it's certainly done that.
R:	Do you think it changes your practice or does it describe your practice or does it tell you how to do it?
J:	I don't think it tells you how to do it / I think it gives you ideas / I think it makes you think more deeply about it / that's what I found // so you might reflect a bit more on what you're doing and maybe how you can improve it or make it more effective / because I mean there are so many different theories aren't there about education and teaching / but yeah it has made me more reflective / definitely / I think so / yeah // I wish I had more time to go into it deeper and use more of it but / you know / it's time preparation isn't it.
R:	Do you think that next year when there is no PGCE / Cert Ed / do you think that theory will still influence you or will..
J:	I think I will take with me what I've learnt / definitely / and I would like to think that I can still spend some time on drawing down the information and learning a bit more // we do / I mean / our office hours if you like are quite limited but I'm hoping that once I've finished here I can utilise Fridays a bit more towards that area now there's has been a bit of a / something's been established now / I'm not in there on a Friday and maybe I can go back and a say look I need this to do this a bit more on a Friday / that's the plan.
R:	So..
J:	..we'll see.
R:	What would you say is the thing in your opinion that makes a good teacher / or one of the things or a things?
J:	A good teacher / a depth of subject knowledge I think is important / and an ability to communicate that to whatever group you are teaching to / that might have to be different depending on the group I think // enthusiasm / I think is important // I think teaching is an act of communication really that the way I look at it I think that's what it is and if you can communicate it I think then you are succeeding to a certain extent.

Comment [A211]: RE

Comment [A212]: LC

Comment [A213]: H1

Comment [A214]: UN

Comment [A215]: CP

Comment [A216]: H2

Comment [A217]: H2

Comment [A218]: RE

Comment [A219]: UN

Comment [A220]: SP

Comment [A221]: RE

Comment [A222]: H2

Comment [A223]: COG

Comment [A224]: AFF

Comment [A225]: CON

Comment [A226]: UN

	Participant K
RESEARCHER:	Could you start with looking at / could you describe what you think is the format or structure of a typical lesson that you teach?
K:	Right // a format or structure of a typical lesson that I teach / would be / from a planning point of view / obviously the basic research that is necessary and required which would go in the form of a lesson plan and basically it would involve / obviously my area is personal development / so it would involve getting to know

	<p>my learners very well first of all because obviously what I talk about is often very touchy-feely and the courses are only six weeks so they have to be condensed so / basically the beginning of the lesson would be a warm up / the very first session / and then there would be an introduction and then / and the aims and objections of the lesson / and through that I may do a little brainstorm or wordstorm and then I would go into the lesson and / you know / just explain what we have gone through in the aims and objectives and take the learners through that all the way through the lesson / I'd also allow for discussion / but my aim is a kind of sort of growth really / growth of that person / that's my aim all the way through / from the beginning right to the end / it's how they grow and so I take gentle steps with the individual and / obviously in order to build their confidence and self esteem and build on any area that they may / that we are dealing at that time / each session has a topic and so we would follow that topic through / at the end obviously / I'll be very vigilant as to how the learners were dealing with certain areas / I do tend to press a few buttons / it can be quite uncomfortable at times however you know I give them lots of support and take them through my process of personal development / and teaching / training / and then at the end there is a plenary / there is a more time for questions / I also allow my learners as well to at the coffee break to mix and mingle / just for extra support between themselves / to talk about me if they want to / and that's what I do.</p>
R:	So what would you say influences your planning of a lesson?
K:	Right / the influencing of the planning of my lesson would be to really get to know my students / who they are / the target base of my students / and reach them wherever they are / so through doing that I would get some information from them / some background about them / and then / in an unbiased as possible way I would try and build my lesson on that because each cohort of learners could be very different.
R:	What / do you think things such as colleagues or employers or previous sessions / does that impact on your planning of lessons?
K:	Okay / does colleagues / previous sessions / impact on my lessons? // it depends really / you know / it depends on if I'd had feedback / if I'd chatted in you know the coffee room over coffee with people doing similar work to me / yes I'd say that does / that potentially could influence what I / what I do and how I teach / and also from my own personal experience as well / I think I would put all of that in / in order to you know to build quite a structured and sound lesson.
R:	Over this year we've been looking at theories / theory of education and learning and teaching / do you think that educational theory actually influences your teaching practice?
K:	Do I think that educational theory actually influences my theory and practice?
R:	Yes.
K:	Yes / I do / I do because it's been / it's given me a wider world if you like / I have got a medical background and I am used to dealing with people but it's / dealing with education / I have taught in the national health but it's dealing with people in a slightly different way / and so knowing of the theorists and what they

Comment [A227]: AFF

Comment [A228]: AFF

Comment [A229]: EM

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Comment [A235]: EX

Comment [A236]: UN

	thought and how theories came about in the first place does influence my teaching and I have really really enjoyed you know learning about them this year and learning about new ones and also just looking at the theorists in a different way / I think that's been really helpful.
R:	So do you think that theory describes what you or would you say that theory sort of informs and tells you what to do?
K:	I would say that theory is a combination of the two / I'd like to think that they work together at different times if you like / I think that you could argue that in one sense that / yes that theories do inform what I do / and in another sense theories do enhance what I do / sorry I'm not sure if I've got that the right way round / however yes I think it's a bit of both really.
R:	If you hear a theory / if you know / if you learn of a theory and read of a theory and you think / yes that sounds like my practice/ do you recognise that feeling?
K:	Definitely / and for me it's been Maslow I'm afraid / regardless of the criticisms / I've had to recently write an essay and a / a critique really of a theory and how it influences my practice and I definitely identify with Malsow / it may not be science / it may not be scientific but I think that there are lots of truth in there.
R:	And will Maslow affect you in the future do you think / is it / in your future teaching will Maslow be behind..
K:	..I think it will be but I think I'm open as well and I think / I'd like someone / nobody really has completely matched it for me from Maslow but I would be open / who knows that might be you / you know / who knows / but I'd like to be open to other theorists / I don't feel that I've exhausted the barrel basically.

Comment [A237]: H1

Comment [A238]: UN

Comment [A239]: CF

Comment [A240]: H2

Comment [A241]: H2

Comment [A242]: UN

Comment [A243]: UN

Comment [A244]: H2

	Participant L
RESEARCHER:	If you could describe for me the format of what you might call a typical lesson that you teach?
L:	Okay [laughs] / a typical lesson / the lessons we teach primarily are / they're modular sessions so they /one would always roll into the other to get to the end result / to achieve the standard that is required to obtain the qualification of a paramedic or an ambulance emergency technician / so it's very structured in that / and also that's a good thing because each lesson then you can recap on the previous one and they all tend to have / you know / they flow / and they build the students' knowledge base as they go along / so the structure of the lessons are pretty / not rigid but they're laid down in a laid out format / so the way we would go about it would / we would have these set objectives but the actual scheme of work and the lesson plans are very much open to flexibility of the tutors / so obviously // the main drivers I think are the numbers of the students we have because that allows you to do certain things / sometimes we have a very high number but if we have a low number that's easy / we can manage it better // the level of the students because obviously some / if you've got a smaller group and they're high fliers you can push the boundaries a little bit more others you just have to keep within the set structure and give them the minimum that they need / so that's the adjustments you'd make on a / probably on a daily basis / on the lessons // and then at the end of the lessons we have to have a

Comment [A245]: COG

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	measure / we have to have a means of measuring that so at the end of each module we'll have to set practical and theoretical assessments but they are not ones that we design they are ones that are designed for us by our awarding body.
R:	Are there other things that affect your sort of planning decisions like colleagues / research / developments..
L:	..Yeah / yeah / as you can imagine the health environment we get swamped with new initiatives that are going on / new / as medicine is a science of mistakes so you try something / it doesn't work / and then (...) will come out with new things / so there's / medicines always pushing so we have to make sure that we read literature that comes out / we keep up to date on the internet / but we are / the danger with our teaching is that if you infuse too much and you go too much into what the cutting edge stuff is people will run to that and then you have to bring them back into the / what's the safe practice / so yes we need to be aware of developments but at the same time we have to have to be / we have to have the underpinning knowledge so we can discuss and talk around it but at the same time we also have a role to make sure that the focus is very much on what is safe practice and what is actually evidenced based work / so the tutors have got two things / they have to make sure they are current / all the trusts' objectives and the awarding body's objectives / but at the same time they need to have / to have studied that bit further so that they have got the underpinning knowledge and they are challenged.
R:	We've been working together for two years now / studying together yeah / looking at you know teaching / learning / theories // do you think that educational theory influences / actually influences your teaching practice?
L:	I would have said no at the start of this two years but I would say it does now because I'll find myself reflecting a lot more / I find myself challenging what I've done in the past or am doing now a lot more // I think that's probably the main thing that I've got from these two years so / in the past it was very much / right we've got set objectives / this is what we've gotta do / let's go and deliver it / without / putting your own personality on it but not really digging deep and challenging / two years from the theorists that we have discussed and I've looked and I've read you do start to analyse your own performance and sometimes you are doing things without thinking about it / subconsciously you are going down a certain theoretical route and that's good because you know you are roughly there you just may need to tweak it / and also you look at others and you think well I hadn't thought of doing that / let's look at maybe stopping and re-examining what we are doing / so it's definitely influenced the way that / personally / that I work.
R:	Do you think that theory tends to describe what you do or does it tend to sort of tell you what to do?
L:	Personally I don't like being prescriptive so / because then you are trying to make things fit into a / it's nice to have the comfort / I suppose / of knowing that what you're doing fits into a certain recognised theory albeit it might be loosely but I think it's just nice to have that comfort / I think to try and said well this theory says that you've got to go from A to Z in this format and you then you

Comment [A248]: UN

Comment [A249]: COG

Comment [A250]: NA

Comment [A251]: UN

Comment [A252]: LC

Comment [A253]: UN

Comment [A254]: SP

Comment [A255]: CP

Comment [A256]: H2

Comment [A257]: RE

Comment [A258]: UN

Comment [A259]: RE

Comment [A260]: H2

Comment [A261]: UN

Comment [A262]: LC

	try to fit your style with the teaching into that I think that's probably a dangerous thing to do.
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Comment [A263]: UN

Comment [A264]: H2

	Participant M
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RESEARCHER:	Shall we start thinking about / if you can sort of describe or tell me about the / what your normal lesson / the sort of format of your average lesson or the structure of it // when you teach a lesson what are the parts / does it have a beginning middle and end?
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M:	Yeah so / I introduce my aims and what I'm going to do then we have activities // is this what you mean? // so I do lots of activities with the group I try and have at the beginning their aims and then we do an activity / I tell them why we are doing it / we do an activity and then we feed back as a group so the group all interact with each other / then we do another activity related to what I'm teaching then I have my break// is that what you mean?
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Comment [A265]: PSY

R:	Yes.
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M:	So then after break // I sort of try and have about three activities during the whole lesson where the group have to interact with each other and do presentations so I try and have a bit of each teaching / I like to have presentations / group work / I like them to get up out their seats..
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R:	..so why did you decide to do that?
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M:	I like to include every teaching method so I'm catering for all of the learners' different needs and because I work in Child Care I like to do activities that are related what they are going to be going in their place of work.
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Comment [A266]: AFF

Comment [A267]: UN

R:	So what would you say influences your sort of lesson planning?
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M:	Depends what I'm delivering / so if it was // like if it was behaviour management I would bring theories into that / if it was health and safety it would be different I would do how it relates to their place// I'd try and link it to where they work.
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Comment [A268]: UN

R:	Would you say that your colleagues or your employer influences how you teach?
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M:	My mentor did when I first started yes I shadowed one of my colleagues for about six months to get an idea of how it's delivered because I was / well I was new to teaching / to understand how it's delivered and how she did it so she was my first inspiration // and then you and [names PGCE/Cert Ed teacher] / people on my PGCE.
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Comment [A269]: LC

Comment [A270]: CF

Comment [A271]: LT

R:	So we've been working together for two years now..
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M:	..I know..
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R:	..looking at teaching / learning theory / do you think that educational theory has influenced your teaching practice?
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M:	Absolutely / absolutely / and I think understanding / well especially that assignment on the theory of learning and buying books about theories has deepened my knowledge and then I'm passing that on to my learners as well / and recommending books to them as well because the theories I deal with are child related as well so it does affect them as much as it affects me so how it affects me I want to pass that on to my learners so they understand why they're doing what they're doing.
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Comment [A272]: UN

Comment [A273]: RE

Comment [A274]: SP

Comment [A275]: CP

R:	Do you think that the theories change / and learning theories changes how you teach as you move through?
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Comment [A276]: H2

M:	I don't know / I think so // I think so.
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Comment [A277]: H2

R:	Do you think that theory describes what you do or does it tell you what to do?
M:	Describes what I do / so I do it anyway and then I have an understanding as to how it impacts on my learners and why / so I do not know why I'm doing it / it's like and instinct and then you think / oh look that what I..
R:	..so how do you feel when you read the theories then..
M:	I think I'm really clever 'cos I'm already doing it // I think / oh my goodness I didn't know that // so the things that I do then I read what an impact that has I think / oh my god that's really good 'cos I'm doing it already // so it helps // then I go into it deeper maybe because I understand why / where I've no knowledge of it before reading has helped me to improve to go deeper into certain things.
R:	So how do you think that's going to affect your teaching in the future?
M:	It's only going to make it better / isn't it? / 'cos I'm gonna learn more about theories and then I'll understand more and then I can add it to my teaching / at different / like Vygotsky and social learning and how I impact on my learners / how I can help them extend their knowledge and working with each other / I think I've done many more group activities now because / and them listening to each other because I think that really affects their teaching / group work for the group to the group // that things you said.
R:	What do you think has been the biggest influence on your teaching practice? // what's the thing that changes it / or does anything change it?
M:	What has been the biggest influence?
R:	What are the things that affect how you teach?
M:	Understanding what I'm teaching I think / is that what you mean? / so if I'm delivering something I have to research it myself so I have a deeper understanding so that when I pitch it to them I need to know more than my learners know so I would research / read lots // so that any questions they ask I hope I can answer their questions / is that what you mean?
R:	That's fine yeah I mean // so is then subject knowledge / is that more important than teaching ability or is teaching ability more important than subject knowledge or is it a balance?
M:	Balance // balance I think.
R:	Why's that?
M:	Because they both have an impact you can't be a good teacher without having a good background knowledge of your subject can you? / you can't just go in and have a good personality but know anything // and if you know a lot but you haven't got the personality / then they're not gonna listen not gonna be interested so you need to have a balance I think.

Comment [A278]: UN

Comment [A279]: EM

Comment [A280]: H2

Comment [A281]: CF

Comment [A282]: UN

Comment [A283]: H2

Comment [A284]: SP

Comment [A285]: NA

Comment [A286]: UN

Comment [A287]: EM

Comment [A288]: H2

Comment [A289]: UN

Comment [A290]: EX

Comment [A291]: SP

Comment [A292]: H2

Comment [A293]: UN

Comment [A294]: AFF

Comment [A295]: COG

Appendix O:

Coded Transcripts of Focus Groups

Focus Group 1

RESEARCHER:	Do you feel that you've changed your teaching over the two years of the PGCE Cert Ed?
Mixed voices:	...yes..
R:	How has this happened?
E:	With time / because we were / as we were going along we learned a lot of things and we implemented in our classes yes..
D:	...lots of ideas lots of...
C:	...best practice / I think that has sort of been the biggest bonus / in a room with other people and picking up other peoples' ideas and thinking / oh I can do that [D~ yeah] or that wouldn't work for me but I can see why it works for you and adopting and changing ideas from other people as much as anything else [D~ definitely]..
A:	..equally I think having that umbrella of I'm a teacher under training has allowed you all lot more flexibility to try ideas and actually get away with it / so if it's going wrong and people have observed it going wrong there's not much they can do really 'cos you're still under training so you're still looking for support and guidance and that / I think / well for me certainly has been a help (...) [D~ yeah] it's been an opportunity to try things that I wouldn't necessarily / well perhaps now with the experience I've got / the knowledge / which is quite limited I can take a lot of what I've learnt forward / but I've got less opportunities perhaps maybe to try and implement new ideas because in my view the timing isn't really there any more now..
D:	..now you're qualified you mean?
A:	Yeah well / hopefully I'll qualify.
D:	You will.
A:	I think the expectation is then that you can just get on and facilitate the learning and there's less opportunities to practise yourself because of time constraints.
R:	Do you recognise an increase or improvements in your teaching practice?
Mixed voices	yeah .. yeah for sure..
C:	Confidence more than anything / confidence to stand up and think okay I should be and not..
D:	..yeah absolutely / totally committed to it and..
E:	..and plus trying out new things doesn't scare you anymore / you just / you want to give it a try..
C:	..yeah / let's see if it works if it doesn't you've got a little bit of experience to jump into something else / whereas before if you didn't do it..
F:	..before you know whenever you went into a class and everything like that you just actually thought well this is the way they're meant to be taught and this is meant to be this way and now you know that there's different avenues and people teach / and learning styles and everything / and different ways / and learn about the learning styles..
D:	..it's the learning styles isn't it that's really opened it for me / I mean [names PGCE / Cert Ed tutor] coming in even three weeks

Comment [A1]: LT

Comment [A2]: PSY

Comment [A3]: LC

Comment [A4]: COG

Comment [A5]: NA

Comment [A6]: PSY

Comment [A7]: LT NA LC

Comment [A8]: NA

Comment [A9]: PSY

Comment [A10]: COG

Comment [A11]: EX

Comment [A12]: PSY

Comment [A13]: CF

Comment [A14]: AFF

Comment [A15]: CF

Comment [A16]: PSY

Comment [A17]: LT

Comment [A18]: NA

Comment [A19]: COG

	ago immediately her doing something about how to deal with somebody who is dyslexic / and sitting differently / and asking questions to each other every fifth word / immediately made me go back and change the way I teach one particular learner / immediately / and the learner's completely different now as a result really / because it's so much easier for her to understand 'cos I understand it / just simple things like that / and your ideas [indicates R] you know just very sort of / let everybody move every twenty minutes or something I would never have necessarily thought of that before I came on this course / I would have thought that if you're sitting there listening...
A:	...being spoken at?
D:	Yeah being spoken at (A~ ...) and I think that the result has been that because my learners have been with me throughout the whole one and a half years / two years / the same group of learners / they've seen me change and they've commented that I've changed and also they know that if I'm trying something new they'll support me in it / so you know / it's been a bit of a two way thing really.
R:	What do people think has been the aspects of the PGCE / Cert Ed course that have most influenced them?
B:	I think it's the amazing different way of teaching subjects really..
C:	..the forums where you can actually have a discussion and bounce ideas off people and think yeah that works or no it doesn't and having also someone like yourself [indicates R] to manage that forum so that it doesn't get out of hand and go totally off the wrong track [D~ absolutely] but I think definitely the forums where you listen to what other people do and you know / either that will work for you or it won't work for you or / different avenues / and definitely the people coming in especially the last two or three weeks if only that could have been earlier..
D:	..if that was at the beginning..
C:	..fantastic..
D:	..we would have some great ideas.
A:	And then for me / on the other hand / I think the whole two years / and everyone knows how negative I was at first / for me the whole two years experience has all been helpful because you've gone from managing the learning environment / so whereas in previous employment where I was teaching in a less structured environment I learned how to / or got to understand how to actually manage a group of students so / from managing the learning environment to supporting and tutoring learners to understanding why we do that as opposed to just being spoke at by a teacher stood at the front and I understand the reason why we do that / everything is structured / and I kind of touched on that in that chat we had before [individual interview] I didn't appreciate what I was doing until then / reflection / having looked at the theory of learning for example [D~ yeah] why I do something a certain way [D~ certain way] so for me the whole experience of Cert Ed has been positive now and I'm glad to have been able to do it because I don't think I would be anywhere near where I am now today / with experience and knowledge and the skills / having shared them with different colleagues and learnt from course tutors had I have not been able to come on the Cert Ed..

Comment [A20]: PSY

Comment [A21]: SP LC

Comment [A22]: EM LT

Comment [A23]: PSY

Comment [A24]: AFF

Comment [A25]: EM

Comment [A26]: LC

Comment [A27]: COG AFF

Comment [A28]: COG PSY

Comment [A29]: LT

Comment [A30]: AFF

Comment [A31]: CP EX

Comment [A32]: COG

Comment [A33]: UN LT

Comment [A34]: UN RE

Comment [A35]: RE

Comment [A36]: PSY COG

Comment [A37]: LT

D:	..I think as well / the fact that the majority of us here are new to teaching whereas the ones who aren't new to teaching / and there are only a couple on the course / they haven't felt that that it's been worthwhile particularly but the new teachers certainly have.
R:	Why do you think that?
D:	They don't want to attend and their whole body language says that they don't want to attend and they feel they've been forced to attend just to upgrade their qualification they've already got.
C:	..I feel at the beginning we were forced to attend and I felt the same as A that / you know / I've got to do this I gotta jump through the hoop but now I / sort of in reflection after the two years I really feel that this has been worthwhile / really feel that coming here I've really sort of moved myself forward / or moved forward because of Cert Ed over two years / and if someone said to / you know / would you recommend it / I definitely would say yeah you have to do it because if nothing else the learning experience you'll get / your own satisfaction above anything else..
D:	..and I think the vibes this time last year / from this year compared to last year's year two / this seems a lot more upbeat and we don't might them coming / whereas I felt certainly maybe at the end of term picnic the attitude was oh it's alright you just have to get it done / I might be wrong there but certainly I think / if we have a picnic this year there will be lots of <i>it was great wasn't it / year two was alright..</i>
C:	I think year two was two cohorts of people / definitely two cohort of people / there are those from the first year who've definitely got a different outlook to the ones that have come in on the second year [D~ yeah] / there is a barrier / we're not as a group / even last year we were a group..
D:	..but I don't think necessarily that / I think that more than anything it's possibly the people who have come in are particularly wanting to be barriers rather than us not inviting them in because I think we've invited them in to become one group and I certainly think R in every lesson / we're just one group.
R:	So what do you think makes an effective class / if we're talking about sort of divisions within a class / what's an effective class?
A:	Make it all inclusive!
C:	We've evolved together / we've all grown together / we've all come in / everybody I think or I felt that everybody came in thinking <i>everybody else is going to be better than me I'm really not up to this everybody else is going to achieve an I'm not going to pass</i> / and I think when we sat there as the course got on we suddenly learnt that everybody was feeling the same way [D~ absolutely] so we all evolved together and we've all got to this point / after two years / together..
E:	..and supporting each other [C~ yeah so..] ..the second year was more people were supporting and helping out..
C:	..we've got to this point where we're now thinking we all stand a chance of achieving this / from where we all were / we learnt that we were all at the same position / 'spose we learnt to feel like students feel like an now we're at the point where hopefully our students feel that way and the sense of achievement for us / 'spose we're living what they're living / it's been a great experience to be a tutor and a student at the same time and be able to see

Comment [A38]: AFF CON

Comment [A39]: CON

Comment [A40]: RE

Comment [A41]: COG

Comment [A42]: LT

Comment [A43]: AFF

Comment [A44]: LC LT

Comment [A45]: LC EM

Comment [A46]: AFF

	both sides of the coin.
D:	And to see my learning style / to be able to see my learning style and therefore reflect it on my other learners or whatever // because somebody did say that you teach in the way that you want to be taught and maybe that isn't always correct and [names course tutor] said that she does the same didn't she / because I said <i>I just love this it's so upbeat and lots of ideas</i> / and she said <i>yeah but I've got to be careful because not everybody likes my style of teaching but I know I would so I can be guilty of that.</i>
A:	That's interesting that you say that because I don't ever take any notes / I've never taken notes in two years / because I can't / I have to see it / and yet I've always said to my learners [D~ MAKE NOTES] ..yeah make notes and take down the salient points of what I'm saying or I'll give you a handout / so I'm not always conscious about how I'm learning when R is teaching / but I don't think I've taken a note down ever because..
D:	..I can't remember without a note and also it's just / you get home and some of the ideas you have you think <i>I'm glad I wrote that down because I would have forgotten that</i> and you won't mean to have forgotten that / but the learners are like that so..
R:	So how do people learn? ..[silence]..
C:	Thousands of different ways.
D:	..interacting / being engaged / doing / watching / needing / all sorts really..
C:	..experiencing..
E:	..experiencing yeah..
A:	..living I think is the right answer [D~ breathing would be helpful] ..living and learning / and I think that to me one word sums it up because we learn from the minute we wake up to the minute we go to sleep and even in our sleep we are still learning because our subconscious is learning..
B:	..somehow or other you've gotta get the learners to want to come in / to be happy to come into the class and be..
D:	..and engaged..
C:	..they've got to want to learn.
D:	Yeah.
R:	And would you say that your studies helped you understand that / has it been part of something you've learned?
D:	Yeah definitely because I think I've gone in at the beginning thinking <i>what am I doing they're not even listening</i> whereas it could just have been that they were listening but I wasn't teaching them in the correct way.
A:	Yes!
D:	Does that make sense?
E:	It's more of an issues to get them to learn and the techniques how to get them to learn / we learned that.
A:	I've changed my style now I'm more inclined / and that's sort of come in the last four or five months where / rather than me sitting and talking about the information the students will now say <i>well why aren't you giving us the answers? why are we going off and doing it ourselves? why don't you just tell us?</i> And I'll say <i>because you won't learn</i> and they'll say <i>we've never done that before</i> and I'll say <i>I know but this is the way for you to learn / you learn as a</i>

Comment [A47]: EM

Comment [A48]: PSY

Comment [A49]: UN RE

Comment [A50]: COG

Comment [A51]: LT UN

Comment [A52]: CON

Comment [A53]: RE

Comment [A54]: RE UN

Comment [A55]: EX

Comment [A56]: EX

Comment [A57]: EX

Comment [A58]: EX

Comment [A59]: EX

Comment [A60]: COG AF

Comment [A61]: CON

Comment [A62]: UN

Comment [A63]: COG PSY

Comment [A64]: SP UN

Comment [A65]: H2

Comment [A66]: PSY

Comment [A67]: NA EX

	group /you learn yourself / but I actually feel a little bit uncomfortable with that [D~ I feel I'm being lazy] [C~ yeah cheating!] or am I saying that I don't know what I'm talking about but actually I do because when they've brought their research together / their activity notes / and I'm recapping or they present their research I can then elaborate on it and (...) down for them or / when I'm recapping at the end I can then go into it a bit further / and that's when I know then that my job's done because they've actually learnt and I've facilitated them / the opportunity to learn whereas six months ago I wouldn't have done it I would have been more inclined to give less activity / engage with them more /rather than let them take control of their own learning..
D:	..and did you learn that from observations though A? [A~ I did yeah] / 'cos that's where I learned it from / D stop doing it for them.
A:	Repeatedly over several observations.
F:	You see I can understand that / maybe with the kind of subjects you teach as well because like with mine they've got to go out and / well not out / you have to show them but certain things they've gotta experiment with / but because of that they don't have to / I don't give them a lot of (...)
D:	I can go into many many colleagues' lessons and they'll be sitting at the desk and the learners will be doing everything and I'll be thinking <i>you're just marking how can you be marking in a lesson?</i> And that to me is / no you just can't do that but in a way their learners are probably learning as much as if they weren't marking / or a lot more / so now I do a lot more of <i>right you go and find out about it and come back and tell us about it</i> and also what I don't do / which I did at the beginning is / right all three groups go and find the same thing / there's no point in doing that / they all now have a different task / again that was [names course tutor] and yourself / just don't all give them the same things / I wouldn't have got that if I hadn't been observed or on this course..
R:	Do we think that there's theory behind these things?
D:	Yeah / inductive and deductive and / you know I'm not just throwing them in at the deep end sometimes and other times I am / so yes that's a theory / don't ask me who / is it Bruner?
R:	I've no idea / who's he?
D:	I can't remember / I can't remember which theorist said it.
C:	It is him!
D:	It is him is it?
E:	No Bruner is I think more telling your students what you're going to be expecting them to learn.
B:	I don't think it's important that you know the name.
D:	Okay I don't remember the name but I remember the theory okay.
R:	(to B) Why do you say that?
B:	Well it's not important whose theory it is that's totally irrelevant / the fact that there's a theory out there..
Mixed voices:	..you know where to get the theory from.. ..but there is ideas.. ..signifies.. ..(..)..
E:	You get the ideas and then you kind of implement it / you don't kind of remember the name of the theorist..

Comment [A68]: UN

Comment [A69]: CF EM

Comment [A70]: COG PSY

Comment [A71]: H2

Comment [A72]: NA

Comment [A73]: PSY

Comment [A74]: EX

Comment [A75]: UN LT

Comment [A76]: UN

Comment [A77]: UN

Comment [A78]: UN

Comment [A79]: UN

Comment [A80]: H2

Comment [A81]: UN

Comment [A82]: H3

Comment [A83]: UN

Comment [A84]: PSY

Comment [A85]: H2

A:	..you don't think <i>right I'm going to adopt some of Honey and Mumford now.</i>
D:	..okay..[laughs]..
A:	..you just don't do you / you learn what you learn on the course and you'll take it back..
D:	..the names aren't important but the actual..
E:	..if you need to write it down how you've done it and things like that then probably we would go and [A~ research] [D~ yeah research] / yeah research / and put down some theorist's names / but not when you're teaching / you won't just say <i>oh I used Bruner's theory or.</i>
C:	..see again the course has taught us to attach the names to the theories so we think <i>oh yeah that is it oh yeah</i> and we would go maybe look back our notes and..
E:	..yeah / it's only as you're producing or letting someone else know what kind of theories ..
D:	..passing on the knowledge..
E:	..but they are definitely raised when your evaluating your lesson plans / I think you then say / not <i>I used so-and-so's theory</i> / but you can then relate it to a theory can't you / <i>in this situation I used very much a case of throwing the learners in perhaps next time I wouldn't do that.</i>
Mixed voices:	(...)
A:	..I personally don't ever refer to theories / I would evaluate but I'm not conscious of whose theory I'm using..
D:	..maybe what we are saying is that subconsciously you are using a theory..
A:	..you are / but I'm not..
E:	..you learnt it in the class and you know that this is there..
D:	..you know you've been taught a theory..
A:	..yes..
E:	..and you bring in..
C:	..when you're standing up there in front of a class you suddenly become aware of what you're doing and you think I've asked this question but I'm getting no reaction / so I change tack / and I think you then become aware of certain mapped out things / if I do this then this will happen / if I don't do this they'll just sit and look at me blankly / so I think you then / you sort of reflect very very quickly and change your tack in relation what we've learned..
D:	..I think it was more a panic in the past..
C:	..yes before it was a panic / what can I do / now it's more like collecting / right I'm going change the tact / I'm gonna / that's not working I'll flip to this / I throw this question in/ and go from one to the other and back again / I think we're now more aware of it and like you say (to D) more controlled than panicked..
D:	..and like you said we were / we thought why are we at the front here / have we a right to be at the front and now I feel more confident in teaching but also if I want to change it halfway through the lesson I will / and the learners don't seem to mind as much as I used to think..
R:	What do you think is going to affect your practice in the future?
A:	What is going to?
R:	Yeah / what do you think is going to affect..
A:	Beaurocracy and government targets!

Comment [A86]: H2

Comment [A87]: UN

Comment [A88]: LT

Comment [A89]: COG PSY

Comment [A90]: UN

Comment [A91]: UN

Comment [A92]: H2

Comment [A93]: UN

Comment [A94]: H3

Comment [A95]: H2

Comment [A96]: RE UN

Comment [A97]: H1

Comment [A98]: UN

Comment [A99]: H2

Comment [A100]: UN

Comment [A101]: LT

Comment [A102]: UN

Comment [A103]: RE NA

Comment [A104]: PSY

Comment [A105]: UN RE

Comment [A106]: PSY

Comment [A107]: CF

Comment [A108]: CF

Comment [A109]: AFF PSY

Mixed voices:	...yeah.. ..I feel.. ..I have a horrible feeling..
E:	It's more to do with how your line manager would come in and say this way of teaching is not right do it another and things like that / or after coming in grading things / how we are going to be graded / it is going to affect..
D:	..I'm a little worried about the fact that we've got to get qualified teacher status / I know nothing about that / we've just been told that / so that's a little bit / oh my goodness have we gotta do something else now as part of the teaching qualification/ but I just think it'll be the government ruling really and we'll have to follow what we're told and it'll be very much Key Skills orientated and I do feel that unless I'm of the calibre to teach those learners then I need to upgrade my skills / which is not a bad thing but I do worry that we might lose some really good teachers just because they don't have Level 2 Maths or whatever..
C:	..I think we lose the specialism and end up with..
D:	..yeah lose some good people because / you're going to have people on this Cert Ed course this year coming that we've been told that unless they've got a particular level or they're particularly good at their subject / that doesn't necessarily mean that they are better teachers though..
	Conversation then moved onto discussion of External Verifiers, Ofsted, ALI and possible changes in practice, based on initiatives and legislation.

Focus Group 2

RESEARCHER:	Do you think that your teaching has changed over your course of study / over the last few years / has learning about teaching or studying about teaching / has that affected your practice?
Mixed voices:	..yes – yes – absolutely.
R:	..how did this happen / in what way has it affected you?
G:	I think you plan better / it allows you to realise that by doing a lot more planning for the actual lesson itself and you having a lot more content in it and to be more creative within your lesson / as opposed to just standing there how we were taught and someone talking to you it's just not good enough / and you've got to have lots of tasks and lots of activities to keep them going and I think that's taught you to be creative within your lesson itself / if you can / if you're not restricted with what you have to teach but I think a lot of us / not everybody around the table / can be more creative within our lessons and doing tasks and activities and bringing a bit of fun to it / to a certain amount but obviously keeping it focused on what you're doing.
R:	You mentioned your teachers / how do people feel about the way they were taught?
Mixed voices:	..boring – yeah – very boring – it's just somebody standing there dictating to you..
K:	..for me it's been different / I've had a total mixed bag of experience of being taught in different areas at different times and I think for me ultimately I've put lots together and I think I've picked out the bad and the good and taken bits from all over and so that's been my experience / my school experience I have to say was a

Comment [e110]: PSY COG

Comment [e111]: PSY

Comment [A112]: RE

Comment [A113]: RE

Comment [e114]: COG

Comment [e115]: PSY

Comment [A116]: SP

Comment [e117]: CON

Comment [e118]: COG

Comment [A119]: EX

	bit bland / could have done with a bit of spice / a bit of salt and pepper / however I think as I've got older and also I think I've found my voice really to challenge more / for me it's been a lot different / a lot of variety.
L:	How it's affected me I think there are three ways of looking at it / you're looking at the learners' experience your experience and then the organisational experience so for two years I think you learn to look a lot more about the learners / what their needs are / rather than grouping them as a group you tend to look more at them as individuals and their learning needs / you as in individual as G said about challenging your own way in terms of delivery and analysing how you are doing that and the effect it has on others / and maybe on the negative side / the organisation / because you want to improve and you want to progress then the barriers you start to bang into / you've got to have some barriers / new barriers will come up and then it's how you deal with that from an organisational side of things..
K:	..and for me / sorry / having started a brand new programme which I had to co-write myself and again do a bit of research and put it all together / it has been invaluable having the feedback of something that I've had to put together myself from scratch virtually from my observers / so the feedback from them has really helped me to interact with my group better.
R:	Feedback is an important thing / what other things do people feel affects their practice?
M:	Observations from you / from our managers / if you get negative feedback from your managers it has a negative impact on your teaching because you don't feel good enough I think and then positive feedback can really boost you and push you on and makes you feel really good / I think my feedback from this course has been great / my feedback from my team / my manager / my old manager / was not positive and it just crushed me and then that also has an impact on my learners when it makes me realise how my feedback to them has an impact on them.
K:	I think that planning affects also affects how we teach / how we deliver / and I also think that we could draw a conclusion or an analogy really to a good wine / the more you do it the more mature it gets / the more you get into your subject then you can add bits you can use a bit more variety / I mean for me at the beginning it's been very script-based [M~ yeah] as you become more confident I can throw in a lot more to what I'm doing and play a little bit more if you like.
R:	Do you think then that experience / how important is experience?
J:	I think it's important I think it's very important / yeah / I think the more experienced you are the greater depth of knowledge and that leads to confidence yeah..
M:	..I think this course has helped us so much..
H:	..yeah definitely..
M:	..I've learnt so much.
J:	What it's done / what it's made me think about more is / rather than give the information out and expect them to understand it I'm thinking more about how do I get them to understand it / that's where all the different little activities come into play.
L:	Experience is good as long as you don't equate it with knowledge

Comment [e120]: COG

Comment [A121]: CF

Comment [A122]: EX

Comment [A123]: UN

Comment [e124]: COG

Comment [e125]: AFF

Comment [e126]: COG

Comment [e127]: AFF

Comment [A128]: LC

Comment [e129]: AFF

Comment [A130]: LC

Comment [e131]: CON

Comment [e132]: AFF

Comment [e133]: CON

Comment [A134]: EX

Comment [A135]: EX

Comment [A136]: PSY

Comment [A137]: CF

Comment [e138]: COG

Comment [A139]: EX CF

Comment [e140]: COG

Comment [A141]: LT

Comment [e142]: PSY

	[J~ yeah, M~ yeah] time in any job doesn't equate to being good at it and it's how you self-motivate yourself to keep up-to-date with the underpinning knowledge and keep current because we could all probably think of people doing the same thing / just turn out the same lesson plans for thirty years / yet I don't think you can underplay experience but it's got to be done against motivation and keeping it fresh / because any job you are going into just because you've done it for twenty five years doesn't mean to say you are good at it.
H:	It's important isn't it like you say to continue developing your professionalism (L~ it is yeah) in a course like this / courses actually help you do that / I would think the day that you get to a stage where you think you are not learning any more [M~ or you don't want to learn] is the day you stop..
M:	You get to an area and then they think right that's it I'm done / I'm done learning..
H:	..yeah so when you get to that day that's the day to get out of the job / well it is isn't it / it's a continuous / if you're continuing to learn all the time then your learners are continuing to learn through you..
M:	..I just wrote that in my assignment..
K:	..I also think as well it's important as well to think about what we are doing as well and / you know / think is there another way / could it have been done a different way / and I think that's been important over the last year certainly of teaching and / you know / how we reach our learners as well / I felt more confident to challenge what I'm doing and how I'm doing it and allow people to think and / you know / I think that's been really useful for me.
L:	Picking up on that / that's the importance of peer assessment isn't it / I know that time management is the crucial thing that none of us have never got enough time but if you have got time to build in that / I find that as you peer assess each other you can pick up a lot of / you can critique very well that way and I think you can take it on board a lot more if it's coming from one of your peers / we all pick up on little anomalies that we do don't we / little annoying little habits that maybe we could do without / obviously I'm perfect..
G:	That obviously why they (...) it / because you can watch someone's lesson and think oh that's a good idea / as opposed to being positive and picking up on things that they do that you would never have thought about so..
L:	..that should be built into your..
M:	..ours is..
L:	..that's what you should be made / not made / encouraged to do.
K:	I think passion is important as well / I think you need to be passionate about your subject because if you are not passionate then how can you / you know / effectively get what you are doing over and I think / you know / that's really important and really plays a big part / and having again observed / you know / different styles of teaching / certainly over the past year / and saw / I've seen passion in how I've been taught / that's been lovely to see.
R:	What about things such as educational theory does this affect things / I mean / we've got passion we've got peers we've got observation we've got development of people..
M:	..it's really helped me because I teach / well I teach Child Care it's really helped me because I teach Child Care to my learners / so

Comment [A143]: EX

Comment [A144]: UN

Comment [e145]: CON

Comment [A146]: H3

Comment [A147]: EX

Comment [e148]: COG

Comment [A149]: NA LT

Comment [e150]: COG

Comment [A151]: NA

Comment [e152]: COG

Comment [A153]: RE

Comment [A154]: EM

Comment [e155]: AFF

Comment [A156]: PSY

Comment [e157]: COG

Comment [A158]: LC

Comment [e159]: PSY

Comment [A160]: COG PSY

Comment [A161]: LC

Comment [e162]: AFF

Comment [A163]: LT

	my understanding has really extended / it's deepened / and so then I feel much more comfortable to deliver this now as I keep referring back to different theories and how they impact upon children / so I'm delivering much more confidently now that I was two years ago because my understanding / and I'm reading more because I'm interested / I was never interested before I started this course / I had a basic knowledge and thought / that's the surface / so I thought I don't really understand it / and if I've got to teach this how I have much deeper understanding and I think it'll only continue to get deeper and it will only make my teaching better.
G:	[That will also enrich your learners / sorry / that will enrich your learners by your enthusiasm / and it's not just like / well they will ask different questions and you can just give better answers I think because your knowledge is just so much better.
K:	I think that what I has just said as well / and everybody else / I think it's getting over that scared factor / it's okay to research / it's okay to read a little bit more / it's okay to explore around the area as well..
M:	..I don't think I'll ever know enough..
K:	..I think yeah / there is so much out there and I think we have been exposed to a lot / I have certainly / you know I have done the first year of this course already / and I have / you know that was 1992 and referencing wasn't that important and now / you know / there has been this emphasis on / you know we didn't even have to type our assignments in 1992 / but having done it again it's just been a different kind of dimension / some of it I've remembered you know / and it's all been lovely / reinforcing the whole thing / and I've really really enjoyed the last year (...)
R:	Here's a big question / I suppose / what theories do we know / what theories of education do we know?
M:	Like Maslow do you mean?
R:	Yes.
M:	Okay / you like that Maslow (...)
G:	..like Kolb learning thing do you mean?
M:	We know lots of theories don't we now / Honey and Mumford..
G:	..VARK..
M:	..VARK..
J:	..Fitts and Posner / behaviourist.
L:	[My view is that you shouldn't endorse all these and that (...) / to actually say I'm a Fitts and Posner man / I think is dangerous / you've got to pick and choose and cherry pick / what works and what doesn't work..]
M:	[..and some of them conflict with each other as well so then it's like oh wow he said that and he said this so I mean which one's right?]
H:	It's quite interesting how similar a lot of them are you pick out the good bits from each one / and some of them you don't..
K:	..I think it depends on your environment as well and I think it's adapting / isn't it / to what situation you are / if you teach across the board then you may just have to adapt and pull in different theorists accordingly to match what area you are doing and it's nice to have flexibility to do that.
R:	Do people label what they are doing / do people say oh I'll do this in a behaviourist way?

Comment [A164]: CF

Comment [e165]: PSY COG

Comment [A166]: UN

Comment [A167]: H2

Comment [e168]: COG

Comment [A169]: UN

Comment [A170]: H2

Comment [e171]: CON

Comment [A172]: EM

Comment [A173]: EX

Comment [A174]: PSY COG

Comment [A175]: H2

Comment [e176]: COG

Comment [A177]: UN

Comment [A178]: UN

Comment [A179]: UN

Comment [A180]: UN

Comment [A181]: UN

Comment [A182]: UN

Comment [A183]: H2

Comment [e184]: COG

Comment [A185]: UN

Comment [A186]: H2

Comment [e187]: COG

Comment [A188]: H2

Comment [A189]: H2

Comment [e190]: PSY

Comment [A191]: EX

Comment [A192]: H2

Mixed voices:	..no.. no don't think so..
H:	I think / I don't think you label yourself but I think when you do something it makes you think oh I'm doing it [L~ awareness] yeah you are aware of the theory rather than sort of making you work to it / you are more aware of what you are actually doing.
L:	[And it can make you self-analyse / am I going too much down this route / do I need to pull it back a little bit [G~ is it the wrong route] yeah.
J:	[Helps you reflect a little bit [L~ yeah] on what we are doing.
R:	So can this type of approach affect us in the future / can theory affect us when we finish here and we move on in our teaching?
Mixed voices:	..yeah..
K:	I think for me definitely because of the type of work that I am doing / like // which is very touchy-feely type stuff / I think it will definitely affect me / I think it will always be at the back of my mind and I think I would definitely like to bring it out in the community for those people that don't necessarily understand or may not have studied in any greater detail I'd like to just use an example of say Maslow to say yeah this is probably where we are coming from this is important / why it's important for personal development confidence and self esteem / but I've said before that I will be open to other theorists as well.
L:	The underpinning knowledge is important when you move outside the classroom environment and maybe some of us may move into other realms of education where you know you will be on committees or drivers to enforce policy change / it's nice to have that underpinning knowledge that you can actually refer back to something that does give you that little bit of / well doesn't give you a lot of credibility or credence but you know where you are coming from and we are in a world where everything has got to be evidence based so if you can reference this type of stuff then you have more power to your elbow for your arguments in different environments as well.
M:	[It's made me what to learn more about child psychology] (...) it's interesting you know / I think you've just opened the door and there is so much to read / so much to learn / so much to know / so many different theories especially Child Care because that's my area and I'm like wow there's so much so I'm still at the beginning.
L:	There's a little bit of information that you gave us early on and I've kept it and I've used it for loads of people at work and they all love it is adapt adopt or reject / and you move that into any environment you want and although that's very easy to say it does make incredible sense and I use that all the time.

Comment [e193]: COG

Comment [A194]: UN

Comment [A195]: H2

Comment [A196]: RE

Comment [A197]: H3

Comment [A198]: RE

Comment [A199]: H2

Comment [A200]: UN

Comment [e201]: AFF

Comment [A202]: UN

Comment [e203]: COG

Comment [A204]: UN

Comment [e205]: CON

Comment [A206]: H2

Comment [A207]: UN

Comment [e208]: CON

Comment [A209]: CF

Comment [A210]: H3

Comment [A211]: UN

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