

**The Experience of Teaching in Art, Design and
Communication**

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B.A. (Hons)., M.A., Cert. Ed.**

September 2003

**This thesis is submitted in partial fulfilment of the
requirements for the degree of Doctor of Philosophy.**

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This thesis was completed as part of the Doctoral Programme in Educational Research. The following article-length assignments were submitted as part of the requirements of that programme:

Education, Training and Work:

The course team as the focus for contextualised professional learning.

Learning, Teaching and Assessment:

Art and Design lecturers' conceptions of teaching: a study of conceptions and individual accounts of influences in their formation

Policy, Change and Organisational Development:

Would you credit it? Adopting a credit framework in a specialist Art, Design and Communication Institution.

Declaration

This thesis results entirely from my own work and has not been offered previously for any other degree or diploma.

Signature:

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B.A. (Hons)., M.A., Cert. Ed.**

“The Experience of Teaching in Art, Design and Communication”

Submitted September 2003

Abstract

The aim of this thesis is to explore conceptions of and approaches to teaching situated within the context of practice-based teachers of art, design and communication. This thesis explores conceptions of teaching held by academics in departments of art, design and communication and explores links between those conceptions and the communities of practice associated with the subject context. It also aims to further investigate how approaches to teaching relate to the concept of communities of practice.

The qualitatively different ways that teachers of creative practices experience their teaching is explored. The study focuses on teachers of practice-based subjects in art, design or communication. The data is from an interview study of 44 teachers from eight UK Universities and is explored with a phenomenographic approach. The analysis was grouped into three discrete sub-disciplines, media practice (15), fine art (11) and design (18), through which variation in the practice dimensions could also be discerned. The research adopts a second-order perspective on the experience of teaching a practice-based subject in art, design and communication departments. The important feature of this analysis is the community of practice dimension, in particular how teaching is perceived as contributing to engaging with the social practices which constitute the particular creative practice.

Following the interviews with art, design and communication teachers, a slightly revised Approaches to Teaching Inventory (ATI), with the inclusion of skills and communities of practice items, was distributed to teachers in the UK. 73 returned questionnaires were analysed. The results show (a) that the ATI has validity in practice-based areas, and (b) that all teachers aim to develop students' skills, but those with a student-focused approach are more likely to also focus on the practice and the real world problems of the profession. The positive correlation between an emphasis on development for the professions and a student-focused approach to teaching, offers insight for those involved in the further development of teaching practice.

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SOUTHPORT SCHOOL OF ART



Southport School of Art

Halliwell, A.E. (1920) Halliwell Collection

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Three dimensional studio class.
London County Council (1967)
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Miss Peake demonstrating modelling a dress on the stand (c. early 1950s)

Miss Peake, is a dressmaking teacher. Modelling on-the-stand involved interpreting a fashion sketch into a three-dimensional design which was achieved by pinning, draping and cutting a soft cotton fabric, usually Leno or Mull, on the dress stand until the desired effect was obtained. The fabric was then marked and ready to be used as a pattern. This was a technique in which many of the dressmaking trade teachers excelled.

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<http://vads.ahds.ac.uk>



Art students at work
National Arts Education Archive (1966)
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Acknowledgements

I would like to thank the following for their help and assistance with this thesis.

Peter Goodyear and Chris Jones, my supervisors, for a very concentrated period of excellent tutorial and virtual support over the last year.

The University of Brighton, The London Institute and the UK's Learning and Teaching Support Network for funding, research support and research context. I have valued the scholarly attitude of each of these organisations and many of my colleagues in each who have participated in this study, worked with me and given me encouragement.

My daughter, Nicola Drew, and my mother, Pat Drew for supporting me so tangibly, and consistently during the Doctoral Programme since 1998 and particularly during the production of this thesis.

Keith Trigwell, for being a constant source of support, for the personal and for the phenomenographic. I am indebted to his help in my progress toward understanding statistics and for reading and commenting on the draft chapters.

The Doctoral Programme cohort 4, particularly Norrie Brown and Pat Young for their unwavering support and enthusiasm. Norrie Brown has been a great help with reading drafts, making suggestions and regular phone conversations.

Tina Williams, research officer at ADC-LTSN, for contributions to the research process including interviewing, arranging transcriptions and many discussions. We

learnt a lot about phenomenography and about becoming researchers by working together and this has been a valuable experience.

Chapter One

Introduction

1.1 Background to the study

This study was first inspired by the learning experiences of art, design and communication teachers on an accredited in service learning and teaching programme. When I started the Doctoral Programme in 1998, I was course leader for the SEDA (Staff and Educational Development Association) accredited programme at the London Institute, a specialist art, design and communication collegiate higher education institution. I was prepared for my students to change as they learnt about learning and reflected on their own professional contexts as I had considerable teaching experience with design students. I was not as prepared for the different ways in which these learners would engage with the issues and begin to make conceptual changes which in turn changed their conceptions and approaches to learning and teaching. I had experienced conceptual change with design students, but began to develop an awareness, in working with other teachers, that not all teachers of practice-based creative arts subjects conceived of learning and teaching in the same way that I did. I began to wonder about what those differences were, and why some teachers held such different views even when they taught the same subject and had similar backgrounds or learning experiences. I was also aware that the educational research literature was rich in exploring the aspects of experiences of learning (e.g. Marton and Saljö, 1976) and the experiences of teaching (e.g. Prosser and Trigwell, 1999). However, there had been little in the literature that examined learning and teaching in creative practice-based subjects. One article by Cal Swann, originally published in *Designer* in 1986 (2002) had a big influence in the world of learning and teaching in art and design in particular. Swann argued that there was a need for art and design teachers to reappraise the teacher-focused approaches characterised by what he calls the 'sitting-by-Nellie' approach. His challenge to

practice-based teachers was to reduce the amount of one-to-one contact in student-teacher tutorials, which rely heavily on teacher guidance and instruction, the 'Nellie' approach.

The so-called 'traditional' teaching method in art and design, as far as studio work is concerned, has relied very heavily on a one-to-one tutorial that generally takes place between the tutor and the student as a discussion about the particular project on which the student is working. It is usually an examination of the work 'on the drawing board' and often results in the tutor demonstrating his/her own expertise to improve some aspects of the students' work – more or less a 'sitting-by-Nellie' approach. Most of the teachers in art and design would call it a traditional 'atelier' method derived from the master artist/craftsman showing an apprentice how to do it, which is a kinder description but it comes to the same thing. (Swann, p. 50)

He proposed that art and design teachers should make more opportunities for peer directed problem solving, group work and developing critical abilities. Crits, or critiques, are intended to develop students critical sensibilities as a tutor/peer assessment methodology, if the tutor leads the process in a teacher-focused way, this intention is not realised and the students often come away demoralised and demotivated. If a student-focus were enhanced, he asserts, it would ensure that seminars and crits would develop higher level learning outcomes for art and design students.

The overall theme of the experience of teaching is one that I have explored in the context of art and design. Firstly for the LTA (Learning, Teaching and Assessment) assignment (Drew, 2000a) where the study explored presage factors involved in teachers' conceptions of teaching in art and design. Some of these themes were also

explored in a conference paper (Drew, 2000b) where the focus of analysis was the qualitatively different ways in which design teachers experience their teaching. This was presented as the ways in which these teachers conceive of or understand their particular teaching and learning situations and was analysed using a phenomenographic approach. This paper further discussed the characteristics of the discipline building on existing research evidence foregrounding the notion of a discipline specific context to teaching. The examination of the concept of learning to practice as a teacher was illustrated with reference to the design teachers' experience.

I also pursued the notion of learning to practice as a teacher of art and design in the ETW (Education, Training and Work) assignment which led to a paper first presented at the SRHE (Society for Research into Higher Education) Conference: Innovation and Creativity in Teaching and Learning and later published in the journal, *Innovations in Education and Teaching International* (Drew and Vaughan, 2002). This article examined a course team, who have a joint responsibility in the design of the student learning experience, as they reflect on their professional learning. This course team, Design Technology for the Fashion Industries, also completed the SEDA programme which had been the focus for my interest in the LTA assignment. The focus of this study was therefore on the value added to professional development as a course team when so often staff development is aimed at the individual teacher. What was highlighted was a strategy for linking development activities to course teams to create an integrated approach, informed by current research. Examples were given of how the development focus had shifted from the individual to a whole course team in an attempt to have more impact on the student learning experience and innovative models of course design. The study examined the results for the course team who had adopted a common student-focused approach, and had been able to accommodate the individual variation in approach to

teaching and still produced an outcome which was likely to benefit student learning. The results accord with studies which suggest developments aimed at improving student learning need to be focused at the individual staff level and at the course and department levels, and to have internal consistency.

1.2 Aims of the enquiry

The aim of this research is to explore:

Conceptions of and approaches to teaching situated within the context of practice-based teachers of art, design and communication.

This study contributes to new knowledge in this research context through an application of existing research methodologies further developed to map hierarchies of experience in a new context. This would significantly benefit the discipline group by clarifying the relationships between conceptions of teaching, approaches to teaching and the context of communities of practice in art, design and communication. This study also contributes to ways of improving practice by bringing this discipline group to awareness in a contextualised study. Studies do exist of teaching in say, physics and the sciences generally, humanities and other text based disciplines. Relational studies of this nature, for example Trigwell et al. (1994) and Trigwell and Prosser (1996b) found a relationship between teachers' intentions and their teaching strategies. This study extends the relational dimension to include communities of practice. This study clearly illustrates how the practice relates to, and therefore influences, the approaches to teaching. It will make a significant contribution to educational and professional development programmes in the discipline area as findings from previous studies suggest that such programmes can successfully integrate these factors to increase awareness (Prosser and Trigwell,

1999). The discipline group of art, design and communication has been a recent entrant to university teaching (relative to other disciplines) and as such has not developed a collective awareness of research into learning and teaching. Teaching of art, design and communication has its roots either in the academy tradition, learning from the master, or in the guild tradition, learning by apprenticeship. The examination of literature that reappraises situated learning will make a logical connection to the two areas of practice examined, the practice-based arts and the practice of teaching.

From the prior inquiries discussed earlier in this introduction I developed an interest to pursue a study of variation in teachers' experience using a phenomenographic approach. The focus for this study is teachers of practice-based subjects in art, design and communication, e.g. fine art painting, graphic design, photography. The reason for this focus is that the knowledge base and context of the teaching is in the practice. The relational framework of conceptions and approaches identified by Trigwell and Prosser (1996a and b) in university science teachers will not be replicated in this study due to these fundamental differences. A further contextualisation is called for by examining learning to practice as a teacher in these subject areas. As the research is discipline specific the previous study (Drew, 2000b) will also be further drawn on to examine epistemological characteristics.

Chapter 2

Learning and Teaching: a review of studies relating to conceptions and approaches to teaching

This chapter outlines the research into teachers' experience of teaching in both school and university level teaching. The literature on teacher thinking broadly divides into studies of teacher beliefs and knowledge and phenomenographic studies of teacher conceptions. The chapter commences with an overview of studies of conceptions of learning which complement the studies of conceptions of teaching. Studies of teacher beliefs, conceptions and approaches are examined before going on to identify studies which look at relations between these areas. Finally, studies which have implications for the development of teaching in universities will be discussed.

2.1 Conceptions of Learning

Learners have been shown to hold qualitatively different conceptions of learning. In his study of adult learners, Säljö (1979) reported five different conceptions:

1. Learning as a quantitative increase in knowledge
2. Learning as memorising
3. Learning as the acquisition of facts, methods etc. which can be retained and used when necessary
4. Learning as the abstraction of meaning
5. Learning as an interpretive process aimed at understanding reality

Table 2.1

Marton & Säljö (1984) reported further relations between learners' conceptions of learning and their approaches to learning. There have also been many qualitative and quantitative studies which further demonstrate associations between approaches

to learning and learning outcomes (e.g. Biggs, 1993). In a further study reporting conceptions of learning, Marton, Dall'Alba & Beaty (1993) found the five conceptions of learning identified by Säljö (1979) and they also identified a sixth conception: learning as changing as a person.

Studies of conceptions of learning have also been undertaken with university teachers. In their study of teachers of first year university science subjects, Prosser, Trigwell & Taylor (1994) reported qualitatively different conceptions of learning and their relation to conceptions of teaching which are discussed later in this chapter.

2.2 Research on Primary and Secondary School Teacher Beliefs

Much research on school teaching has focused on teacher cognition (Calderhead, 1996; Clark & Peterson, 1986). As such, this research includes studies of teacher knowledge, beliefs and thinking. Kagan (1990) describes teacher cognition as;

somewhat ambiguous, because researchers invoke the term to refer to different products, including teachers' interactive thoughts during instruction; thoughts during lesson planning; implicit beliefs about students, classrooms and learning; reflections about their own teaching performance; automatized routines and activities that form their instructional repertoire; and self-awareness of procedures they use to solve classroom problems. (p. 420)

Studies of teachers' conceptions in schools (e.g. Pajares, 1992) illustrate the central role that teachers' beliefs play in shaping teaching practices. In his review of teacher beliefs Pajares (1992) identified the wide range of terms used to discuss this aspect of teacher cognition.

They travel in disguise and often under alias – attitudes, values judgements, axioms, opinions, ideology, perceptions, conceptions, conceptual systems, preconceptions, dispositions, implicit theories, explicit theories, personal theories, internal mental processes, action strategies, rules of practice, practical principles, perspectives, repertoires of understanding, and social strategy, to name but a few that can be found in the literature. (p. 309)

Findings from these research studies do however reach consensus on a number of key issues. Beliefs are shaped by teachers' prior experience of learning as school students and foreground or filter new knowledge which is seen to be incompatible with current beliefs (Pajares, 1992). This literature is rarely drawn on in studies of teaching in tertiary settings, with some notable exceptions (Entwistle & Walker, 2000).

2.3 Research on Tertiary Teacher Belief Orientations

Kember (1997) produced a comparative review of research into beliefs and conceptions of teaching in higher education which describes the work of others in creating models for categorising beliefs and conceptions. Those studies which characterise teachers' belief orientations are mainly derived from a grounded approach with the aim of making interpretations of qualitative data which can be coded into categories and theoretical propositions (Glaser & Strauss, 1967). Fox (1983) and Dunkin (1990) interviewed newly appointed staff and both identified different dimensions of theories of teaching. Fox (1983) proposes a dimension which contrasts teacher-initiated learning with student-initiated learning and a dimension which contrasts an emphasis on subject content and a focus on students' conceptions. Fox describes the theories of transfer, travelling, shaping and growing within his findings. Dunkin (1990), in his study of novice teachers also identifies four

dimensions of teaching beliefs: structuring learning; motivating learning; encouraging activity and independence in learning; and establishing interpersonal relations conducive to learning.

Further studies of belief orientations enhance and extend the findings of these early studies as a “continuum of categories of conceptions” (Samuelowicz & Bain, 1992). Samuelowicz & Bain (1992) proposed five orientations to teaching and learning which were subsequently analysed to reveal constituent beliefs. Some studies focus on specific aspects of teaching. For example Dunkin & Precians’ (1992) study of award winning university teachers, helps us to understand that although these teachers’ beliefs are not remarkably different from those in other studies, these teachers do carefully consider certain aspects of the teaching context when they go about their teaching. This study explored four dimensions of teaching: teaching as structuring learning; teaching as motivating learning; teaching as encouraging activity and independence in learning; and teaching as establishing interpersonal relations conducive to learning. In a similar vein, Ballantyne, Bain & Packer (1999) studied teachers who were nominated for “exemplary or noteworthy teaching practice” and noted that these teachers’ accounts support the claim that there is a strong link between teacher beliefs and practices. Some studies went on to develop quantitative instruments (Gow & Kember, 1993) that could be used with larger samples, to support generalisable claims about teacher beliefs which are framed as *learning facilitation* and *knowledge transmission*. Gow & Kember (1993) state that “this study suggests that the methods of teaching adopted, the learning tasks set, the assessment demands made and the workload specified are strongly influenced by the orientation to teaching” (p. 31) which is a similar to claims made in other studies of beliefs or conceptions of teaching.

In Kember's review of this research field, he proposed an overarching model for these studies of belief orientations (the model also mapped studies of conceptions which will be discussed later).

The model posits two broad higher level orientations labelled teacher-centred/content-oriented and student-centred/learning oriented. Subordinate to each orientation are two conceptions. The boundary between each pair of conceptions is shown as diffuse, implying a relatively easy development across each pair. Transitions between the two orientations are envisaged as requiring a more significant change. A fifth intermediate conception, in which teacher-student interaction is first recognised as necessary, is included as a transitional bridge between the two orientations and their subordinate conceptions. (Kember, 1997 p. 266)

More recent studies of belief orientations revisit findings from earlier studies (Kember & Kwan, 2000; Samuelowicz & Bain, 2001) and extend and refine those findings.

Samuelowicz & Bain (2001) provided illustrative stories to contextualize their findings which they asserted "illustrate how closely coupled an academic's beliefs and practices tend to be, although that is not the focus of this article" (p. 312). Their 2001 findings were similar to the 1992 study in identifying the belief orientations of *imparting information, transmitting structured knowledge and encouraging knowledge creation*, as well as extending both the teaching-centred and learning-centred orientation dimensions.

2.4 Conceptions of Teaching

Studies outlined in this section adopt a phenomenographic approach, in which a limited number of categories of conceptions are identified, describing the subjects' perception of a phenomenon (e.g. Trigwell et al., 1994). The categories as defined in many of these studies have many similarities in the use, and in the choice of terminology, as in the studies of belief orientations. Conceptions are defined by Pratt.

Conceptions are specific meanings attached to phenomena which then mediate our response to situations involving those phenomena. We form conceptions of virtually every aspect of our perceived world, and in so doing, use those abstract representations to delimit something from, and relate it to, other aspects of our world. In effect, we view the world through the lenses of our conceptions, interpreting and acting in accordance with our understanding of the world. (Pratt, 1992, p. 204)

Many of these studies present findings of teachers' conceptions or ways of understanding teaching which range from knowledge or information transmission to facilitation of learning or conceptual change (e.g. Dall'Alba, 1991; Martin & Balla, 1991; Pratt, 1992; Martin & Ramsden, 1992). Dall'Alba (1991) described seven qualitatively different conceptions of teaching and she further explored these conceptions in a study of the ways teachers experienced their teaching roles and the content of a course of study (Dall'Alba, 1993). The categorisations identified in these studies form an ordered set of qualitatively differing conceptions and a nested hierarchy of conceptions.

Prosser, Trigwell & Taylor (1994) report a phenomenographic study of conceptions of teaching which focused on a specific teaching environment (as opposed to a range of

teaching environments): first year university science teaching. This study further underpins research into teachers' approaches to teaching which is discussed later in this chapter. This study adopts a second-order, phenomenographic perspective which clarifies that conceptions are not characteristics of individuals but are relations between individuals and a phenomenon. The phenomenon in this case consists of a particular teaching role and context. Because conceptions are context dependent they are not stable characteristics of individuals but are relations between individuals and a particular task and context. Teachers can change their conceptions according to the teaching environment and other aspects of the context, for example teachers of first year undergraduate courses may think of their teaching in qualitatively different ways when they teach on postgraduate courses. This study proposes six conceptions of teaching (Table 2.2) and five conceptions of learning (discussed earlier in this chapter).

Conceptions of Teaching (Prosser, Trigwell & Taylor, 1994)

Conception 1: Teaching as transmitting concepts of the syllabus

Conception 2: Teaching as transmitting the teacher's knowledge

Conception 3: Teaching as helping students acquire concepts of the syllabus

Conception 4: Teaching as helping students acquire teacher's knowledge

Conception 5: Teaching as helping students develop conceptions

Conception 6: Teaching as helping students change conceptions

Table 2.2

2.5 Conceptions of Teaching in Creative Practices

Teaching context or discipline frameworks are another area that the literature suggests can influence teachers' conceptions of teaching. One such study did begin to categorise conceptions from two broadly different discipline areas, the sciences and social sciences (Samuelowicz & Bain, 1992). However, no conclusions could be drawn from the findings of this study that bear a direct relevance to either teaching context or discipline frameworks for teaching and learning. This may be due to the limited sample size in this study (13 teachers) or because there was a limited discipline mix (science and social science). This study has been revisited by these authors with a larger sample (39 teachers) and a range of disciplines, they characterise the differences in belief dimensions with illustrative cases from Chemistry and Architecture (Samuelowicz & Bain, 2001). These cases characterise the Chemistry teacher as having an orientation which is labelled 'Providing and facilitating understanding'; the Architecture teacher as having an orientation labelled 'Helping students develop expertise'. The main conclusions drawn from this study further substantiate the claims of the 1992 study which are presented as two different stories about belief orientations. Samuelowicz and Bain (2001) are careful to point out that further work needs to be done to look at the link between belief and practice as well as how much these findings are due to variations in disciplines and their underpinning epistemologies. The work of Prosser & Trigwell (summarised in their 1999 book), concentrates on empirical studies of science teachers (physics and chemistry), and as such they are clear in conveying that although some findings will have generalisable applications, in the main the findings may only be pertinent to the context of science teaching.

Most studies of conceptions of teaching have chosen to focus on traditional university subject disciplines e.g. sciences and humanities. There are however some studies of

conceptions of teaching in creative practice-based disciplines including music (Reid, 1997; 2000) and design (Drew, 2000a; 2000b).

In an earlier study of design teachers (Drew, 2000b) five qualitatively different conceptions of design teaching are described. These range from the teacher offering a range of practical and technical skills to students, through to the teaching as helping to change students' conceptions. These categories of description illustrate a dimension of the qualitative variation in design teaching. Conception A in this study illustrates that even one-to-one teaching contexts can still be conceptualised in transmission terms. The other four conceptions identified incorporate a degree of student-centredness which increases from B to E. Categories D and E also demonstrate a community of practice dimension as a focus for the context of teaching.

Variation in Conceptions of Design Teaching (Drew, 2000b)

Conception A: Teaching is offering students a range of practical and technical skills

The teacher aims to reinforce technical ability by giving demonstrations and showing individual students ways of making or doing. The teacher believes that the students need to follow technical topics based on what the teacher feels they need to learn. The emphasis of the learning is on a product or artefact. The intention is to demonstrate or give examples of technical skills.

'One to one is most effective in this situation as each student has different requirements, it may be possible to cover key mistakes, pitfalls, what works, straight edges, cleanliness, mounting, application of text etc. in a briefing session. I would like to include more demos and methods if possible.'

Conception B: Teaching is developing students' practical and technical skills

The teacher emphasises developing and practising skills, sometimes in differing contexts, with the aim of perfecting techniques. The emphasis of the learning is on a product or artefact. The teacher works with individual students with the intention of giving a guided learning experience.

Conception C: Teaching is developing students' critical, practical and technical skills through student interaction

The teacher aims to enable students to develop a critical language by working together in groups or teams to present their own work and to see the work of others. The emphasis of the learning is on peer learning and process. The teacher works with individuals, groups or teams with the intention to enable students to form opinions and ideas.

Conception D: Teaching is developing students' skills and conceptions in the context of professional practice

The teacher encourages students to manage projects involving complex problem solving skills which are set in the context of professional practice. The emphasis of the learning is on peer learning and process. The teacher works with students to develop conceptions with the intention to increase self-awareness, individual and team autonomy and for professional preparation.

Conception E: Teaching is helping students change conceptions

The teacher emphasises original research and conceptual thinking skills. The emphasis of the learning is on peer learning and process. The teacher works with students with the intention to improve self-directed research, conceptual skills and change conceptions.

'I introduced the programme by explaining the brief in full to the entire class, showing examples of the variety of work that they could consider and stressing the importance of original research and innovation. I then sent them away to research concepts for four of their collections which they were to present visually and verbally the following week. For this Concept Seminar I called on the other tutor (X) to join me in discussing with the students the themes they had developed, as a fresh but informed eye. In subsequent weeks I worked with the students to develop sketchbooks, development sheets and presentation drawings building on those themes. I would start the session by reminding them of the stage we had reached in the work schedule, agreeing an order in which to see each student and cover any points of general concern or uncertainty. I would then work with those students scheduled to be seen that day, and (in the last half hour of the session) those students from the other group who had asked to be seen because they were having problems. The agreement was that the group timetabled to be working independently must sign in at the start of the session but could then work in the library etc. if necessary, but the majority chose to stay in the studio too. I programmed another Concept Seminar with (X) near the end of the schedule, thinking that the students would need a change of pace and some creative input to freshen their ideas, and we held a major critique on the last day in which the students presented their completed portfolios to the staff and the other students.'

Adapted from Drew, L. (2000b)

The practice-based context of studio teaching can be seen as a student centred approach, but as Reid & Davies (2000) report, some teachers in this context hold

conceptions of teaching as instructional and teacher centred rather than co-operative and collaborative learning. The quality of this learning environment relates to the context and the conceptions of learning and teaching held by both teacher and student (Reid and Davies, 2000).

2.6 Approaches to Teaching

Trigwell, Prosser & Taylor (1994) reported five approaches to teaching (Table 2.3) using transcripts from the interviews with 24 university physics and chemistry teachers from an earlier study to conduct their analysis (Prosser, Trigwell & Taylor, 1994). The analysis of categories of approaches to teaching was conducted in terms of the strategies teachers adopted and the intentions which informed those strategies.

Approach A	A teacher-focused strategy with the intention of transmitting information to students
Approach B	A teacher-focused strategy with the intention that students acquire the concepts of the discipline
Approach C	A teacher/student interaction strategy with the intention that students acquire the concepts of the discipline
Approach D	A student-focused strategy aimed at students developing their conceptions
Approach E	A student-focused strategy aimed at students changing their conceptions

Table 2.3

Prosser & Trigwell used the outcomes of these qualitative studies to devise the *Approaches to Teaching Inventory* (1993; Trigwell & Prosser, 1996a). Use of the

questionnaire confirmed the relationship between intention and strategy which was found previously in qualitative studies. The Approaches to Teaching Inventory or ATI was developed to measure the variation in the ways teachers approach their teaching in a particular situation as it is a relational instrument.

It has 16 items.

- 8 on a sub-scale describing an approach which is intended to change student's conceptions or ways of seeing things through a focus on the student. This sub-scale is labelled conceptual change/student-focused or CCSF
- 8 on a sub-scale describing an approach concerned with information transmission and a teacher-focus, labelled ITTF.

The full 16 item inventory and its use as a relational instrument is discussed by Prosser & Trigwell (1999). They present the research into teachers' approaches together with discussion of earlier research into student learning and teachers' conceptions. The declared aim of this research is to seek relations between these areas, that is, student learning and teaching, in order to derive conclusions for the development of teachers. Research into teacher approaches therefore acknowledges teachers' conceptions and consequently aims to help to improve student learning outcomes by coming to a better understanding of what it is that teachers think and do when they go about their teaching.

2.7 Research which examines relations between teachers' conceptions and teachers' practices

Some other studies have made the logical progression from describing the variation in conceptions and approaches by seeking to identify connections between these areas. This is mainly because, as has been asserted earlier, beliefs and conceptions are considered to underlie approaches to teaching.

Measures to enhance the quality of teaching should take account of teaching conceptions if they are to be effective, as teaching approaches are strongly influenced by the underlying beliefs of the teacher. (Kember, 1997)

Willcoxson (1998) interviewed both teachers and their students in order to examine what relationships existed between those teachers' experience of teaching, their perceptions of teaching and the experience of students being taught (in lectures) by the same teacher. The experience of the students in this study is the key factor. What they perceive is considered to be an indicator of teacher efficacy. Martin & Ramsden (1992) conducted a modified phenomenographic study of five teachers engaged in a university level course in learning and teaching. The aim of this study was to investigate "how academic staff understand teaching and how that understanding is embodied in their practice" (p. 148). Martin & Ramsden reported case studies based on both interviews and observational studies of the participants over a period of time during the teachers' professional development. Martin, Prosser, Trigwell, Ramsden & Benjamin (2000) examined relationships between teaching intention and strategy in a study of 26 university teachers in four discipline areas. This study was conducted using both interviews and observational studies to examine those relationships. The results of this study confirmed that there were no inconsistencies between the way that teachers reported their intentions and their actual practices which supports the claim that the way teachers think about their teaching informs the way in which they go about it. Hativa, Barak & Simhi (2001) conducted a similar study, with exemplary university teachers. This study used a wide range of sources including course documents, a teaching effectiveness questionnaire, interviews and video observations. The authors came to very similar conclusions "that there is a good, but far from perfect, fit between these teachers' beliefs and knowledge concerning effective strategies and their classroom practice" (p. 725)

Some studies do make well supported claims for the relationship between conceptions and approaches to teaching. These studies use qualitative and quantitative methods to derive their findings (Trigwell & Prosser, 1996a; Kember & Kwan, 2000). The five approaches to teaching (Trigwell, Prosser & Taylor, 1994) discussed earlier are further explored in relation to the teachers' conceptions of learning and teaching (Trigwell & Prosser, 1996a) to present a fuller relational picture of teachers' awareness, strategies and intentions. The findings in this study demonstrate a statistically significant relationship between conceptions of teaching and approaches to teaching ($p < 0.001$), conceptions of teaching and conceptions of learning ($p < 0.001$) and conceptions of learning and approaches to teaching ($p < 0.05$). Kember & Kwan (2000) also sought to examine this relationship and found "a high level of correspondence" of 89.5% using cross tabulation which confirms the earlier findings, in other words, teachers' conceptions were found to very closely mirror the way in which those same teachers approach their teaching. Teaching conceptions have therefore been shown to be related to approaches to teaching, which, in turn, affect students' approaches to learning and the quality of student learning outcomes (Trigwell, Prosser & Waterhouse, 1999). If educational development activities are focused on the formation of a student-focused/learning oriented conception of teaching, then the role of those activities is central to the enhancement of the quality of student learning outcomes.

2.8 Research which discusses implications for teacher development

As a teacher develops they can become more aware of their conceptions of teaching. In fact it is an essential part of changing approaches to teaching to increase this awareness. Teachers' conceptions and experiences are stressed by Prosser and Trigwell (1999, p160). In their principles underpinning academic development, they

argue that one of the primary roles of academic development is to expand teachers' awareness of their learning and teaching situations. Those principles are as follows:

1. Teachers need to become aware of the way they conceive of learning and teaching within the subjects they are teaching.
2. Teachers need to examine carefully the context in which they are teaching and to become aware of how that context relates to or affects the way they teach.
3. Teachers need to be aware of and seek to understand the way their students perceive the learning and teaching situation.
4. Teachers need to be continually revising, adjusting and developing their teaching in the light of this developing awareness.

Entwistle, Skinner, Entwistle & Orr (2000) studied the views of students on a postgraduate teacher training course about what they perceived 'good teaching' to be. The conceptions of student teachers provide a useful insight from the perspective of the learner. This study has some implications for development of teachers in other contexts, they concluded that an expanded awareness of the relationship between teaching and learning can be achieved if the teacher can see things from the perspective of the learner. In engaging with an educational development activity, the teacher becomes a learner also and uniquely sees what it is their own students are experiencing with a new focus. Marton & Booth (1997) have described this awareness:

Teachers mould experiences for their students with the aim of bringing about learning, and the essential feature is that the teacher takes the part of the learner, sees the experience through the learner's eyes, becomes aware of the experience through the learner's awareness. (Marton & Booth, 1997)

Entwistle & Walker (2000) encourage the use of staff development activities which are designed to help teachers to develop more sophisticated conceptions of learning and teaching, i.e. those conceptions which are student-focused, learning oriented and concerned with conceptual development or change. Martin, Prosser, Trigwell, Ramsden & Benjamin (2000) also make this recommendation and qualify this in the respect that development activities should also take account of the 'object of study'. Ho, Watkins & Kelly (2001) studied teachers on a development programme which used a conceptual change approach. Their study took account of teachers' conceptions and approaches before and after the programme as well as the learning approaches of their students. The results of this study have very positive implications for teacher development activities. All of the teachers showed positive changes in their conceptions and teaching practices which then led to some changes in their students' approaches to learning.

2.9 Overview

Much of this literature is reviewed or summarised in three main sources. Prosser & Trigwell (1999) is an authoritative source in this area from the phenomenographic perspective. Hativa & Goodyear (2002) brings together a broader selection of studies from both the phenomenographic and belief orientation traditions and with a wide variety of tertiary teaching contexts and settings. Kane, Sandretto & Heath (2002) have produced a critical review of studies of teaching beliefs and practices. This review, while comprehensive, does not fully appreciate the findings from the phenomenographic (non-dualist) perspective particularly. The authors of the latter review adopt a dualist perspective on research in this area and advocate that studies of conceptions should be triangulated with observations of teaching to seek confirmation between teachers' espoused theories and theories of action.

Chapter 3

Communities of practice and learning to practice

This chapter outlines the research into communities of practice and learning to practice. Most of this literature comes from a social constructivist perspective, the epistemological characteristic of which is that knowledge is seen to be constructed in a social context. The chapter commences with an overview of studies relating to learning to practice and participation in practice and also reports of studies which use narrative to explore learning to practice. Studies of expertise and competence and activity theoretical perspectives are also reviewed as they further complement the studies of learning to practice. The chapter goes on to discuss studies of team and course cultures which are mainly derived from an organisational theoretical perspective. The chapter concludes with an overview of studies of professional learning, particularly as related to the learning of teachers.

3.1 Learning to practice and participation

The roots of social theory go back to Plato's arguments about the nature of a republic. However, more recently these ideas and their contemporary antecedents are well described by Giddens (1984). He argues that social structures demonstrate the characteristics of rules and resources. Rules have normative elements and codes of signification. Resources comprise both authoritative and allocative aspects which are transmitted by socialisation (Giddens, 1984, p xxxi and p 17). Social structures have properties which give coherence and relative permanence to social practices in different times and locales (Giddens, 1984). In much of Giddens' work a common conceptual framework is used to examine notions of practice, see for example 'New Rules of Sociological Method' (1976), 'Central Problems in Social Theory' (1979) and 'The constitution of Society' (1984). He refers to the practical as a behaviour which

has become routinised, in other words something which happens as part of a daily pattern of life. So a 'practice' according to Giddens, is a way of doing something, the nature of which is reproduced in social contexts and conforms to certain rules. These ideas about social context, temporality and historicity are further developed in some of the studies reviewed here.

There is a significant literature which embraces the sociocultural perspective on practice, particularly emphasising learning to practice in various settings. Learning to practice, whether in workplace or simulated settings is seen as a move towards full participation in a community of practice (Lave and Wenger 1991; Lave 1993). That move to full participation takes place by engaging in 'legitimate peripheral participation' which is taking part in the authentic activities of the practice albeit with guidance and at the edges of the practice community. These views emphasise social practice as a premise for learning and that 'knowing in practice' arises from participation in that social practice (Billett 1998). The community of practice has been further conceived as constituting smaller units, or activity systems (Engeström 1987) which engage in practice through expansive learning, learning by extension and diversification of activity. The principle of expansive learning concerns the activity system (e.g. a course team) as the unit of analysis, in this regard individual teachers' and group actions are important. An activity system is a community of multiple points of view, different traditions and interests. Activity systems get shaped and change over time so they are both a source of trouble and of innovation. The history of aspects of the activity system helps us to understand their inherent problems and potentials. Contradictions, or the process of questioning and evaluating, play a central role in the cycle of expansive learning, as a system develops the learning expands by individuals questioning the different aspects of the situation. So contradictions are not the same as problems or conflicts. New elements (e.g. a course team adopting an innovation or changing the divisions of labour) lead to

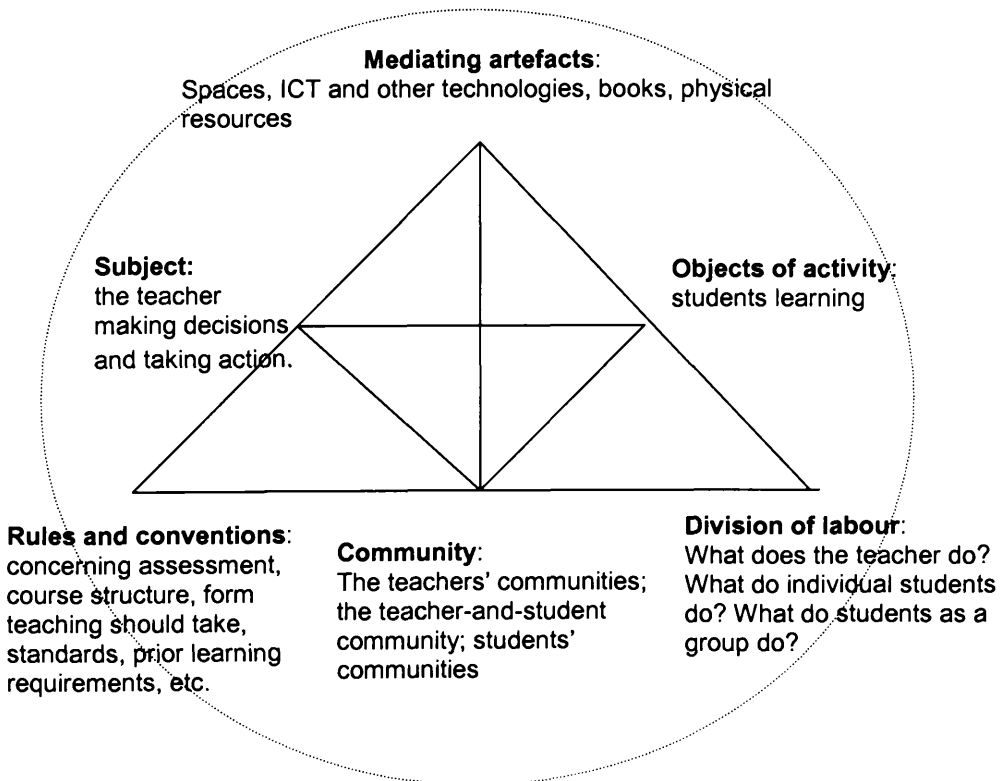
secondary contradictions which then generate disturbances and conflict, further questioning, evaluation and expansive learning. Activity systems move through long cycles of qualitative change, thus leading to collaborative envisioning and collective change efforts.

Activity theory focuses on the structure of activities as historically constituted entities.

The learning focus of activity theory is to describe the historical nature of an activity (e.g. teaching on a particular course) and compare that to the developmental stage of a person in respect of that activity (e.g. a learner on that course). The aim is to further define a 'zone of proximal development' so that learners can be helped to perform the activities of the practice with help and guidance which they would not be able to perform alone (Vygotsky, 1934; Wertsch, 1985; Engeström 1987).

Teachers and their learners, engaged in collective work and learning demonstrate all of the principles of the activity system (Engeström, 2001) (Fig 3.i)

Fig 3.i An activity system for learning and teaching



The diagram shows teaching as an activity system (adapted from Knight, 2002)

Figure 3.1 shows teaching as an activity system, noting that:

1. Teaching is not sufficient to produce the planned learning outcomes.
2. Linking subject, object and community in the inner triangle: clarifies that the action is not individual (teacher) but individual and social (teacher and their communities)
3. Linking opportunities and possibilities in the outer triangle: mediating artefacts, which teachers shape to their activities; rules, codes, expectations and the like; and the division of labour.
4. The outer triangle provides parameters for teachers to work within: rules for course design and structure, rules for quality assurance, rules for assessment etc; how the division of labour works in a course team; what resources and use of learning environments. These factors can also limit what can happen in changing course design for example.

Learning which is the result of participation in social practices means that the participants appropriate ways of seeing the world inherent in those practices. These situational and social factors are a key part of learning to practice (Billett, 2001).

Billett argues that a non-dualist view of learning is becoming more accepted, based on the concept that there is an inseparable relationship between an individual's knowing and their social lifeworld (Rogoff, 1990). Many would argue that preparing learners for life as a creative practitioner, be that as an artist or a photographer, is essentially preparing them for solitary work. Rogoff (1990) suggests that cultural

practices and norms shape even the most apparently solitary activities. This is further confirmed by Billett (2001).

An artist working in the isolation of his studio reported shaping his practice to account for situational factors determining the kinds and purposes of his work that included physical environments and consideration of the market (p. 444)

These kinds of social situation and activity related analyses are also clearly demonstrated in the work of Suchman (1987) in her accounts of an airport operations room. She describes the activities of the individuals and the work related artefacts constituting a locally ordered work setting that is subject to constant change.

Jean Lave describes the social participatory perspective on learning as individuals developing and changing their identities, "... people are becoming kinds of persons" (Lave 1996, p 157). Lave's study of the apprenticeship of tailors in Liberia during the seventies identifies how the tailors were primarily making ready-to-wear trousers, but the apprentices also learned other important contextual factors about being a tailor:

... they were learning relations among the major social identities and divisions in Liberian society which they were in the business of dressing. They were learning to make a life, to make a living, to make clothes, to grow old enough, and mature enough to become master tailors, and to see the truth of the respect due to a master of their trade.

(Lave, 1996, p 159)

These tailors lived in the master tailors' houses in a district full of those houses and also tailoring workshops. In the workshops the apprentices received direct and

indirect guidance from participation in the tailoring practices, working with other tailors and other tailors' apprentices. These apprentices were effectively immersed in tailoring practice and this environment helped them to fully participate in tailoring and learn the trade. The community of practice dimension is most certainly about "becoming kinds of persons", and about developing ways of seeing the world through practice.

The cornerstone of these issues for professional learning can be summarised as learning to practice or becoming inducted into a community of practice (Wenger, 1998). Wenger further defines the role of *participation* in a practice in its relationship with the *reification* of artefacts or processes particular to the practice. Wenger regards participation as 'the social experience of living in the world' (1998, p. 55) which involves acting, thinking and feeling as a whole personal experience. It is from participation Wenger argues, that an *identity of participation* is constituted through the relations formed in participation itself. Wenger's idea of *reification* is central to practice, artefacts, processes and concepts can be reified (made into a concrete object).

Any community of practice produces abstractions, tools, symbols, stories, terms, and concepts that reify something of that practice in a congealed form.

(p. 59)

The indicators of a community of practice, according to Wenger are:

1. Collective reflection on practice – *sustained mutual relationships leading to awareness*
2. Talking about practice – *shared ways of engaging in doing things together*
3. Sharing problems and issues relating to practice – *knowing what others know, and how they can contribute to the task*

4. Context of practice - *absence of introductory preambles, interactions are the continuation of ongoing discussions*
5. Cultural aspects of practice – *a shared discourse reflecting a certain perspective on the world*

Narrative and story telling are regarded as processes central to learning to practice. A learning experience is framed in stories and anecdotes which give a different dimension to the learning, the non-canonical practice (Orr, 1996; Brown & Duguid, 1996). Canonical practice is described by Orr (1996) as being derived from a map of 'directive' documentation which is aimed at single issues. This documentation is often a work practice manual and is much less like a map and more like a single predetermined route with no alternatives. For example, the manual which accompanies a video recorder could fit Orr's account of canonical practice, yet many people would tell very different stories of how they have actually used a video recorder or diagnosed even simple problems. Experience tells us that the practicalities of using something as commonplace as a video recorder vary immensely and are often at odds with the simple instructions in the user manual. The account of actual practice, the non-canonical, is very different and is anything but the following of simple instructions. The accounts of actual practices, shared between learners, teachers and other practitioners enrich the informal learning process. Orr (1996) analysed the work of service technicians in training and work with a rich, descriptive ethnographic account. His analysis contrasts the official documentation of the practice e.g. work manuals, the canonical practice, with the diagnostic process afforded by story telling and cooperative knowledge building, the non-canonical practice.

The key element of diagnosis is the situated production of understanding through narration, in that the integration of the various facts of the situation is

accomplished through a verbal consideration of those facts with a primary criterion of coherence. The process is situated, in Suchman's terms, in that both the damaged machine and the social context of the user site are essential resources for both the definition of the problem and its resolution.... They are faced with a failing machine displaying diagnostic information which has previously proved worthless and in which no one has any particular confidence this time. They do not know where they are going to find the information they need to understand and solve the problem. In their search for inspiration, they tell stories. (Orr, 1996, pp. 178-179)

Studies of experience, expertise and competence further demonstrate that learning to practice is not just about participation, but also about an experience of meaning which is constructed over time in engaging at the community level in order to build a repertoire of practice. Earlier studies of competence define a linear hierarchy of competence acquisition from novice to expert (Dreyfus & Dreyfus, 1986; Benner, 1984) which do not take account of social factors but do define aspects of competence as context dependent. Schön (1983) criticised the technical rational epistemology by elaborating on what he called an 'epistemology of practice'. His study closely examined the professional work and learning of architects, engineers, psychotherapists, planners and managers. From this study he further determined two different types of human competence, knowing-in-action and reflection-in-action. Knowing-in-action illustrates the context-dependent nature of competence. The professional workers' reflection-in-action further demonstrates and clarifies the context-dependent nature of competence.

Wenger (1998, p137-139) explains that learning in practice is possible if an experience of meaning interacts with a regime of competence. He also distinguishes between experience and competence, they do not determine each other but they

may be out of alignment in the practice learning experience. Developing competence in the skills of a practice does not in itself build experience as the practice has many socially situated elements the meaning of which have to be negotiated within the community of practice. Billett (2001) has produced an authoritative study of knowing in practice and vocational expertise which uses accounts of Australian hairdresser's learning to practice. He acknowledges both the social and the situational in the process of coming to know and in developing expertise.

Expertise needs to be considered situationally, being related to the circumstances of the enactment of the vocational practice. This does not mean that the individual's capacity to perform is welded to one setting. Rather, it recognises that expertise can only be understood within particular domains of knowledge and action (social practice), thus embedding it in particular social circumstances. (Billett, 2001, p. 441)

Sandberg (1994) developed an interpretive approach to human competence at work in his phenomenographic study of engine optimisers. His findings indicate that knowledge, skills and other attributes are not externally related to work as assumed within the rationalistic approach, but internally related to it through the workers' conceptions of that work. He further elaborates on the collaborative sense making of work practices as described by other interpretive studies (e.g. Weick, 1983, 1995). The phenomenographic approach in this study focuses on 'the workers' own experience or sense making of their work' (Sandberg, 1994, pp. 45-46). Sandberg's interpretation yields three qualitatively different conceptions of competence in engine optimisation;

- Competence as accurately optimising separate qualities of the engine according to requirements

- Competence as accurately optimising interacting qualities of the engine in the right order
- Competence as optimising interacting qualities of the engine through a practical sense of the engine

(Sandberg, 1994, p. 94-95)

Crucially, his study helps us to understand that, '...a move from one level to another in the hierarchy from novice to expert does not necessarily mean a change from one conception to another' (p. 145). In other words, development of competence involves a change in the way that work is conceived. The themes developed in this study are further elaborated in the neonatal nursing practice context (Davey, 2002). Davey (2002) also uses a phenomenographic approach to elicit variation in the ways neonatal nurses develop expertise and conceive of the practice of neonatal nursing.

3.2 The role of departmental and course level cultures

There is a body of work developing organisational theories which are concerned with the way individuals learn in organisational contexts and the ways in which organisations can be said to learn. Some of this has been discussed in relation to studies of story telling (Brown & Duguid, 1996). The pedagogical focus is on organisational systems, structures and cultures. Nonaka and Takeuchi (1995) give an example of transformation between tacit and explicit knowledge in an organisation with the employee of a firm of bread making machines who apprenticed herself to a baker in order to better understand how good bread was made. The findings illustrated that she was able to develop concepts of dough kneading which were critical to the success of the machines her company manufactured.

Knight and Trowler (2000) argue that there are culturally prevalent views of learning, dominated by the main activity system in a teacher's experience, the department, or the sub-unit of it, the course. To focus on the main activity system, rather than on the individual, can be said to be a more effective way of influencing cultural changes leading to the improvement of learning and teaching. They emphasise that course and departmental focus is crucial to maintaining the impact of change in line with departmental culture.

This is a theme pursued by others in the discussion of academic work. Martin (1999) sees team work and team learning as vital to the conditions for the 'Learning University'. She illustrates her cases and relies heavily on Senge (1992) to apply the qualities of a learning organisation to the university context. The five disciplines, or qualities, that Senge regards as essential for the staff of a learning organisation are:

1. *Personal mastery*: developing a personal vision and having faith in one's own ability to make a difference within the organisation;
2. *Mental models*: understanding the way oneself and one's colleagues think and reason;
3. *Shared vision*: aligning one's own aims and ambitions with those of one's colleagues;
4. *Team learning*: working with colleagues to go beyond one's own way of seeing;
5. *Systems thinking*: seeing one's work unit as a system, or part of a larger whole and understanding how what happens in one affects what goes on elsewhere.

The sharing of a purpose and a context for working should also therefore be extended into other contexts for professional learning. The emphasis is on the team's influence on the learning of the individual in context. Thomas and Willcoxson (1998) make a strong case for the role of junior academics to support each other in a grass

roots movement for change. The growth of teaching development against the grain of the organisational culture is achieved only by the peer group support at grass-roots level. They assert that the 'bottom-up' approach gave legitimacy to 'teaching experiments' and began to give rise to an emergent priority of excellence in teaching in their department (as opposed to a research-only focus). This study also expresses support for critical friendships as a valid contribution to action learning.

The junior academic enthusiast for change must be protected and supported by a group of others, junior or senior, who are able to act as 'sounding boards' and to share the enthusiasm, burden and credit...for innovations. The creation of a common language and basis for communication within the initiating group is essential, and this language must then be used publicly to provide for dissemination of ideas beyond the initiating group. (p. 481)

An identification with the predominant cultures within academic departments is pertinent also for the new entrant to higher education. Trowler and Knight (1999) discuss the organisational socialisation of new entrants, and recognise how crucial those cultures are to professional development. Those on teaching and learning programmes are predominantly new entrants to the profession, so the development process should heed the sensitivities inherent to the particular circumstances of socialisation or enculturation.

...socialisation into academic work is treated as a special case of professional development – or, alternatively, professional development is taken as a special case of continuous socialisation and resocialisation. (p. 185)

Wenger (1998) asserts that there is a profound connection between identity and practice. He sees parallels between practice and identity constituted as mirror images of each other.

Practice as...

- Negotiation of meaning (in terms of participation and reification)
- Community
- Shared history of learning
- Boundary and landscape
- Constellations

Identity as...

- Negotiated experience of self (in terms of participation and reification)
- Membership
- Learning trajectory
- Nexus of multimembership
- Belonging defined globally but experienced locally

(Wenger, 1998, p.150)

The collective construction of practice (Wenger, 1998) makes things possible in the professional context. Collectively we make sense of and articulate practice to test and re-test the robustness of our claims. Those new to a practice can only make sense of it in practice and in reflecting on that practice through mutual engagement. Wenger (1998) states that talking about practice is the source of coherence in a community and that newcomers can join the community to further its practice and to construct their identity.

3.3 Professional learning in the teaching context

How the context of teaching applies to professional learning is also an important feature of the literature. Eraut (1994) argues that knowledge use and acquisition is also context dependent, that an idea learnt in one context does not readily allow it to be transferred from one context of use into another. This concept is central to the

debate contra generic and transferable skills and is related to Eraut's claim that a large amount of the learning associated with changes in practice takes place in the context of use. This claim can be supported by action learning approaches and projects (e.g. Kember, 2000). The first part of this claim is that learning is not solely associated with the first encounter with a new idea (knowledge acquisition) and then subsequently used in practice. Eraut asserts that some learning will take place at the original encounter, some with use and some in the period in between when the learner may reflect on possible use. The idea can then be reinterpreted during and after use, in fact the argument is that a conceptual clarity cannot be achieved unless repeated use and reflection have taken place. The second, and probably most contentious part of this claim, is that;

...there is little immediate transfer of learning from one context of use to another. Using an idea in one context does not enable it to be used in another context without considerable further learning taking place. (p. 33)

Eraut further applies this to learning associated with knowledge use in the teaching context (in this case in a secondary school setting);

...one can argue that knowledge use at school level ultimately involves not one but several teachers coming to understand, accept and internalise some new ideas. (p. 35)

The Action Learning Project (Kember, 2000) cites evidence from 90 action learning projects in university course contexts in Hong Kong, the action learning approach encourages innovative forms of teaching in a framework which features both tutor and peer support. The eventual form of the innovations can be piloted in a university setting with time and support provided from the teacher and from fellow students.

The action learning approach uses 'live' issues and requires real time support for the learners as they adapt to novel situations e.g. change in assessment procedures.

3.4 Overview

This literature reviewed here comes from three main perspectives, the first of which looks at the sociocultural aspects of practice (Lave & Wenger, 1991; Lave 1993; Wenger, 1998). In this perspective I have explored literature which also engages with the further social and historical analysis of practice in the work group (Engeström, 1987 & 2001; Billett, 2001) also known as Activity Theory. It is in this perspective that the non-dualist view of learning is also appreciated (Billett, 2001; Rogoff, 1990). Probably the most conclusive of the studies reviewed would be that of Wenger (1998) which provides a conceptual framework for the investigation and quantitative analysis in Chapter 7. Experience and expertise is revealed as a major consideration in these studies, some of which come from a sociocultural perspective e.g. Orr, 1996. Sandberg's 1994 phenomenographic study of competence at work stands out in this respect as a way to understand the individual variation in experiencing competence in practice. The second complementary perspective looks further at departmental and course cultures, essential to understanding the situated nature of this study and the relation to both activity theory (Knight & Trowler, 2000) and the context of teaching and learning (Martin, 1999; Trowler & Knight, 1999) explored in Chapter 2. The third and further complementary perspective is that of professional learning in teaching which draws on ideas about professional learning in context first generated by Eraut (1994) and evidenced by Kember (2000) in his study of action learning projects carried out by 90 university course teams in Hong Kong.

Chapter 4

The discipline context: epistemological characteristics, societal, cultural and organisational factors affecting the context

This chapter commences with a review of studies of disciplinary differences pursued through epistemological characteristics such as structures for knowledge validation and responses to changes in the context. These differences are further explored in a review of studies related to the disciplines and teaching and teaching scholarship. Studies of the particular context of art, design and communication media education are also reviewed to understand the situated nature of the discipline's culture within higher education institutions. Finally, these studies are further contextualised by an illustrative account of findings from the Quality Assurance Agency (QAA) subject review overview reports and benchmarking statements for these disciplines. The further purpose of this chapter is to explore existing assumptions about the discipline group of art, design and communication. Some of the themes discovered in both QAA reports and benchmarking statements emerge as key concepts in this study, particularly how the discipline addresses the skills and practices which are seen as inherent to student learning.

4.1 Disciplinary differences

Disciplines can be defined in many different ways, including epistemologically, by their practices, their narratives of belonging and by identification. Epistemologically they are defined by their distinctive set of concepts, the structure of propositions, truth criteria by which those propositions are reviewed and the methodology used to arrive at those propositions (Donald, 1986; 1995). Donald (1995) explores those disciplinary differences in knowledge validation and makes distinctions between

scientific method and interpretive methods used in disciplines such as the social sciences. Scientific method assumes that there is an objective truth which can be found through processes of deduction. The social science model relies on observations, interpretations and perceptions to make claims for knowledge. The best known description of how disciplines demonstrate these differences is characterised by the hard/soft and applied/pure typology first posited by Biglan (1973) and further elaborated with empirical study by Becher (1989) and revisited in Becher and Trowler (2001). The Becher (1989) concept of academic tribes has been widely adopted as shorthand for categorisation of both academic knowledge and academics. The Becher and Trowler (2001) edition further complements this study with a categorisation of the social features of those disciplinary communities between convergent, tightly knit and divergent, loosely knit disciplinary configurations. Both of these studies also focused on research activity (and not teaching) as an aspect of the disciplinary variation found. A recent study (Cooper and Trowler, 2002) further develops some of the themes relating to disciplinary variation and identities in interaction, recurrent practices and implicit theories of learning and teaching. The notion of disciplinary communities and their teaching and learning regimes (TLRs) proposes a socially constructed notion of how groups of teachers come to know through the practice of teaching and of learning to teach. Cooper and Trowler's main argument is that academic staff bring sets of assumptions and practices rooted in TLRs to their experience of teaching and educational development programmes

4.2 Disciplinary differences in teaching and teaching scholarship

Studies of disciplinary variation in teaching or teaching scholarship have received limited attention. A collection of studies edited by Hativa and Marincovitch (1995) is one of the first to gather cases from different disciplines with respect to implications for learning and teaching. Within that collection, Murray and Renaud (1995) examine

disciplinary differences in teaching and their relationship to student feedback and ratings of instruction. In their study, arts and humanities teachers scored higher than social science and natural science teachers on six out of ten teaching behaviour dimensions. This finding implies that 'arts and humanities teachers tend to exhibit a wider range of teaching behaviours that contribute positively to student instructional ratings than social science or natural science teachers do' (p. 38). Further case studies and disciplinary variation in improving student learning were the subject of the 7th International Improving Student Learning Symposium in 1999 (Rust, 2000). In this proceedings, Trigwell, Prosser, Martin & Ramsden (2000) studied relations between approaches to teaching, academic leadership and disciplinary differences. It was noted that where arts/business teachers perceived a leadership environment which was supportive of good teaching as they adopt a more Conceptual Change/Student-focused approach. This finding deserves further investigation in relation to the development of teachers and departmental heads in arts departments.

More recently however there have been some studies which connect disciplinary culture to the nature of teaching and learning processes and learning outcomes (Neumann, 2001; Neumann, Parry & Becher, 2002). Neumann (2001) provides an overview of studies of disciplinary difference and further applies this to the nature of teaching, teaching practices and approaches. More importantly, she makes connections between these approaches, disciplinary differences and student learning. This study does also conclude that further systematic study of this area needs to be conducted to further explore the links between teachers' conceptions founded in disciplinary identity and the implications for the improvement of student learning. Neumann, Parry & Becher (2002) have commenced that further study and come to some important conclusions which are well illustrated with disciplinary examples.

...hard applied subject fields, where the emphasis, in both curriculum and assessment, on problem solving and practical skills is expected to manifest itself as an important product of a degree course. Here a strong value is placed on the integration and application of existing knowledge... It is commonly observed that the vocational nature of most applied programmes leads to a clear expectation of their subsequent employment opportunities: the claim is rarely made for the development of widely transferable skills. ...soft applied programmes, not unexpectedly, share this vocational slant, and the skills they develop are also practice related, their knowledge base tends to be more eclectic, and their implicit emphasis – shared with soft pure knowledge – is on the enhancement of personal growth and intellectual breadth. (p. 410)

Studies of teaching scholarship have also highlighted disciplinary variation although it is not always clearly demonstrated. Huber and Morreale (2002) situate this area in an orienting essay as a preface to their edited collection on disciplinary styles in the scholarship of teaching and learning. Their claim is that 'disciplinary styles empower the scholarship of teaching by guiding scholars to choose certain problems, use certain methods, and present their work in certain ways' (p. 4). In other words, those scholars' findings can be presented in contextually contingent ways. Differences are therefore presented in this collection, but only at the level of the personalised accounts. It should be noted that this is, in effect, work in progress from the outcomes of the ongoing work of the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL). Approaches to teaching have, however been shown to relate to approaches to teaching scholarship in the disciplines (Leuddeke, 2003). Leuddeke confirms his working hypothesis that staff teaching hard/pure or applied subjects were more likely to adopt an Information Transmission/Teacher Focus approach to their teaching, while those teaching soft/pure and applied subjects

generally take a more Conceptual Change/ Student Focus. He also concludes that this has implications for teacher development and development of teaching scholarship in the disciplines citing both the LTSN (Learning and Teaching Support Network) and CASTL as organisations which can support such disciplinary driven development.

4.3 The particular context of Art & Design and Communication & Media in higher education

There is a body of literature which concerns the historical and societal context of the discipline. It should be noted that most of this literature is to be found either in specialist journals or published by art schools' presses in the pursuit of mapping the territory of the discipline.

In a study of the history of art education, MacDonald (1970) notes that from its beginnings in the early nineteenth century the sector had virtually nothing to do with the academic disciplines of universities. The teaching of art (and latterly also design and media practice) had evolved independently which could be considered a discipline of vocational practice.

Britain's art education has its roots in the work of itinerant drawing tutors. The first attempts to formalise training have been traced to the early 17th century, but they did not result in a fully-fledged academy until the second half of the 18th, which makes Britain's art education about a century younger than that of France, which is in turn about a century junior to Italy. Yet this country's achievements on the world stage have been and remain outstanding (Cornock, 2003).

Cornock (2003) also notes that there was an examination system covering the art and design syllabus in England and Scotland developed through the 19th century and, by the middle of the 20th, specialist national diplomas were being awarded in painting and sculpture. In 1960 a National Council for Diplomas in Art and Design (NCDAD) was established as a body responsible for validating the bulk of the art and design courses at degree-equivalent level in the UK. It was decided that NCDAD should pass that responsibility to the Council for National Academic Awards (CNAA) in 1974, at which time successful candidates were able to gain an honours or Masters degree in art and design subjects. That process of recognising fine art's valid place within the higher education system culminated in the award of the first PhD in Fine Art by the CNAA in 1978.

The importance of Britain's commitment to the enhancement of its manufactures was confirmed by the Great Exhibition and, despite competition from the new medium of photography, the number of schools of drawing grew rapidly. A century later more than a hundred schools of art had an output of more than a thousand diploma holders across the art and design fields. By 1981 there were 45 institutions offering fine art courses at degree level, with a total enrolment of 4,900. For example the number of higher education institutions teaching fine art practices rose sharply through the 1990s to more than 75 and the number of undergraduate students of fine art to more than 14,000 in 2000-2001. In 1998 the Culture Secretary Chris Smith questioned assumptions about the need to devote attention to halting the long decline in agriculture and manufacturing and instead drew attention to a group of "creative industries" - the fine arts prominent among them - that had been booming. They had, he suggested, generated 50,000 jobs and £60bn in revenues during 1997-98.

There is evidence of some studies about learning and teaching in this sector, but they are mainly produced as highly romanticised personal reflections and reminiscences of past students (Hassell, 1995) rather than systematic or sustained studies. Hassell's (1995) account of post-war learning and teaching experiences at Camberwell School of Arts and Crafts describes a somewhat eccentric and haphazard organisational context which nonetheless affords an education with all of the features of the liberal arts traditions. Hassell also describes learning from a range of practising artists and crafts professionals and that this formative learning experience provided strong role models who would demonstrate practical skills and articulate ideas. Furlong, Gould and Hetherington (2000) further confirm the institutional culture as all pervasive. They assert that art and design students (and teachers) are encouraged to express their individuality by constant questioning of, and occasional reaction against, the cultural norms.

Ashwin (1975) describes how this ethos was disrupted by government interventions and developments in the 1960's which contributed to the changing context of art and design education particularly. The National Advisory Council for Art Education (1960, 1962 and 1964), under the chairmanship of Sir William Coldstream, brought about major changes which laid the foundations for art & design higher education in its current form by the absorption of these colleges into the emergent polytechnic sector. These changes added academic rigour and respectability to a sector which had been poorly perceived in comparison with more traditional university subjects.

The practice of liberal apprenticeship was called into question by the 1980's due to the increasing number of students enrolled in these courses in art schools or in university faculties of art, design and media. The best known critique of this approach is in the seminal article by Swann (2002):

The so-called 'traditional' teaching method in art and design, as far as studio work is concerned, has relied very heavily on a one-on-one tutorial that generally takes place between the tutor and the student as a discussion about the particular project on which the student is working. It is usually an examination of the work 'on the drawing board' and often results in the tutor demonstrating his/her own expertise to improve some aspects of the student's work - more or less a 'sitting-by-Nellie' approach. Most of the teachers in art and design would call it a traditional 'atelier' method derived from the master artist/craftsman showing an apprentice how to do it, which is a kinder description but it comes to the same thing. (p. 50)

This is however, a description of a context with close teacher-student relations and is arguably more student-focused than some other university contexts. This is something which Swann strongly advocates as the future direction of the sector.

The sector encountered further change in the period up to the 1990's with the incorporation of new universities and the modularisation of courses by means of credit frameworks. Credit frameworks offered art and design students the opportunity for increased choice and student- focus as described by Gregg (1996):

Art and Design education must accept – and develop in the light of accepting – that in future control of the individual student's programme will ultimately lie with that student and not with any one course team or institution, let alone with a single teacher with his or her 'own' students. (p. 19)

The dilemma discussed here is an acceptance that the learner should be central to the mission of HE art, design and communication and the firm belief that traditional linear courses offer the best experience for providing that, viz.

...art and design staff hold sacrosanct the belief that the whole is greater than the sum of its parts. Staff perceive that obligations to assess all student work, and to award module marks which will count toward the final degree classification, lead to the inhibition of artistic risk and thwart the process of development and maturation. Moreover, while staff in almost all other disciplines credit modularity with giving students more responsibility for their educational progress, art and design teachers report the opposite effect. In traditional linear courses, students developed a portfolio of work and/or selected pieces for exhibition based on their own self-appraisal of aesthetic and technical quality. In modular programmes, where all work has been evaluated by instructors and external examiners, students become reliant on external validation rather than trusting their own judgement. (Gregg, 1996, p 16)

Some critics of this approach in the context of art and design education link credit with developing constructive alignment of the curriculum by articulation of learning outcomes, teaching and learning activities and assessment. Cina (1994) regards this as a return to the teaching practices of the nineteenth century academies.

*It is assumed that the pedagogic intention is deterministically linked to a pre-
visioned progression of particular learning experiences and their intended
outcomes – that all of this must be made clear, in advance, to the initiate
student. It may well be that this kind of approach still has its' place in some
faculties within the higher education sector but for fine art education this is a
late 20th century redemption of guild and academy teaching methods. (p. 58)*

Ashwin (1994), in his study of artist/teacher roles, posits that learning takes place in this context through selective imitation of practices which are thought to embody excellence. He argues further that this forms a basis for the discipline and its' situated practices.

Those practices are also discussed by Reid and Davies (2000), in their study of design learning. They identify the key practices of that environment: project-based learning; the public critique (or 'crit'); studio-based teaching; and the 'final show'. All of these practices require students and teachers to work closely together in collaborative and cooperative practice. Small group teaching is a feature of project-based learning is normally conducted in small groups or as individual student activities, but in both cases, the interaction between student and teacher is usually frequent and close. The Final Show is effectively an independent learning project which affords the student more time to progress from project proposal, through experimentation processes and execution to final exhibition. Ashton (1997) has discussed the practice of the public critique 'The tutor would begin the discussion with the same introductory question and the subsequent discussion took very much the same form as one-to-one teaching'. In many of these studies of the context studio-based teaching is seen as the basic template for all learning and teaching activities.

4.4 QAA Subject Overview reports

The Art, Design and Communication subject centre of the Learning and Teaching Support Network (ADC-LTSN) produced a baseline report concerning learning, teaching, assessment and curriculum issues in these disciplines. Part of that report comprised an overview of the concerns related to those areas as presented in the

Quality Assurance Agency (QAA) Subject Overview reports. The following are summary extracts from the ADC-LTSN baseline report (2001).

The subject overview report of the Quality Assessment of Communication and Media Studies (QO 13/98) identifies strengths and areas of concern. Media and communication are a relatively new and rapidly growing area of study without a long-established discipline base. There are frequent changes in the technology and organisation of the media and related industries. Demands for new media technologies and for technical support pose resource problems for institutions. The relationship between theory and practice can be a difficult one. Teachers demonstrate enthusiasm and commitment to their subject area; this occasionally leads to an overall lack of coherence in some degree programmes.

The relationship between theory and practice varies between institutions; theory itself is understood differently. Practice-based courses sometimes lack a necessary critical and theoretical base. This is the case in 35% of the visits undertaken by the QAA, and is particularly an issue where FE (Further Education) colleges are delivering HE (Higher Education) courses. Work placements, when clearly focussed, well organised and integrated into the curriculum, are highly valued. Visits, demonstrations and lectures by professionals working in the relevant fields, are important.

Learning and teaching are frequently of a high standard using a wide range of delivery and assessment methods, including lectures, seminars, workshops, demonstrations, tutorials, peer group learning, production projects, small group and team work, film screenings, case studies and critical reviews. There are some innovative teaching and learning strategies, such as learning contracts, self-learning packs and the integration of study skills into subject teaching.

Problems of assessment are found in the majority of institutions. There is an imbalance between formative and summative assessments, and assessment criteria can be vague. Additionally, in some cases, marking is over-generous, moderation of marks is poor and there may be difficulties of group work assessment.

In 20% of cases written feedback is exemplary, particularly when used in conjunction with specially designed feedback sheets or as annotations. The report identifies this as an area which needs improvement; it is important that feedback relate more closely to the assessment criteria. Oral feedback, particularly in media production, is helpful and welcomed by students, but needs a more structural basis.

In the practice-based areas, technical staff are important and valued team members. Recruitment, training, retention and the role of such staff needs further analysis. Outside professionals sharing and demonstrating their skills provide a considerable benefit to students; links with professional bodies and employers are valued.

In many cases teaching is of a high standard. There are problems with assessment criteria and lack of written feedback. Generous marking, group work marking and the moderation of marks are also of occasional concern. Some written feedback is exemplary with the use of pro-formas and other aids to give detailed student feedback; there is sometimes delay and a lack of quality.

Transferable skills are a key factor in future employability, especially given the nature of employment practices in media industries.

The subject overview report of the Quality Assessment of Art and Design 1998 – 2000 (QO13/2000) Curriculum Design, Content and Organisation were awarded a 4 (the highest possible grade in a scale of 4) in over 50% of the subject review visits.

However a need for greater differentiation between levels of study, within and between named programmes, and a revised curricula to ensure learning during work placement contributed effectively to subsequent studies were noted. Institutions were recommended to review the arrangements for equal access; and emphasis was placed on obtaining greater consistency of learning outcomes, and curriculum design, content and organisation.

In Teaching, Learning and Assessment only 33.5 % of grade 4's were awarded. More strategic planning in staff development and research was recommended. The report stated that students did not always understand arrangements for the development of key skills and the criteria for the assessment of these skills. In 12% of reports a lack of critical debate and analysis in art and design practice was evident, promoting a need for a closer working relationship or structured interconnection between theory and practice. Less than 43% of providers' arrangements for assessment of students were completely effective. Sector wide concerns were identified including: inconsistency in the use of assessment criteria, relationship of assessment to published learning outcomes and banding criteria not always sufficiently differentiated. Where criteria were generic there was often failure to engage with subject specific learning outcomes and inconsistencies in the grading of different levels of achievement. 12% of the reports point to inconsistent quality and frequency of written feedback, quoting it as 'perfunctory, not reflecting relevant assessment criteria or student attainment of learning outcomes, leading to the articulation of the need for clear definition and relationship to published learning outcomes.'

In Student Progression and Achievement 12% of the reports stated that student' critical and analytical skills lacked rigour, failed to demonstrate an adequate level of

academic debate or understanding and in a few institutions work with pass grades was not achieving the stated learning outcomes in respect of subject specific skills.

Part Time staff were not usually part of induction and mentoring schemes. Peer observation of teaching rarely informed the planning of staff development particularly in teaching, learning and assessment. Links with employers needed more formalising and advice from external groups needed developing. There was a notable difference between the graded profiles of FE and HE colleges.

Other key features which were identified included the need to encourage students to engage in critical debate within studio practice and the missed opportunities to develop links between observation of teaching, appraisal and professional practice.

4.5 Subject benchmark statements

There are two QAA subject benchmarks relevant to this review. Art and Design, and Communication, Media, Film and Cultural Studies. Laing (2002) produced a comprehensive and relevant analysis of these two statements (and also that of History of Art, Architecture and Design). The study compared key subject definitions from each statement. Laing's analysis looked for the situated uses of the key terms, 'creativity' 'professionalism' and 'culture' within each statement. He also discussed the core rationales offered for the contemporary social purpose of each subject. He notes that each of these statements attempts to make claims about their relevance to human societal development in some way, for example:

The study of art & design as an academic and intellectual pursuit develops a range of cognitive abilities related to the aesthetic, the moral and the social contexts of human experience. The capacity to visualise the world from different perspectives is not only intrinsically worthwhile as a personal life-

skill, but is also an essential part of the human condition. The engagement in the study of art & design is, therefore, a commitment to improving the quality of one's own and others' cultural experiences. The manifestation of these essential human capacities has always been through the production of artefacts, often for cultural consumption, thus the study of art & design has always provided a vocational outlet for creative endeavour. In a world that is becoming culturally more sophisticated and requires greater material output, the cognitive abilities and practical skills of artists and designers are in increasing demand. (QAA, 2002 p.2)

Further claims are made for the sector's contribution to contemporary socio-economic circumstances;

The creative industries sector is expanding at a faster rate than that of the rest of the industrial and commercial economy in the UK. Increasing demand for visual communication in all of its manifestations, rapid developments in technology, and expanding public interest in the visual arts and media, all contribute to the demand for education in disciplines associated with these activities. Students studying full-time on degree courses in art & design account for approximately 6 per cent (60,000) of the total number of full-time undergraduates in the UK. The Department for Culture, Media and Sport reports on the creative industries (1998 and 2001) acknowledge the contribution that these disciplines make to the national culture and economy. Graduates in art & design disciplines have demonstrated that they are equipped with the appropriate skills and abilities to operate effectively in the marketplace. In particular, they display resourcefulness, entrepreneurial skills, and the capacity to establish new and innovative enterprises. Many are active as independent creative artists, designers or designer/makers, while some

work in other fields where their attributes and skills are needed and valued.

(QAA, 2002 p.3)

The discipline(s) are portrayed in this analysis as making contributions to personal development (of learners), to a broader social purpose and to the economic well being of the UK as a whole.

4.6 Overview

This chapter reviews a range of sources which are drawn on to highlight the particular context of art, design and communication teaching and learning. These sources are particularly broad and can be summarised in two broad categories, the research literature relating to disciplinary differences and contextual literature drawn from both historical accounts and contemporary policy documentation. The best known disciplinary study cited here is the one by Becher (1989) which is further cited and elaborated in most of the studies which are then described as having relevance to this enquiry. For a clear overview of this literature the Neumann (2001) study draws out comparisons and makes relations between the disciplinary characteristics and learning and teaching practice. Further disciplinary examples and related findings are brought together in the subsequent study by some of the key researchers in this field (Neumann, Parry & Becher, 2002). The contextual literature is of variable quality, some of the historical accounts are highly personalised and may be unreliable but serve as a thumbnail sketch of the ambience and purpose of early art school education. By contrast, the contemporary policy literature is dominated by the QAA Subject Overview Reports and the QAA Subject Benchmark Statements. These reports are however useful in situating the current state of these disciplines in terms of learning, teaching and assessment as well as their wider aspirations which are well articulated in the Subject Benchmark Statements (QAA, 2002).

Chapter 5

Research Methodology

5.1 Introduction

In the planning stages of this study I considered phenomenography because of the associations with research into student learning and educational development and the focus on variation and experience. The phenomenographic research tradition was developed by an education research group based at the University of Göteborg in the early 1970's (Marton, 1981). I also examined qualitative interviewing from a position complementary to phenomenography (Kvale, 1996). This chapter begins by discussing the phenomenographic methodology and the central philosophical and epistemological ideas which have been introduced in chapters 2, 3 and 4. I go on to describe the qualitative method and approaches employed in the phenomenographic study of conceptions using Kvale's (1996) seven stages of an interview investigation. The final stage of the methods described here is a quantitative study of relations between approaches to teaching, skills development, and teachers' communities of practice. It is presented as Stages 8 to 10.

5.2 Methodology

Phenomenography had its origins in research in the 1970s at the University of Göteborg, which began to look at learning from the learners' perspective. It began by focusing on the question of why some people are better at learning than others (Marton and Säljö, 1976) but pursued that question in ways which differed greatly from the dominant approaches in education research at that time. This qualitative empirical research approach was developed at a time when quantitative approaches were considered the norm in educational research (Sandberg, 1997; Svensson, 1997). The early phenomenographic studies focused on the different ways in which

students understood a text which they had read and how these different ways related to the ways in which students went about the reading task (Marton and Säljö, 1976). The study was concerned with what were then termed 'levels of processing'. They found the key difference between the ways educational psychology students had read a given text rested on whether they focused on what the text was about (deep processing), or on the text itself (surface processing). Svensson (1977) also working on how students read texts found similar results in what he termed students' 'approaches', but he referred to the two approaches as 'atomistic' and 'holistic', the former describing a focus on parts of the text, and the latter a focus on the meaning of the text. Over time, elements of the terminologies adopted in these two early studies appear to have merged to give us the 'deep/surface approaches'. Research undertaken by Laurillard (1979) confirmed that the two different approaches were adopted by the same students working on problem solving tasks on a combined science course, and also identified that students would change approach according to the learning context. Thereby it was established that an approach is not a fixed characteristic of the student, although there may be a preferred approach. Both the identification of deep and surface approaches to learning, and the distinctive research approach used to identify them became particularly influential. The research approach was later called *phenomenography* (Marton, 1981). The word is said to derive from the Greek *phainómenon* or *fainemonon*, meaning *that which is appearing* and *graphein* meaning *description* (Marton and Booth, 1997; Hasselgren and Beach, 1997). Research which is undertaken from a phenomenographic perspective aims to describe variation in ways of experiencing, conceptualising, understanding, comprehending or seeing particular phenomena.

Since these original studies, phenomenographic research approaches have been widely used, particularly in educational contexts. Some of these contexts have been discussed in chapter 2. Many studies have focused on variation in ways in which

school or university students understand abstract disciplinary concepts: price in economics (Dahlgren, 1989); motion and frames of reference in Physics (Bowden et al, 1992); computer programming (Booth, 1997; Marton and Booth, 1997) and instrumental music (Reid, 1997). Others, as discussed in chapter 2, have focused on conceptions of learning (Marton, Dall'Alba and Beaty, 1993) and teaching (Dall'Alba 1991; Martin & Balla, 1991; Prosser, Trigwell & Taylor, 1994). Other studies, as discussed in chapter 4 have turned to the people's experiences of competence in their work as engine optimisers (Sandberg, 1994) or neonatal nurses (Davey, 2002).

The theoretical and methodological underpinnings of phenomenography as articulated by Marton (1981) in the late 1970s and early 1980s, are influenced by Husserlian phenomenological philosophy (Husserl, 1917) and later by Gurwitsch's (1964) ideas on the nature of human awareness (see for example Marton and Booth, 1997).

Phenomenography has a focus on variation and experience and the fundamental assumption that a way of experiencing a phenomenon is an internal relation between the experience and the phenomenon (Marton, 1981; Svensson, 1997; Marton and Booth 1997; Marton and Pang, 1999). From this non-dualist, or relational, perspective, a way of experiencing something in the world is neither something which resides in an individual nor something in the world which is separate from the individual's experience.

5.3 Methods

Stage 1: Thematising

The method is determined after the aim of the research is determined. The aim of the research is to explore conceptions of teaching and approaches to teaching; situated within the context of practice-based teachers of art, design and communication.

In the context of teaching the practice of art, design and communication. The research questions are:

- How do teachers express their conceptions of teaching?
- How are the qualitative differences between those conceptions constituted?
- How do teachers differ in their approach their teaching?

And they are answered by:

- Exploring conceptions of learning and teaching, what is the focus of the teaching (e.g. focus on the individual, on groups, on changing conceptions)
- Exploring the structural and referential aspects of teachers' conceptions
- Examining the approaches, strategies and intentions of the teachers (e.g. intention to give examples, enable interaction, improve self-directed research).

Teacher's conceptions are central to this study. The literature suggests (Marton and Booth, 1997) that one way to study variation in conceptions is through the second order, phenomenographic method. In exploring studies of a first order perspective (e.g. grounded analysis, discourse analysis) much of the hermeneutic interpretive framework is reliant on the rigour of the researcher in applying a constant comparative method, Kvale (1996) calls this a,

“...back and forth process between the parts and the whole that follows from the hermeneutical circle.” (p. 48)

I had also designed several studies using a grounded approach and wanted to get closer to the study of teachers understanding of their *experience of teaching* in art, design and communication. The only method that would be able to make that distinction is phenomenography.

“Fundamental to an understanding of the phenomenographic approach is to realise that its epistemological stance is premised on the principle of intentionality which affords a non-dualist view of human cognition that depicts experience as the internal relationship between the human and the world.”

(Marton and Pang, 1999)

The aim of the method in the context of this study is to find out how some people (practice-based teachers of art, design and communication) experience some aspects of their world (their teaching) with a view to this enabling others to change how their world operates. Bowden (1995) calls this developmental phenomenography.

Rationale for methods used in this study

I have made a strong case for using a qualitative methodology, namely a phenomenographic approach to elicit and explore aspects of teachers' experiences of teaching. I will also be exploring how those teachers differ in their approach to teaching by examining teacher strategies and intentions. This exploration will be by quantitative methods which are further described in some detail in Stage 8 of this chapter (p. 71). In the social sciences the multimethod approach, or methodological

triangulation, is commonplace when studying aspects of human behaviour which may be subject to distortion due to the researcher's reliance on one interpretation of a particular phenomenon. There are many reasons cited for the improved validation use of additional methods may offer to the social science researcher (Cohen, Manion & Morrison, 2000) and some of these have been used in the critique of phenomenography as a research method to examine variation in conceptions of phenomena (see for example Kane, Sandretto & Heath, 2002). Having said all of these things, it is not for these reasons alone that I choose to use a well validated quantitative inventory alongside the use of a qualitative phenomenographic approach. Both the phenomenographic approach and The Approaches to Teaching Inventory (Prosser & Trigwell, 1999) are used to demonstrate a relational perspective on the findings. This particular quantitative method can only be used to reliable effect when it is consistently applied in a context, in other words the inventory does not seek to make generalisable claims about a whole population, only to distinguish variation and relations between approaches in a particular context. Marton & Säljö (1997) reported associations between students' conceptions and approaches to learning. Many other studies using both qualitative and quantitative methods have demonstrated the relationship between approaches to learning and student learning outcomes (Biggs, 1993). Similar relationships were found between teachers' conceptions and approaches to teaching (Trigwell & Prosser, 1996), using first a phenomenographic methodology and subsequently reporting the correlations between conceptions of teaching and the related categories of description with approaches to teaching adopted by those teachers. The factor common to each method is the range of ways of describing the teaching and learning process, in the creation and adaptation of the inventory, the items were first generated by using the data from phenomenographic interviews. What these two methods aim to demonstrate is the substantial coherence between teachers' perceptions,

conceptions and approaches; this aim is achieved by using methods which have complementary relational outcomes, one qualitative and the other quantitative.

Stage 2: Designing

With the theme clarified the next stage is to plan the design of the study taking into consideration all stages of the investigation. The design of the study also took into consideration working with a junior researcher to conduct some of the interviews as the sample size was large as well as replicating aspects of other small teams of researchers working using the phenomenographic method.

Phenomenography is the empirical study of the limited number of qualitatively different ways in which we experience, conceptualise, understand, etc, various phenomena in and aspects of the world around us. These differing experiences, understandings etc are characterised in terms of categories of description, logically related to each other, and forming hierarchies in relation to given criteria. Such an ordered set of categories of description is called the outcome space of the phenomenon in question. Participants in the study are encouraged to reflect on previously unthematized aspects of the phenomenon in question. The analysis is carried out in an iterative manner on those reflections. Distinctly different ways of experiencing the phenomenon discussed by participants are the units of analysis and not the single individuals. The categories of description corresponding to those differing understandings and the logical relations that can be established between them constitute the main results of a phenomenographic study (Marton, 1994).

This research approach has been articulated more fully by Marton and Booth (1997).

A non-dualist approach

Phenomenography requires a non-dualist (or relational) approach where the individual and the phenomenon are seen as being inseparable. Therefore, the study (and the people being interviewed) has to focus clearly on a specific phenomenon in order to evoke the experience to be studied.

The phenomenon to be used as a focus for eliciting the teachers' experiences of teaching in this study would be a particular teaching unit or module which the teacher was asked to decide upon and describe. In this study the specific teaching context described was to be practice-based. The study was therefore designed, in part, to replicate studies of relations between teachers' approaches to teaching and their conceptions of teaching (Trigwell, Prosser and Taylor, 1994; Prosser and Trigwell, 1997, 1999). But it is also designed to go beyond those studies into new disciplinary fields, as the individual participants were all practice-based teachers of art, design or communication and talked about modules or units in, for example, graphic design, video production, fine art painting and fashion design.

Stage 3: Conceptions of teaching: Interviews

Using a phenomenographic approach, the learner (researcher), learns about a certain phenomenon (how others experience the phenomenon – teaching), in a situation (the research situation – teaching the practice of art, design and communication), that is of her own moulding.

The sample

The sample was selected by initially contacting departments I knew well, a kind of opportunity sampling. I was then able to further refine the sampling criteria once departments had agreed to identify interviewees willing to participate. During this study I worked for the LTSN (Learning and Teaching Support Network) in Art, Design

and Communication within a network of eight partner institutions. I identified teachers through contacts in those institutions, asking them to identify others who fit the aims of the research, broadly speaking these were practice-based teachers of art, design and communication. The plan was to sample 11 – 18 teachers in each sub discipline (this reflects the size of sample in similar studies e.g. Prosser and Trigwell, 1999). The total number of respondents was 44 of which 18 were design teachers, 15 media practice teachers and 11 fine art teachers.

The main aim is to select a sample which will maximise the variation of experience. In other words, I was looking for people who would be able to report a range of different experiences of teaching. I did this by asking the contact person in each department to put me in touch with some people who had a few years and some much experience of teaching. I was not keen for all the interviewees to be that department's 'top teachers' as this would not maximise the variation. So I asked to meet those who were perceived by others to be 'good' teachers, those who were perceived to be teachers with development needs, those who were perceived to be student-focused and those who were perceived to be teacher-focused.

Ethical considerations

The relevant faculty management personnel were approached in each institution involved in the study in seeking approval to access these teachers. These requests were forwarded to the University or Faculty ethics committee where they existed (a lot of the specialist institutions visited do not have ethics committees). Approval was given and a list of names, email and campus addresses of teachers was requested and received from the respective departments, faculties and institutions.

Each participant was invited, in writing, to take part in the research. They received written information outlining the aims of the study and why it was taking place

(Appendix 1). Also included in the written invitation was information relating to the issues of confidentiality - assuring that, if they agreed to take part in the study, that their confidentiality will be maintained at all times. After reading this, and if they agreed to take part in the study, each participant was scheduled for an interview at an agreed date and time. Only those participants consenting to take part in this study were involved. An assurance was given to each participant that names of individual participants would not be revealed or disclosed at any time during and after the research study. Pseudonym codes were allocated to each individual to protect their anonymity. The universities used in this study are also identified by code to avoid detection.

The process of data collection: The interview

The interviews were semi-structured and consisted of questions designed to encourage the respondent to talk about their work strategies and associated intentions and beliefs. Each respondent was interviewed for approximately 45 minutes.

The interviewee reflects on their experience (e.g. of teaching fine art sculpture) in a state of *meta-awareness* i.e. being aware of his/her awareness of teaching, personal theories, concepts, practices, contexts etc.

The interviewee and interviewer work together on the articulation of the interviewee's reflections on experience. This works on two levels, the interpersonal and the meta level. The interpersonal or social discourse level is the interaction itself and the construction of meaning within it. The meta or therapeutic discourse level is a valuable outcome of the raising of the interviewee's awareness (and meta-awareness) so that the experience of the interview itself is a learning experience for

both the interviewer and interviewee. The aim is to get a description of an experience of an individual so that it can be put into a context for comparison with other experiences.

Interview Schedule

The interviewees are teachers of practice-based subjects in art, design or communication e.g.

- Studio teachers: painting, sculpture, etc.
- Workshop teachers: fashion, textiles, ceramics, etc.
- Media and technology teachers: film, video, multimedia, etc.

All teachers like to talk about their practice, of teaching and professional practice, and the interview has to be focussed on one particular aspect of their practice-based teaching e.g. a specific course, module, unit or project.

The phenomenographic method requires that the researcher focus on the interviewees' experience of the phenomenon to be studied. The relationship between the teacher and their teaching in a learning context is the prime focus of this study.

As I am particularly interested in how the qualitative differences between conceptions are constituted. I asked questions which divided the interview into three sections.

1. Approaches to teaching, strategies used and intentions related to those strategies
2. Conceptions of teaching, discussing the role of the teacher and the focus of their teaching

3. Perceptions of their learning context, the different ways the teacher experiences things such as traditional or new learning technologies

Questions used in each section were followed by probing questions to pursue themes e.g. when the teacher refers to learning, understanding, knowing.

The first section of questions informed the articulation of questions for the adaptation of the Approaches to Teaching Inventory (see p 69). The second section of questions are used to elicit the phenomenographic analysis of conceptions of teaching (reported in chapter 6). The third section of questions informed a separate study (for non PhD purposes), *Variation in the experience of learning technologies in teaching in art, design and communication: implications for network dissemination strategies* (Drew and Williams, 2001). This study also helped with the induction of the junior researcher into both interview strategies and ways of working together on the analysis.

Stage 4: Transcription

In common with most interview investigations the interview material is prepared for analysis, first by transcription from cassette tapes to text. The tapes were transcribed verbatim for a manual form of analysis rather than preparation for analysis by specialist software.

Stage 5: Analysing

The data collected is seen to form a pool of meaning. It contains two types of material, that pertaining to the individuals and that pertaining to the collective i.e. all the interviews.

One aspect of the phenomenon – relating to teaching the practice of art, design and communication – can be selected and inspected across the whole sample, and then another aspect, and so on...The whole interviews may be revisited to see where one or two aspects lie in the pool in relation to the others and to the background (Marton, 1986, p. 43).

This identifies a number of qualitatively different ways in which the phenomenon has been *experienced* and also the different ways in which these *ways of experiencing* are *expressed*.

The analysis leads to the constitution of a hierarchical categorisation of conceptions of teaching, *categories of description* which are arrived at by the scrutiny of the *variations of ways of experiencing*, they do not describe the individuals. This constitutes the *outcome space* of the phenomenon.

Analysis

The transcripts were analysed by both researchers who read them thoroughly, and repeatedly. The first phase of individual reading attempted to highlight significant phrases in relation to how the teachers' perceived aspects of the learning context. As the semi-structured interview schedule included a range of questions and probes, there were often similar patterns of teaching experiences and contexts described across the interviews e.g. visual research, assessment by critique, communicating with students. Thus the structural and referential components emerged from the teachers' process of describing teaching experiences. Although the transcripts differed in the contexts and actions described, they could be said to conform to similar activities, even though the interviewee may not have used the same terminology in describing it.

The researchers then met to begin the formal construction of categories by sorting the components of the structural and referential parts of the significant descriptions. This was done by moving through the transcripts one by one and indicating what each of us had found to be relevant on each page. Whilst doing this, rough groupings began to emerge within the teachers' focus and their intent. This development of the 'pool of meanings' did not follow the early methodology described by Marton and Säljö (1976) in which the phrases were selected and grouped in piles of differences. It conformed to the later descriptions of a 'metaphorical pool', where the selected comments were left in situ to allow a more contextual analysis to remain when the process of iteration continued (Marton 1992 cited in Bowden, 2000 p 12).

A brief abstract of each transcript provided a summary function to ascertain the teachers' focus; notes and quotes were also indicated at this stage. A major development occurred when these abstracts were further grouped according to what they were focusing on in their teaching. Within this strategy the phrases were then grouped by intent. The process of sorting the statements into components and looking for relational hierarchies was the classic iterative one of questioning, evaluating and reaching agreement. No discussion of categories had been undertaken before the study, so no transcripts were read initially with any particular framework in mind, except for previous knowledge gained through the literature. Thus it was through dialogue that the categories emerged and were refined. Confirmation of components was assisted by the classification of different intent within them. By looking for the underlying conceptions in an interviewee's account the patterns became more apparent. Further discussion and defence of the descriptions of the categories took place with a fellow doctoral programme student (also using a phenomenographic approach), the doctoral thesis supervisor and an experienced phenomenographer.

Stage 6: Verifying

Marton and Booth (1997) discuss the verifying of a phenomenographic study. Validity – the claim is made in relation to the data available, there is no validity in respect of ‘representative samples’, because as discussed previously, the sample is selected to maximise the variation, not to be representative of any particular constituency of thought. In terms of reliability therefore – a phenomenographic study demonstrates internal consistency.

The joint analysis of the data strengthens internal consistency in the findings as each researcher is able to defend their interpretation with evidence. In the iterative process of interrogating the data there is also the opportunity for researchers to negotiate interpretations, as in the example above. The shared discussion and approach to process can be asserted to maintain reliability and validity (Bowden, 2000). This is known as interjudge reliability, which is essentially a format to ensure replicability of results. Bowden also outlines how co-researchers also act as co-judges (p. 57). This cooperative approach to analysis best describes the procedure adopted for this study, where one researcher is primarily responsible for the analysis and proposing of categories and the other researcher(s) test and probe. This testing and probing can also be used by the first researcher in querying objections and interventions. Interjudge reliability in this context does not assert that another researcher would be able to exactly replicate the discovery of the same categories of qualitative variation after studying the same data. Marton (1986) argues that it is reasonable for another researcher to recognise the conceptions identified by the original researcher through relating the data to the categories of description.

The original finding of the categories of description is a form of discovery, and discoveries do not have to be replicable. On the other hand, once the categories have been found, it must be possible to reach a high degree of intersubjective agreement concerning their presence or absence if other researchers are able to use them (p. 35).

Although it can be argued that interjudge reliability may not take into account the researchers' procedures (Sandberg, 1997), attention was given to the bracketing of prior experience in the design of this study and I will return to this theme later. Social construction of validity

The continued focus on a collaborative approach to the analysis and subsequent construction of categories of description can be regarded as a way to build verification into the research process. This is a preferable approach in this iterative process which negates the need to emphasise validation at an end point where any claims made are seen to be quality-controlled. Kvale (1995) discusses the social construction of validity in terms of quality of craftsmanship, communicative validity and pragmatic validity. As communicative validity, claims can be tested in a dialogue, involving conversations about the data and its' analysis. What is considered valid is therefore a matter for ongoing discussion and often argument between the participants in the research process. The social construction of validity moves from the context of the researchers working in collaboration to the wider community of scholars in making the findings known in public research fora, including presentation and discussion at academic conferences, publication in journals etc. Pragmatic validity mainly concerns whether interventions based on researchers' interpretations may actually influence changes in behaviour. The aim of this research was to look at the different ways teachers experienced teaching, so that those teachers with less complete conceptions may be made aware of the focus of their teaching and, in debating these findings, seek ways to develop and change.

Stage 7: Reporting

The analysis leads to the *categories of description*; these are reported with illustrative quotes from the data. The aim of phenomenographic analysis is to develop categories of description which illustrate the limited number of qualitatively different ways of experiencing a phenomenon, in this case the experience of teaching art, design and communication. The categories were devised by looking for the variation between responses, and the similarities between statements within categories. It is through this process that the key aspects of the variation, of experience of the phenomenon in question, are discerned (Trigwell, 2000a). Then final descriptions were produced to reflect these similarities and differences. The descriptions of the categories were developed using two components – how the explanation is given and what is focused on (Trigwell, 2000b, p. 74).

The categories of description, described in the next chapter (6), are internally related to each other. Categories were sorted into a meaningful order, with the ‘lower’ less complete conceptions first, moving into ‘higher’, more complete conceptions. The higher conceptions encompass the lower conceptions and are therefore more complete. This is known as a hierarchy of categories of description, the logical relations between these categories are shown in the outcome space. The outcome space describes those internal relations in structural and referential terms, it also enables the construction of the hierarchy of categories of description.

Stage 8: Quantitative Study of Approaches to Teaching

Following on from the study of conceptions, a further test of teacher’s approaches was applied. The Approaches to Teaching Inventory or ATI (Prosser & Trigwell, 1999) was developed to measure the variation in the ways teachers approach their teaching in a particular situation.

It has 16 items.

- 8 on a sub-scale describing an approach which is intended to change student's conceptions or ways of seeing things through a focus on the student. Conceptual change/student-focused CCSF
- 8 on a sub-scale describing an approach labelled information transmission/teacher-focused approach ITTF

I felt that this would add another dimension to the study by using a well-validated instrument with a reliable and readily interpreted quantitative outcome which would also further validate and triangulate findings from the qualitative study. The only issue for its use in the art, design and communication context was the language used in the inventory itself. An adaptation of those items had already been undertaken for a study into approaches to teaching in design contexts (Trigwell, 2002) and as a consequence I gained permission from the inventory's authors to use this version. I shall give an example of some of the original items which caused concern and the adapted versions;

I think that an important reason for giving lectures in this subject is to give students a good set of notes. (Original ATI version)

I think an important reason for running teaching sessions in this subject is to give students a reliable record of what I think are key issues. (ATI in Design version)

I feel it is better for students in this subject to generate their own notes rather than always copy mine. (Original ATI version)

I feel that it is better for students in this subject to generate their own record of key events than to be relying on what I give them. (ATI in Design version)

I added to this version of the inventory items which pertained to aspects of teachers focus on skills and developing communities of practice. I added items to the ATI using data collected from the interviews, in other words, I used statements made by interview respondents in the approaches section of their interviews and clarified aims, intentions and important issues relating to teaching which focuses on skills or on developing communities of practice.

I added four items relating to practical skills development (items 3, 6, 9 and 12). Following analysis, item 12 was not used in the Skills Scale.

Skills Items

- 3 My aim in this subject is to develop students' technical competence in basic skills.
- 6 I think that an important reason for running teaching sessions in this subject is to demonstrate technical procedures correctly.
- 9 Being able to use the basic skills is a key aim I have for students in this subject.
- 12 In this subject, I think it is important for students to have opportunities to practise their skills with my support.

I also included five items relating to developing communities of practice (items 15, 18, 21, 24 and 25). Following analysis, item 21 was not included in the Practice Scale. Item 25 helped respondents to discern whether a *Practice* approach was more or less important to them than a *Skills* approach.

Practice Items

- 15 I feel that it is important for students to experience the practice in a “real world” situation in this subject.
- 18 In this subject I help students apply their skills to “real world” projects.
- 21 I think it is important in this subject for students to develop their practice through individually negotiated study.
- 24 To get students to think and act like a practitioner is my aim in this subject.
- 25 In this subject I feel it is more important for students to engage with “real world” projects and to act like a practitioner than to develop and practice basic skills.

I also added three further items designed to explore new research areas. Items 26 and 27 monitor correlations between the teaching approaches and creativity and satisfaction (Trigwell, 2002). The final item (28) was designed to monitor the correlation between teaching approaches and teacher self-efficacy. These items are associated with a separate, but related study, and are not subject to further report in this thesis.

- 26 I design this subject in such a way that students have the opportunity to explore, and be assessed on, their own creative ideas
- 27 Teaching this subject is a satisfying experience
- 28 I am certain that I have the necessary skills to teach this subject

The full inventory (ADC-ATI) as administered can be seen at Appendix 2.

I ran a small test of an earlier version of the ADC-ATI on a small sample (5) of teachers in the discipline area. These teachers were some of those who had taken part in the interview study. This helped eliminate problems with understanding and application of the inventory and tested any factors in its face reliability in use.

Stage 9: Collection of data from ATI

I had initially thought a large sample would be necessary to demonstrate validity in collecting this data, on examining similar studies sample sizes were from 58 to over 400 (Prosser and Trigwell, 1999). I circulated this version of the ADC-ATI on visits to departments/specialist institutions and at two conferences (i.e. in person rather than by post or email) to ensure a higher completion rate. I was aiming for a sample of between 50 to 100 teachers and I achieved a completed sample of 73. The selection of respondents was determined by opportunity sampling from the network of partner institutions and subject specific conferences.

Stage 10: Analysis and reporting

The analysis of ADC-ATI data was conducted using a statistical software package (SPSS). Frequencies, descriptives, correlation coefficients, scale reliability analyses (alpha) and Principal Components factor analyses were conducted to test both the data and relations between the study variables. The results are reported and interpreted in context in chapter 7.

5.4 Reflections on the phenomenographic method

Several connected themes emerge from this reflection on phenomenography as a distinct qualitative research method. First, the non-dualist approach where the individual and the phenomena are, inseparably, the experience to be studied, means

that the study has to clearly focus on a specific task or phenomenon to elicit that experience. The context explored in this study required both the interviewers to focus on experiences of teaching a practice-based subject in art, design or communication. This often proved to be easily diverted by interviewer or interviewee digression from the focus. The second relates to the second-order nature of the research approach which required the interviewers to focus on talking to teachers about how they experience teaching (that is, to describe the experience of their interviewees, rather than to describe their own experience, which is a first –order approach). Third, the focus on variation, or on experiences which are different, required a distinct approach to the analysis of the interview transcripts to disregard those elements that were similar across that range, and to highlight that there were internal relations. The construction of an outcome space which describes those internal relations in structural and referential terms also enabled the construction of the hierarchy of the structural component of the study. A fourth consideration is an intention to achieve an empathy with the interviewee through the interview experience as highlighted by Ashworth and Lucas (2000).

The reflection described in this chapter picks up on these issues. It exposes the need to examine prior knowledge and experience in this and other areas of qualitative research e.g. interviewing skills and focus of the analysis (on similarity, on richness of description, or on variation).

The nature of phenomenography is such that interview techniques are honed and revised throughout the study, and the skills needed for a successful interview are developed during the process. “It was only by experiencing the difficulties and participating in discussion with others working on the same transcripts that I developed my understanding of, and skills in using the methodology.” (Bowden, 2000, p. 59)

Data Generation Issues

Keeping the interview focused on a particular teaching context was particularly important. The relational, non-dualist nature of the research required that the interviewers should focus solely on the experience deriving from the teacher's involvement with a particular practice-based teaching context, and within that context, to elicit descriptions of engagements with learning technologies. As Bowden observes;

The phenomenographic interview has a focus – the way in which interviewees understand the chosen concept – and this focus is maintained throughout the interview. (Bowden, 2000, p.9)

This consistency of focus is a key factor to the phenomenographic methodology. However, maintaining this focus turned out to be difficult during interviews. The focus proved to be easily diverted either by the interviewers' digressions, or by those of the interviewees that went unchecked. It was easy for the focus of the interview to shift from a particular unit or module to a sense of teaching in general. Keeping the interview focused on teachers' intentions was also important to maintain.

The second-order nature of the research approach required the interviewers to focus on talking to teachers about how they experience their teaching; that is, to describe the experience of their interviewees rather than describe their own experience, which is a first-order approach. This meant that a probing for teachers' intentions was crucial.

In discussion of his experience of conducting a phenomenographic study with first year physics students, Prosser states;

In the interviews it was relatively easy to get the students to describe the what, but much more difficult to get them to discuss the why. (Prosser, 2000, p. 36).

This accords with my experiences. It was sometimes easy to feel as though an explanation of strategy actually articulated the intention, when in fact it did not do so explicitly. The interviewer had to prevent herself from assuming a teacher's intentions and to ensure that every strategy was probed, even if it seemed as though the intention was obvious, which sometimes baffled the interviewee. This example shows how prompting for further explanation of a concept was met with hostility, but resulted in a much richer description of meaning.

A: Yes, it is encouragement and the other thing, as you asked me what I would like them to take away, a key word is empowerment. So that they go away from the drawing class with some kind of... you know, I can take that to my other studio and use it.

Q: Why do you think that is important?

A: Well, I mean that is a silly question!

Q: Of course, yes. Could you try and explain?

A: Well, it is something that I have taken for granted.

Q: That is what I am trying to get to here; that I know a lot of the things are so self-explanatory, I know that empowerment is obvious, and what I'm trying to get you to talk about is why we think that?

A: I guess that empowerment is good because it gives the individual the confidence to break out of the mould, to break out of the expected. Remember that the context is fine art so we are committed people that can think outside the norm and to do that you have got to first of all recognise that you are normalised, and that you have got this kind of what Jensen called impacts of language, I call prism. So if you imagine your mindsets being rather like a prism and just by moving your eye, you get a totally different slant. A prism is an awkward term I know, but the students like it as it helps them to understand simply by shifting, and I mean physically shifting your head will give you a new slant on things. If you can imagine that mentally for all sorts of things you think, wow, this is a new world... The good artist educates and allows the rest of us to share his or her vision. We see the world freshly and we all go wow, that is amazing, I never thought of it like that. So then you know that you have really made an impact on them. That is empowerment.

Learning to research as legitimate peripheral participation

When looking to the literature on phenomenography, or on studies which adopted a phenomenographic approach, it seems that something is lost in the description of the

approach. The often contextual and unarticulated tacit knowledge of more experienced researchers is difficult to transform to written guidelines. Indeed, it may not ever have been the intention of some of these texts to be read as such. In preparation for this study, both researchers read key texts which highlighted aspects of the phenomenographic method and discussed them. Some of the most awkward, conflicting and frustrating discussions ensued between the researchers until the learning process engaged with the practice, by exemplars, stories, narratives and through experience. The process of learning to research became one of apprenticeship to the practice, by engaging with the practice and understanding the process through narration, collaboration and social construction (Kvale, 1993; Lave and Wenger, 1991). The key texts were reference points, but on their own did not lead to a fruitful understanding of how a phenomenographic study could be undertaken, they were the canonical practice. The lead researcher's experiences, stories and anecdotes of encounters with the methodology gave a different dimension to the learning, the non-canonical practice (Orr, 1996; Brown and Duguid, 1996). Although the texts described a singular research philosophy and method, few of them agreed on detail or on process. The accounts of actual practices, shared between researchers and stories shared from other sources (conferences, methods courses, other researchers) enriched the informal learning process. For the researcher as learner to participate at the periphery of practice is very important. Both researchers had access to the periphery of communication in this practice, by access to various email discussion groups, research seminars, conferences, PhD tutorials and seminars and meetings with more experienced researchers. This practice has helped embed the 'know how' as distinct from the 'know what'.

The need to 'bracket' ones own previous experience was discussed in the first stages of sorting. The processes described by Ashworth and Lucas (2000) suggests ways to put aside ones previous learning in order to avoid presupposing structures.

The aim of phenomenographic research is to arrive at a structure within which the various [interviewee] conceptualisations of the relevant concept are fitted: a structure of categories of description. However, an anxiety arises that – unless this goal is bracketed during those stages of the research which are concerned to uncover conceptions – it threatens to subvert entry into the [interviewee] lifeworld. (Ashworth and Lucas, 2000, p 298)

It was evident that as a researcher new to phenomenography I brought my own knowledge and previous awareness to the analysis. This included interests in research and debates in teaching and learning going back several years and experience of a variety of teaching, administrative and educational development roles. The uncovering of the categories and their structures was very much affected by this range of knowledge.

Chapter 6

The Experience of Teaching: a qualitative analysis

This chapter presents the findings of the interview study by qualitative means, using a phenomenographic approach to the analysis of the data. An experience, such as teaching, is considered for analytical purposes to have internally related structural and referential aspects. The structural in this context relates to how the explanation of teaching was given e.g. 'My role is to facilitate...'. The referential aspects are those things the teacher focuses on in their teaching e.g. '...so as to develop students' technical and critical skills'. The analysis is presented by sub discipline as conceptions of teaching media practice (communication), fine art (art) and design.

In this chapter I have identified a range of qualitatively different conceptions of teaching in media practice, fine art and design, these conceptions are constituted as a hierarchy where the more complete conceptions include some aspects of the more limited conceptions but not vice versa. The decision to present the categories in terms of increasing sophistication does not necessarily bear any relation to their appropriateness; rather it relates to the perceived need to illustrate the hierarchical relationship which links the categories and their conceptions together. Because of the study's superindividual approach, it should be noted that the categories are constituted from a range of quotes and do not necessarily reflect the conceptions of individual teachers. I have illustrated each conception with key quotes from the interview data, these are accompanied by a subject and institution code and with a respondent number, for identification of transcript purposes only, without revealing respondent identity. The outcome space for each sub discipline is not a full rich description of teaching in that context, rather it is a description of those aspects of teaching that are seen to have qualitative variation. For a description of the

characteristics of an outcome space see 5.3, where the research method is discussed, especially in Stage 2 – the outcome space is part of the research design (p. 58) and Stage 7- the outcome space is part of the reporting process (p. 68).

6.1 Conceptions of Teaching Media Practice

For the purposes of this study, media practice teachers are defined as those teaching the practices of journalism, film making, television and video production, animation and photography. The constant context of each interview was the teachers' practice-based teaching as opposed to the teaching of media studies for example. What I asked each teacher to focus on was the teaching of a practice-based subject in a particular undergraduate course context. In some cases this meant that they focused on a particular project e.g. a journalism project. In other cases the focus was likely to be a practice-based subject taught in a term or semester for which they had teaching and assessment responsibility, e.g. video production. The interview data is derived from a sample of fifteen media teachers from seven higher education departments of media and communication across the UK. This sample was chosen with an aim to maximise the variation in ways of conceiving of teaching media practice (see 5.3, stage 3 for a fuller description of how this was achieved p. 61).

Media Practice Conception A: Teaching is offering students a range of practical and technical skills

The teacher aims to reinforce technical ability by giving demonstrations and showing individual or groups of students' ways of making or doing. The teacher believes that the students need to follow technical topics based on what the teacher feels they need to learn. The emphasis of the learning is on a product or artefact. The intention is to demonstrate or give examples of technical skills.

Structural aspects of this conception are concerned with the teacher's role, in this case demonstrating, showing or instructing students how to make or do something. There is an emphasis on correct procedures and observing or checking that these are carried out correctly or for the students to demonstrate some technical competence.

The referential aspects of this conception describe the focus of the teaching on technical and practical skills. The teacher feels that they know best what skills to develop or to teach and often refer to content or objectives of the course, rules of the practice or other practical parameters which they feel the students must master before progressing in the subject.

This teacher discusses the focus of his teaching, to demonstrate a process, observe the students practising it and check they can do it.

First of all I will demonstrate how to correct, then we move onto something a bit more complicated, I've got these cans of Coke in the studio back there. Then I can show, if I have the camera that way they're all out, with the movement, they're all sharp. Okay that's fine, they're all sharp, But the camera's off thickness, the camera is called a female, you need to get it sharpened over there, we lose light so we have to increase the exposure and so on, just the basics, and then I've got them to do it, and I've got observation sheets which I tick off and they can demonstrate to me that they can actually do it, and I observe and tick off the observation sheet.

Q: And what would you say is your intention with using the observation sheet?

This is just a record for me that they can do it. The course, half of the mark is attendance and successful completion of all of the skills we have to offer, the other half of the course is the final portfolio... so I have to have an actual record that they can actually do it. (Media practice: PR13)

In this conception the teacher decides what to teach on the basis that they feel the students, although they may have some prior knowledge or experience, need to either start from demonstrations of the basic skills or to improve their practice with teacher guidance. The rules of the practice are seen as foundations of learning in this conception.

We actually tell them that we work from the principle that nobody knows anything, so we start from the ground up and treat everybody the same so that they all have to learn the same skills. (Media practice: CU7)

If they've chosen the subject matter, like one person tried to change the proportions, they had to build musical instruments, there were trumpets, a trombone, violin, piano, and the piano is a good example. Three people tried pianos and when they came back the pianos had 13 keys on it, so that's the kind of scenario where you can say okay, obviously there's something not quite right here.

Q: In terms of what you can help them to achieve, would you say that that hadn't quite met your criteria?

Yes and no, I would say in that scenario, that observation, to try to create a representation to try to create an actual piano that they overlooked some details, that there's more than 13 keys on a piano...

Q: What would you say - to these students in this unit - was the most important thing for them to learn?

The first time, the concepts of 3D, how they actually function in terms of the computer. There are rules in the real world, and usually if you want those rules you need to enforce them somehow, the computer doesn't know anything and the software... so in that context, how light works, inside the computer, all the basic building blocks to create 3D objects. (Media practice: CU7)

This teacher, in discussing his role, expresses a need to follow the syllabus or course content in terms of delivering a pre-determined range of topics and skills. The topics and skills are the referential aspects of this conception.

Q: *So what do you feel your role is?*

It's a good question. Again I've only, this is only my second year, so I have issues with my role, because it is very, it feels like you've got yourself in a chain basically, and someone else is driving. So I mean the only time that you get some freedom is when you're in the classroom and obviously the students then practise, you go with the students and if they find something interesting you try and push that forward, but from the initial standing point, starting point, you are very controlled. It may be different for other courses I don't know.

Q: So, what you're saying is that your role is working with the students?

You start to deliver the material, whatever it is, so if you're teaching them 3D objects like spheres and how 3D space works you still have to deliver that material. But the material you deliver is specified, you've got to teach the class, but the actual content you're working with is pre-described. (Media practice: CU7)

Demonstrating technical procedures and key rules and concepts are a focus of this conception with an intention to give students confidence in using the tools of the practice.

The first series is putting it together and showing them the actual movement, the second series goes into why you would use the rising folding front, why would you use the swings and tilt, because everything moves, and we talk about something called the Scheinflug rule, because there was an Austrian Captain in the Army in Austria in the 19th Century who did a lot of photographic surveys who worked out a way of controlling depth of field, which is getting everything sharp by using the camera movement. So that's what's we talk about, controlling depth of field, controlling or exaggerating perspective and various things. (Media practice: PR13)

I think that they know what control they can have over the image, by using this fantastic... well the principles are in fact 150/60 years old but in fact the technology that gets them there now is very much more advanced, the principle's the same. That they have total control over the image I think, to give them confidence is using the equipment. (Media practice: PR13)

Media Practice Conception B: Teaching is developing students' critical, practical and technical skills through student interaction

The teacher aims to enable students to develop a critical language by working together in groups or teams to present their own work and to see the work of others. The emphasis of the learning is on peer learning and process. The teacher works with individuals, groups or teams with the intention to enable students to form opinions and ideas and to develop practical and technical skills.

In this conception the teacher still feels it is important for students to develop practical and technical skills, but the emphasis is on much more than that. The referential aspect expands the focus of the teaching to include learning with others, sometimes in team or group situations and often with an opportunity for critical debate.

... to initiate the questions, because the kinds of questions that you ask are the kinds of questions you want them to be asking. So you start off the session being the only one asking questions and you want to end the sessions actually having them ask questions, and then they see comments and that's something we try and get them to do a lot up here, get them to really feel confident about a position that they have whether its right or wrong, but have a position and present an argument from that position. (Media practice: SU8)

My role really is to get the students to take those questions, take them on, on board themselves as much as possible, they may find it easier to question other people about what works, but at the end of the day they can ask useful questions, about other people's work. The idea that they can do that for themselves. People don't have to be oversensitive about other people's work, there are questions that can be asked that are non judgmental. (Media practice: FC5)

...handing it over as much as possible to the students, to open up the works that they look at, the one we did, we have a group of three students, one student interviews one of the others, so its very much about listening, and they look at the work, and the interviewer asks the interviewee open ended questions like Why? How? And just about time for the student, you know, the interviewee to think about this, and sometimes they can't answer, and its very interesting, um, questions. The third person is there to look at the quality, they look at the quality of the questions, and how a certain question closes the conversation, but how another type of question can lead to finding out things, you know, revealing, in the sense of the word. So that's the sort of critique that we're applying really, it's not descriptive. (Media practice: FC5)

The structural aspects of this conception involve explanations of developing students, particularly in a variety of group settings. Teachers often describe their role as facilitating or encouraging the process of learning and of developing confidence in learners. In this conception, teachers are keen to emphasise elements of the process which actively engage with students.

The teaching in this situation is more facilitating that group interaction is happening and the groups are progressing all along certain key dates that

they have to meet captured across semester two. So in terms of preparation there is very little note taking or white board writing or handing out lecture notes. The project does not require this, by the time they get to the end of year two the assumption is that they have learnt all that in previous modules and now a synthesis happens. That knowledge comes together. So the teacher, the lecturer is more of a facilitator. In terms of preparation my preparation is more of a psychologist or a facilitator rather than spending two or three nights writing lecture notes to get ready. That doesn't apply in this particular case. So there is not real preparation to say, rather a mental preparation if I could put it that way. You are a facilitator now, you are supervising the process. (Media practice: CU6)

We don't give individuals feedback, we give feedback through the sessions, you know the whole group, but its just encouragement really. And obviously, they've been observing, watching, what's successful for other people and the feedback yesterday, was, the whole group, tried not to deliver their findings to me, all the time making eye contact with me, as I address the group, and hopefully that will encourage the group to ask further questions, or further observations about the work that's being presented. So that would be a small observation, not specifically individual, but it's also about presentations, that were made, that will enable discussion to flow and feel more comfortable. (Media practice: FC5)

I think a lot of what they seem to achieve, or what you hope them to achieve but are never quite sure, is confidence. You see them feeding back to their group and you actually feel quite proud that they have thought of something or that their approaches have been achieved. It might be that you get five or six different answers but it shows them that it is OK to have a different

approach and to be confident in their own abilities. I think that is one of the strongest things that comes from peer learning. (Media practice: NT2)

Media Practice Conception C: Teaching is developing students' skills and conceptions in the context of professional practice

The teacher encourages students to manage projects involving complex problem solving skills which are set in the context of professional practice. The emphasis of the learning is on peer learning and process. The teacher works with students to develop conceptions with the intention to increase self-awareness, individual and team autonomy and for professional preparation.

The structural aspects of this conception, as with conception B, emphasise that teaching happens in a range of group settings. The difference in this conception is the referential aspect with a focus for that activity on real world scenarios or projects as a simulation of professional practice. The teacher aims to enable high level learning outcomes including problem solving skills.

To teach verbal skills and how that relates to the job market, particularly with the model, independent portfolio working as the norm now, but I think learning those skills, developing and transferring skills works much better from a problem based approach, you cannot tell somebody how to get good at something, they have to have a go and see where their strengths lie. So problem based learning allows for that and if they have to can give them a safety net to learn in when they do trip up. Particularly areas around transferable skills and professional skills problem based learning is the right way to go. (Media practice: NT2)

The focus is still on practical and critical skills, but crucially, this is developed in a real world scenario in order to help the students to begin to think like practitioners. It is this focus which also begins to address the student's ability to relate theory to practice and therefore to develop their conceptions.

The more (students) can talk, learning to write, talk or discuss or, finding the tools, the way to write and discuss other peoples developments is really useful to (students) in talking about (students) own work and developing conceptions of (students) own work, inside, and I do think these skills are important. (Media practice: PR9)

So reflection, there's a kind of debate over whether journalists reflect or not, but we feel its important for students here to play out a lot of ethical situations and scenarios and practical professional situations is a safe environment before they enter the industry, so we do encourage them to reflect, compare and contrast, look at real life journalism is and how it compares to what they're doing. (Media practice: PR15)

I like to see this as a realistic representation of what the industry is like so that when they go in they won't be too surprised...I think its important that they have, if they're going to do a course that's got quite a vocational element to it. It's going to be realistic, and we push them very hard and we give them very difficult situations. I think that we set tight deadlines, we give them the types of responses an editor would give, and that seems to be what they want, they seem to want to be pushed and given a space to play out in. (Media practice: PR15)

I mean the golden grail of teaching is to integrate theory and practice in a meaningful way. And each lecturer is a practitioner, you'd never make a distinction between theory and practice in our real world. In television production the theory and the practice are totally creative. So within an education context we try to replicate that. But the other is to create what we call thinking practitioners. They are programme makers who can handle all the pressures of a light entertainment show, which are often recorded as live. And yet in their preparation and planning and thinking about the contents of that programme they are considering all the kinds of aspects that are crucial in terms of target audience, appropriateness of use of language, the nature of light entertainment fixed within popular culture. So it's a more rounded approach. You can't just lecture on light entertainment and then hope that somehow it will bleed into practice. You do the two in parallel and our team timetable in media production has vertical strands which are the module pathways, and then horizontal strands, which are the integration moments. Now they either happen each week in various small ways or they come together in the integrated project. Now it may be also, this is another aspect is that in the real world light entertainment is a much more collaborative exercise. You have media production students working with performers, actors, dancers, musicians, and what we do is on our integrated event we bring in performing arts students, we bring in popular musicians. And most of the bands tend to be in our 'Top of the Pops' type programmes are our own students in another course. And it's a replication if you like, although it's made in an institution, of how it's like in the real world. (Media practice: CU4)

Media Practice Conception D: Teaching is helping students change conceptions

The teacher emphasises original research and conceptual thinking skills. The emphasis of the learning is on peer learning and process. The teacher works with students with the intention to improve self-directed research, practice and conceptual skills.

In this conception, the structural aspects vary from Conception C in that how the explanation of the teaching is given relates to changing students or helping students to change their own conceptions of their practice and their lifeworld. The teacher feels that students should have an ability to relate key concepts to the practice, or to develop practice through critical examination of concepts or theories. Teachers in the referential aspects of this conception also stress 'real world' and practice-based contexts as in Conception C. The focus is also still on students' conceptions but the emphasis is on changing those conceptions through an engagement with the practice.

I'm also interested in building arguments that are persuasive, working towards things that might be felt to be some kind of consensus about what the film's working. I mean, we do have individual interpretations but the better, so many interpretations are better than others if you see what I mean and that's partly because they're reported by a range of kind of evidence or there are broader arguments drawn on the theme to support it. So I feel you get a very strong sense of consensus of what is going on with a particular theme, a particular film. Now how that then relates to key concepts I suppose it does all the time in effect...

So I am hoping that there are going to be certain kind of principles that people will be able to take away and use. You know when we look at Hitchcock... I do think there are some really interesting things they can learn about the ways in

which film works from looking at these films, some of the extraordinary possibilities, from what at first glance might just be a bit of macabre entertainment, you know. So I'm hoping they're going to take away from that which isn't necessarily a desire to make suspense thrillers. They may take away those kind of ideas or take away a sense of what has been achieved in those kind of sequences and the kind of that's possible and take that away and work with it in, well, critically perhaps. Take some of those things, ideas to employ them to other films outside to take some of those possibilities, all those principles they might have derived from that study and think of that in their work. (Media practice: PR9)

Well, from the seminar presentation I guess that we are encouraging them to do what I was saying before, to take an area of theoretical work and to apply it to an example or a case study, and they have to learn to critically examine and reflect on that theoretical work in terms of what their thoughts are on that topic. But of course more generally, more generically, I think that they are developing their skills for research and presentation. I think that that's very important in terms of everyone doing this thing, but I mean, these are transferable skills, the ability to take a brief, and come back with a lively and animated presentation on that and to engage other people in it I think is a skill that is essential to a lot of areas in the media practices anyway. So in the seminar I think that that is an important element of it, they are developing still, or researching presentations, and working with colleagues as well. (Media practice: PR11)

Media Practice Conception E: Teaching is helping students to change as a person

Teachers holding this conception again emphasise original research and conceptual thinking skills and peer learning and process. The teacher works with students with the intention to help students change as a person, improve self-directed research, practice and conceptual skills.

Teachers holding conception E differ from those holding Conception D in seeing teaching as a way of enabling students to change themselves as a person or to make changes in their lifeworld. The structural aspects of this conception are also related to teaching as being a way to change students, primarily through practice and its impact on the student lifeworld.

It's important that the project has some sort of currency, in the world outside of this institution, and by that I mean, that its not just done as a project to get an academic qualification, its done as a project that will in some way make a difference in the world, either to the student, or the world outside the college.

(Media practice: FC14)

The referential aspects of this conception differ from those in Conception D by introducing a focus on the student lifeworld, but as this following quote illustrates, there is an inclusive nature to the conception. The teacher expresses the focus of his teaching as including technical, collaborative, professional and lifeworld aspects, in other words all of the referential aspects from the less inclusive conceptions can be evidenced.

...each student comes away with having achieved something, and achieves something that takes them to another level of their existence, that's a bit ambitious but they have grown whether or not they have learnt anything

technical about photography, is of less interest too me, I think they need to move on in their own lives and if they can produce a project with some collaboration with outside agencies or in the wider sense that it might be a scientific institution or a group of young mothers in an organisation, so, photography is not seen simply a means to an end, but as a real way of shaping how people understand themselves and the world around them.

(Media practice: FC14)

An analysis of these conceptions in terms of their structural and referential components is shown in Table 6.1, this demonstrates the way the categories have a logical ordering within the outcome space.

Table 6.1: Conceptions of Teaching Media Practice: Outcome Space

The structural and referential aspects of the categories of conceptions

Structural	Referential			
Focus of the teaching	Skills	Critical language	Conceptual	Student lifeworld
Giving information to individual students	A			
Developing students through groups (and individuals)		B	C	
Changing students through groups (and individuals)			D	E

6.2 Conceptions of Teaching Fine Art

For the purposes of this study, fine art teachers are defined as those teaching the practices of fine art including, painting, sculpture, printmaking and related visual arts.

The constant context of each interview was the teachers' practice-based teaching as opposed to teaching a text-based study such as the history of art for example. .

What I asked each teacher to focus on was the teaching of a practice-based subject in a particular undergraduate course context. In some cases this meant that they focused on a particular practice-based subject taught in a term, semester or year for which they had teaching and assessment responsibility, e.g. fine art - sculpture. The interview data is derived from a sample of eleven teachers from five higher education departments of fine art across the UK. This sample was chosen with an aim to maximise the variation in ways of conceiving of teaching fine art (see 5.3, stage 3 for a fuller description of how this was achieved p. 61).

Fine Art Conception A: Teaching is developing students' skills and conceptions in the context of professional practice

The teacher encourages students to manage their learning involving complex problem-solving skills which are set in the context of professional practice. The emphasis of the learning is on peer learning and process. The teacher works with students to develop conceptions with the intention to increase self-awareness, individual and team autonomy and for professional preparation.

In this conception teachers believe that a learning experience which engages students in professional practice as artists enables high level learning outcomes including problem-solving skills.

The structural aspects of this conception are concerned with the teachers' role as a facilitator of peer learning by working with both individual students and enabling peer group discussion. Teachers in this conception often refer to professional practice and learning from the artist's approach as part of the context.

They learn from each other as they do me. It is from the artist's approach, which is relevant and very important. I give them a breadth of ideas, some of which I have talked about, but fundamentally it is about their peer group and themselves and it is about making use of the experience, the struggle and the thinking of how the hell do I do this project. Hopefully, they will talk about it outside of this time also. So this becomes very much part of the teaching process. (Fine Art: SI 11)

Some teachers of fine art further described their teaching role as being an artist with students in the role of apprentices to the practice of fine art making. Apprenticeship is seen as a positive experience of being inducted into the fine art social context as well as the extension of practice and making art. The referential aspects of this conception are the focus of the teaching on developing conceptions and expanding ideas by making art. The focus is also on belonging to a community of practice through shared experiences and opportunities for knowledge building through practice.

So my role is in some way as a kind of mediator, but it is as an artist as well, an established artist, but also a 'shallow' artist in a sense. I will talk about them making art, it an art apprenticeship in a way. That is important I think to form that kind of relationship of shared experiences, knowledge and also the building of experience. It is confidence building and expanding ideas. The possibilities of making work expand is very important. What I try to do is talk

about the relevance of materials, as well as appropriate advice. (Fine Art: SI 11)

Fine Art Conception B: Teaching is helping students change conceptions

The teacher emphasises original research and conceptual thinking skills. The emphasis of the learning is on peer learning and process. The teacher works with students with the intention to improve self-directed research, practice and conceptual skills.

The teacher feels that students should have an ability to relate key concepts to the practice, or to develop practice through critical examination of concepts or theories. Teachers in this conception also stress practice-based contexts and the artist's approach as in Conception A. The structural aspects of this conception are still concerned with the teacher's role as a facilitator, not just to develop the students practice but to change the student response to the practice. The teacher sees their role as a catalyst to change students' conceptions, through critiquing ideas and experiments and by enabling them to pursue original research through practice.

Well I guess as a facilitator and a critic I suppose, a facilitator in the sense that I'm trying to encourage them to make work, and to develop their thinking along their own lines. But I'm also there to criticise it objectively, so if I think or feel as though there are better ways of looking at it, or if they're not looking at it broadly enough. I mean objectives can be quite important as they have to form preconceptions so commonly about what they want to do, and they get a mental image and then they try and set about executing it. Very often it's sort of done with a very single minded intent and at the end of the day they make it, it doesn't fulfil their expectations, it doesn't fulfil what they think it will

achieve. I guess I'm inclined to think more laterally, rather than make finished products to think about the ideas as a series of visual experiments although you might you might make a number of different products. It might be... expedient, or quite quick, so they can actually form an understanding of the broader concept they're working with, as long as it happens in varying degrees. I mean some students as I say are very single minded, with their pre conceived ideas, and some come at it from the start, with a very open view so you get a feeling of very different attitudes and abilities. (Fine Art: PL6)

The referential aspect of this conception, which varies from conception A, is the focus on changing students' conceptions, although inclusively this builds from developing conceptions. It is interesting to note that technical or practical skills are not considered to be a focus of these conceptions of teaching fine art. Inevitably, technical and practical skills are mentioned, but only in relation to developing a holistic approach to practice or as being less important than conceptual thinking.

The focus is on a tutorial point of view and that would be the ideas and the conceptual thinking side rather than the practical. (Fine Art: PL6)

The referential aspect of changing conceptions is often achieved by a focus on locating students' practice in a visual precedent. This means that the focus of the teaching is on enabling the students to engage in a wider critical discourse which relates to their practice in a particular context. The term, locating practice, is often used to describe this focus, which, when probed in the interview context uncovers a teacher intention to change conceptions through the process of reflection or critical discourse.

They have to begin I guess to engage, very slowly and over a period of time, in a discourse. A discourse is between themselves and their own interests, their own capabilities, their own relationship with the materials and their own relationship with visual things that stimulate and interest them, and those other artists. We may be travelling way back in time, or we may be looking at a very contemporary practice or we may be looking locally, or we may be looking into the distance, but they begin to feel themselves connected to other people who perhaps explored similar ideas. In order to kind of develop professional practice, they need to begin to locate, very gradually I would say over the period of the whole BA program, their practice, somehow in relation to all this visual precedent. (Fine Art: FC7)

I suppose the kind of learning that's taking place, or that I hope is taking place – certainly it's taken place for me, was a process of deep reflection on one's activities. You see, the whole basis of – art and design education – is that one learns through practice. One learns from the world, one learns about the kind of cultural context that one's operating in and one learns about the community that one's operating in. Through practice, there isn't this kind of body of knowledge that is consulted, that is brought to bear on practice. Practice and these other sources of contexts of knowledge work together. So in a sense practice itself is a learning experience, and I suppose that the intention was to reveal that, articulate it, and allow people to compare their learning experiences through that method with others, and identify other useful models in the process. (Fine Art: FC3)

To enable students to change conceptions of the subject, of the world and of their work is seen as an integral part of this conception. These teachers talk about

expressing ideas, changing conceptions and also about learning beyond the subject boundaries as an aim for teaching in this subject.

Fine Art Conception C: Teaching is helping students to change as a person

Teachers holding this conception again emphasise original research and conceptual thinking skills and peer learning and process. They differ from those holding Conception B in seeing teaching as a way of enabling students to change themselves as a person or to make changes in their lifeworld.

Structural aspects of this conception are still concerned with changing students. It is the referential aspects of the conception where teachers also say that the focus of their teaching is on aspects of changing students as a person, relating to their practice, to concepts of creativity and beyond the practice into the student lifeworld.

It's a kind of, liberal art education, you are kind of enabling students to fall on a creative theme, depending on what level they are operating at, and what their ambitions are. You might be producing people who are practitioners in their own right, artists, and people who take that experience back into other fields whether it's teaching or curating or other kinds of public art activities. So I think it's broader now than it used to be, and I just feel that it's the last traces of liberal art education. It's not geared towards a career or job, but more at developing a person, so that's my view, I think a lot of people would accord with that. (Fine Art: PL 6)

Changing conceptions and changing the person are an integral focus of teaching in this conception. Product and process are not ignored but become less important than the personal gain to the student that the teacher aims for in this conception. There is

evidence that teachers in this conception believe that students will be prepared for all manner of change in their future lifeworld as a result and this is a strong focus behind some aspects of the induction into a practice.

Ah, to, give them something to think about, some directions or tools, to do a very practical thing, you could say that there are a much wider range of ways of making marks on your territory. For instance, if you look at the practice of that, there are two different ways, now you may not want them to imagine you're a student, you may not want to use those two ways, but they are implications that you are working in a very particular way. You are making a choice to do that, and within that crit, what you are doing dissolves in some way. What often emerges from this is a sense of well, why should I change, and I think that's quite important, to get that out in the open, that they're going to have to face up to go looking for the idea of change in their work. As they come to the end of the course, and at the end of their own practice, not to stay in the same place but to change, and to get used to the idea of change being, on occasion, quite uncomfortable. (Fine Art: FC 7)

An analysis of these conceptions in terms of their structural and referential components is shown in Table 6.2, this demonstrates the way the categories have a logical ordering within the outcome space.

Table 6.2: Conceptions of Teaching Fine Art: Outcome Space

The structural and referential aspects of the categories of conceptions

Structural	Referential	
Focus of the teaching	Conceptual	Student lifeworld
Developing students through groups (and individuals)	A	
Changing students through groups (and individuals)	B	C

6.3 Conceptions of Teaching Design

For the purposes of this study, design teachers are defined as those teaching the practices of design for various purposes including fashion and textile design, graphic design and illustration, product design, industrial design and interior design. The constant context of each interview was the teachers' practice-based teaching as opposed to teaching design studies for example. What I asked each teacher to focus on was the teaching of a practice-based subject in a particular undergraduate course context. In some cases this meant that they focused on a particular project e.g. a client-focused graphic design project. In other cases the focus was likely to be a practice-based subject taught in a term or semester for which they had teaching and assessment responsibility, e.g. textile design. The interview data is derived from a sample of eighteen design teachers from seven higher education departments of design across the UK. This sample was chosen with an aim to maximise the variation in ways of conceiving of teaching design (see 5.3, stage 3 for a fuller description of how this was achieved p. 61).

Design Conception A: Teaching is offering students a range of practical and technical skills

The teacher aims to reinforce technical ability by giving demonstrations and showing individual or groups of students' ways of making or doing. The teacher believes that the students need to follow technical topics based on what the teacher feels they need to learn. The emphasis of the learning is on a product or artefact. The intention is to demonstrate or give examples of technical skills.

As with Media practice teachers (see p. 81) structural aspects of this conception are concerned with the teacher's role, in this case demonstrating, showing or instructing students how to make or do something. There is an emphasis on correct procedures and observing or checking that these are carried out correctly or for the students to demonstrate some technical competence. The focus of the teaching is on technical and practical skills. The teacher feels that they know best what skills to develop or to teach and often refer to content or objectives of the course, rules of the practice or other practical parameters which they feel the students must master before progressing in the subject.

The referential aspects of this conception (see also p. 81) are concerned with a focus on skills or techniques and this is predicated on the teacher's knowledge and experience of those skills. This teacher discusses the focus of her teaching, to demonstrate a process, observe the students practising it and check they understand the practical requirements of the task.

I mean in a discussion group for example, I would also introduce showing examples of mood boards, theme boards, that fashion forecasters use, so I would come to some of those small group tutorials with lots of examples of work, that we would layout and discuss.

Q: What do you intend the students to learn from looking at the examples?

For those students who've never had to do a mood board or theme board, I'm hoping that they will through the examples see what it is they're required to do. The students who have done it before I'm hoping they will see how they can improve on what they've done before. I show them a variety of different examples which demonstrates perhaps a minimalist look, and another mood board, theme board that are much more to do with themes in terms of, 'Britishness' and stuff like that. So it's that sort of thing. (Design: SU10)

In this conception the teacher decides what to teach on the basis that they feel the students, although they may have some prior knowledge or experience, need to either start from demonstrations of the basic skills or to improve their practice with teacher guidance. The rules of the practice are seen as foundations of learning in this conception.

Early on it is to increase their visual awareness, the awareness of typography specifically in this module and to become aware of letterforms... and the way these letterforms are used... One of the objectives I suppose is to get them to determine between what is a good typeface and a bad typeface. I know some people would argue that there is no such thing as a bad typeface and that all letterforms have a place. In some ways I prefer them to use a limited number of typefaces and to get to know those typefaces well rather than just using anything and everything at that stage. (Design: SI 1)

This teacher, in discussing his role, talks about the necessity of teaching the basis of a pre-determined range of techniques and skills. There is an emphasis on rules and of certain things being right or true and therefore uncontestable.

We assume that once we've taught a technique, we've got to teach the basis of the technique, the students are bright enough and sharp enough and they are...to be able to learn what they need to know, of that technique, and expand it as and when they need too. So they're very quick on that. Learning is... learning for example not to put your hand in the fire, because it's hot. By doing it once you discover that fact, and that's a very basic example... learning by experience, learning by hazards. I talk about trial and error, and it's not strictly trial and error, you know they'll try this and see if it works, because that would suggest a 'non-thinking' approach to design. It's not like that, there are certain truisms, there's certain things you need to get under your thumb, literally. One of the things I say to students is, here are the rules, now once you know what the rules are, you can break the rules, until you know what the rules are you can't break the rules. I always give the example of speeding on a motorway. If there's no speed limit on the motorway you can't break the law, but if there's a speed limit on the motorway, you can break the law...so its pushing frontiers, once you know where the existing frontiers... are. (Design: PL11)

Design Conception B: Teaching is developing students' critical, practical and technical skills through student interaction

The teacher aims to enable students to develop a critical language by working together in groups or teams to present their own work and to see the work of others.

The emphasis of the learning is on peer learning and process. The teacher works with individuals, groups or teams with the intention to enable students to form opinions and ideas and to develop practical and technical skills.

Structural aspects of this conception are concerned with the teacher's role as a developer or facilitator of a range of skills. The explanations given do not solely refer to demonstration as in conception A, but on working in group learning situations to further develop skills which have been demonstrated or exemplified. In this conception the teacher still feels it is important for students to develop practical and technical skills, but the emphasis is on learning with others, sometimes in team or group situations and often with an opportunity for critical debate.

...to encourage the way the group works, the peer group interaction is really important, for example, what student over that side of the group might have a key fabric that somebody over the side of the group might be looking for and if there are not using it then it's like, well, can you give them the address... So it is very much dealing with practical issues and it is also reassuring them, a lot of them really do get unsure and quite worried about this module because it is such a big thing. (Design: NT2)

When we say student-centred teaching I think that we really are, we really know what we are talking about when we say that we are not just saying it because it happens part of the government's objective. That is the major kind of framework beyond that it is, I suppose in detail, to do with getting the students to really take responsibility which again will be heightened by the fact that they're reporting not just to me but to a group of peers. Then it is for me to actually encourage them to debate these issues, between themselves. So in a way, what I do, and I know my whole team of people do this, is we act as a kind of catalyst in those kind of circumstances, so the student is talking about something and I am conscious of what the others are doing. I can

actually make links between somebody else's experience and theirs and that tends to work very well. So we have a very debate centred meeting and it is interesting because you have to be very conscious of it because it is very easy to lapse into a series of students individually reporting what they are doing. So we have to be really conscious of the purpose of this teaching function is to actually share ideas and develop general knowledge as well as the individuals. (Design: NT3)

Teachers often describe their role as facilitating or encouraging the process of learning and of developing confidence in learners. In this conception, teachers are keen to emphasise elements of the process which actively engage with students. This teacher discusses his role in enabling students to have the confidence to express themselves rather than telling the students what to do. He calls this bringing out the interior voice.

Well overall we would like the students to bring out their own interior voice and their own design voice. It is a strange situation, in a lot of design it is quite often the case that the tutor will put a voice into the student and tell them this is what is required and the student will go along with this. But I spent a whole year on the course looking into this. What we need to do is get students to look at the project with their own voice and we can put forward strategies, which will help to articulate that. It is not always possible because some students just sit and point when they have to make suggestions. So you end up saying well you could do this or you should do this, you must do this.

Q: So when you are talking about 'design voice' and 'interior voice' are they the same thing?

I think so. Design is a really interesting thing to teach because there are so many ways that people can interpret things. The students know a lot and it is trying to find a way in which they can articulate what they do know or what their main concerns are, or what they perceive as their main concerns of the course or of a particular tutor. It is quite difficult, because the question which is probably asked the most is what do you want? We try to make it clear that effectively they have their own voice and their own concerns and probably the role of the tutor is the role of trying to enable or prescribe it perhaps. (Design: BN7)

One of the main aspects of variation in this conception is the referential aspect which expands the range of skills which the teacher focuses on in their teaching to include critical skills. There is a focus on developing a critical language through working with others in project settings and giving and receiving interim feedback at crits (for a fuller description of crits or critiques see p. 2).

I hope they learn how to discuss their work for one thing, because they need to learn to talk about their intentions. They need to build critical judgement about their own work as well as discussing the work of others. I also hope that sometimes there is advice given that might not even be directed at their work and that they put this in the back of their mind and say, oh that was really good advice and it might be appropriate for my project as well. The nature of the interim (crit) is that you are giving very project specific advice that you are always giving advice that is relevant for them as individual image-makers or illustrators. (Design: BN6)

Design Conception C: Teaching is developing students' skills and conceptions in the context of professional practice

The teacher encourages students to manage projects involving complex problem solving skills which are set in the context of professional practice. The emphasis of the learning is on peer learning and process. The teacher works with students to develop conceptions with the intention to increase self-awareness, individual and team autonomy and for professional preparation.

The structural aspects of this conception are as in conception B, developing students' skills in groups or individually. In this conception teachers believe that real world scenarios or projects as a simulation of professional practice enable high level learning outcomes including problem solving skills. The role of the teacher is that of confidence builder and motivator as well as developing subject based skills in context.

Well, all of our programs in fashion and textiles talk about the development of student confidence and there is a high premium to articulate in the creative industries. I mean people win contracts based on their ability to talk about their work and again it is a real conscious move away from the old fine art because that is much more specialist actually. (Design: NT3)

So I suppose confidence building and awareness of their intelligence, the ability to articulate concepts and ideas and to then to share that in a team situation and practical are the other thing, out there in those industries and the need for ability to team talk is crucial. So it is very geared towards helping and assisting them as employable people, as people who know all about the subject. (Design: NT3)

Well for this particular project, which was the first one of those three, the branding one. I try to think what I would do if I was doing this for real, so the industrial - the real world context of it, and I sort of identified that these people did have difficulty with organisational and time management, they were skills they hadn't been taught really. So I felt this was a good opportunity to help develop those skills, and teamwork skills as well, so I put them in teams for this project. (Design SU9)

This referential aspect of the conception gives a real world focus to the teachers' role as a developer of students' conceptions. This teacher talks with relish about the way the students will feel professional when they learn in a real world context which legitimises this particular approach. Skills and developing students' conceptions are treated equally, evidencing the inclusive nature of this conception. Unlike conception A, it is the student's knowledge, and the development of it, not the teacher's knowledge, which becomes the focus of the teaching.

So the time management suddenly becomes more crucial, it's got a real connection. So it's the time management, a professional and business-like approach. I think it does a lot for them, looking into what's happening out there and the pricing becomes real, they use it to get commissions. So it's not just the hypothetical pricing it's the pricing which means they get green notes in their hand or whatever. And that's considering pricing becomes an important issue to the real world. But the transferable skills you know, its sort of there's an element of being on the phone and practising and communicating basically with people they may not even know very well. And being sure to have all the prices ready, all the packaging done properly, everything properly labelled. Its all those things that, if they weren't sending it

somewhere, they wouldn't really do... getting slides ready on time and...until the third year in the past we hadn't really been doing that. And it may be only a tiny project, I know it's not very big, but this year we're doing Japan 2001. We've got a lovely big exhibition, a full gallery taken on just for their work, which the Japanese Embassy funded. And they are getting paid for the work that they are putting in. And it's like they feel professional. And in some ways you can't...it's very difficult to assess that element that is creeping into their work that makes them realise that the industry is very important and it's for somebody else, it's not just for them. (Design CU8)

This teacher believes that if students are brought into contact with practising subject experts they can bring a professional context to bear in relation to their work as well as developing ideas and concepts. This begins to widen the range of authentic practice settings in which teaching and practice combine. The idea of the focus of the teaching being 'inside', inside the student, or inside the project, or even inside the university is evoked in this and other quotes. The 'outside', by contrast is the antithesis of these things and this teacher feels that tutorials (inside) and experts in the practice (outside) must coincide to enable the student to form a full context for professional learning in design,

I think one of the things that's most interesting is that when they do come in they're quite gauche and they're very insecure in their ideas, by the end of the module they really should become confident in expressing ideas – visually, orally and intellectually... I think it's because it's a combination of teaching and practice. It's not just one-to-one tutorials. It's also bringing them into contact with experts in the area so that they can actually have a reference point and they can contextualise their ideas in relation to what is actually going on outside. (Design: BN 4)

Design Conception D: Teaching is helping students change conceptions

The teacher emphasises original research and conceptual thinking skills. The emphasis of the learning is on peer learning and process. The teacher works with students with the intention to improve self-directed research, practice and conceptual skills.

The structural aspects of this conception are still concerned with the teacher's role as a developer and mediator, not just to develop the students' professional practice but to change the student response to design practice in a wider context. The teacher sees their role as a catalyst to change students' conceptions, through critiquing ideas and experiments and by enabling them to engage in wider design issues.

The teacher feels that students should have an ability to relate key concepts to the practice, or to develop and change their practice through critical examination of concepts by which they can develop their own position or voice. Teachers in this conception also stress 'real world' and practice-based contexts as in Conception C. This is also exemplified by a desire to invite practitioners, not teachers, to join in the assessment and critiquing process as a mark of authentic practice. These invited critics may offer other perspectives such as ethical, sustainable or community elements to design issues which engage with other facets of lived experience beyond the student lifeworld. These invited critics also continue the theme of inducting the student into a wider community of practice by legitimate peripheral participation in authentic design practices.

Q: So is it important that invited critics are practitioners?

Yes, I think it is. But not entirely practice-based, I think usually come from very good practices which are engaging certain issues and I think that we are doing something beyond just educating students beyond practice. We are trying to get students to engage in the wider aspects and wider ideas also.

Q: So what are those wider aspects that you are telling me about, not just practice?

Well, that students are able to consider the world that they are entering into, the design world. So in a design sense, that they are engaging in wider design issues, which might not be articulated in some narrow practice. There are practices and practices, there are some very good ones, but I am sure you are aware a lot of the criticism that students are no good for anything but practice when they come out, because they have been trained by practices to draw properly and such. I would still maintain that students come out being able to think in a wider context also and that they should certainly should have the wider skills.

Q: So what do you think is important for them to learn?

It is quite interesting at undergraduate level, probably students need to have certain skills and be able to be clear about their ability to operate within a design practice. At a wider level I would like them to be quite actively seeking out and looking at a lot of good design and examining what they think to be good driving ideas behind this design. They need to engage with issues of wider design, about design as a whole. I suppose the third thing is, ultimately that they are looking to have their own voice, their own riches and their own position. (Design: BN7)

Referential aspects of this conception focus on the student changing conceptions. To enable students to change conceptions of the subject, of the world and of their work is seen as an integral part of this conception. These teachers talk about expressing ideas, changing conceptions and also about learning beyond the subject boundaries as an aim for teaching in this subject.

I think you're more trying to prepare them just to negotiate the world and negotiate with people, really... I think if we're just assuming they're going into design jobs, I don't think that life works like that any more, there's people doing all sorts of stuff...you're hoping it will enable them to articulate themselves sufficiently to navigate the world and navigate people in it. And then be successful, ultimately, I think, maybe in design, hopefully, but, you know, I've known students go on and become successes in other fields, which means we've done something right, you know...Because when I have a seminar with a small group and I'm trying to get them to talk about their work it's not just about talking about their work it's about communicating with other people and expressing their ideas. It so happens, maybe rightly or wrongly, that, I don't know whether I should say it, that it's about design. If they can do it about design then they can quite rightly do it about a range of...other subjects may come into it, so that's the deal really. (Design: PR5)

Table 6.3: Conceptions of Teaching Design: Outcome Space

The structural and referential aspects of the categories of conceptions

Structural	Skills	Referential	Conceptual
Focus of the teaching		Critical language	
Giving information to individual students	A		
Developing students through groups (and individuals)		B	C
Changing students through groups (and individuals)			D

The qualitative analysis presented in this chapter helps us to understand the aspects of variation in the experience of teaching in the creative practice-based subjects of media practice, fine art and design. The variation described in each of these sub disciplines makes an important contribution to knowledge as some of the key aspects of variation are not to be found in previous studies of conceptions of teaching (e.g. Prosser, Trigwell & Taylor, 1994). The main point of departure in this study is the focus on practice-based subjects, and all of the conceptions reveal different aspects of variation of practice-based teaching. Some of these conceptions (Media Practice A and B; Design A and B) focus on practising and developing skills such as practical, technical and critical skills. Other conceptions (Media Practice C and D; Fine Art A and B; Design C and D) focus on developing and changing conceptions in a practice-based context of which skills are an inclusive part. Finally, some conceptions focus on change in the student lifeworld (Media Practice E; Fine Art C). These latter conceptions are a significant discovery in that they relate to an earlier study of students' conceptions of learning (Marton, Dall'Alba & Beaty, 1993). Marton et al. (1993) found a sixth conception of learning, *learning as changing as a person*, this study of conceptions of teaching complements that finding, *teaching is helping students to change as a person*.

The final part of the analysis is a quantitative study of teachers' approaches to teaching in the same sub disciplines (presented in chapter 7). This further complements the qualitative analysis by using a multi method approach. More importantly, as discussed in chapter 2, research demonstrates that conceptions of teaching relate to approaches to teaching (e.g. Trigwell and Prosser, 1996a). The quantitative analysis further seeks to determine whether similar relations occur with teacher-focused and student-focused teaching as well as a focus on skills or practice.

Chapter 7

The experience of teaching: a quantitative analysis

This chapter addresses the final research question in the context of teaching the practice of art, design and communication.

How do teachers differ in their approach to teaching?

This particular research question is answered by examining the approaches, strategies and intentions of the teachers (e.g. intention to give examples, enable interaction, improve self-directed research). As the context of this study relates to teaching the practices involved in art, design and communication, the examination of teachers' approaches also focuses on the relations between approaches to teaching and the development of skills and communities of practice.

In studies of university teachers' approaches to teaching (see for example, Trigwell, Prosser, and Taylor, 1994) there are qualitative variations reported in the way teachers describe their approach. Whilst the context of teaching may vary, some teachers describe their approach as student-focused. These teachers intend for their students to change conceptions of the subject of their study and their worldviews. These teachers believe that it is important for their students to have to construct their own knowledge, and they see their role as teachers as facilitating that. Although some of these teachers may use transmission methods as part of their repertoire of teaching methods (e.g. demonstration, lecturing), they understand that these methods in isolation will not satisfy their intended aims. This approach has been described as a Conceptual Change/Student-focused (CCSF) approach (Prosser and Trigwell, 1999).

Some other teachers, again in varying contexts, limit their approach to the information transmission methods and adopt a strategy that mainly focuses on what the teacher does rather than on what the student does or learns. This is described as a teacher-focused approach. These teachers intend for their students to be recipients of information or to acquire concepts of the subject by passive teacher-focused means. This approach has been described as an Information Transmission/Teacher-focused (ITTF) approach to teaching (Prosser and Trigwell, 1999).

This chapter reports the quantitative study of relations between these qualitatively different approaches to teaching, skills development, and teachers' communities of practice. This study was designed using the Approaches to Teaching Inventory (Prosser and Trigwell, 1999) and 7 additional items, three of which focus on skills development and four of which focus on developing a community of practice.

The Approaches to Teaching Inventory (Prosser and Trigwell, 1999) was developed to measure the variation in the ways teachers approach their teaching in a particular situation.

It has 16 items.

- 8 on a sub-scale describing an approach which is intended to change student's conceptions or ways of seeing things through a focus on the student. This sub-scale is labelled conceptual change/student-focused, CCSF
- 8 on a sub-scale describing an approach concerned with information transmission and a teacher –focus, labelled ITTF

The full inventory (ATI-ADC) for the purposes of this study consists of items 1 to 25 – see 5.8 for a full description and review of the methods used to refine the inventory and its application in this context. There were 9 additional items which made up the original *Skills* and *Practice* scales, these were subjected to factor and scale reliability analyses to confirm the structure of the scales (see Table 7.3)

The majority of studies of approaches to teaching have been undertaken with teachers from mainstream university teaching contexts. Those studies have also been conducted using an inventory developed from studies of university science teaching. One study of approaches to teaching in design subjects does however inform aspects of this investigation (Trigwell, 2002).

The teaching of design subjects is often described in ways that are quite different to descriptions of teaching in more traditional subject areas such as science. Less use is made of lecturing and lecture notes, the activities that are employed tend to be more studio and project-based, and involve smaller groups of students than in the more traditional areas. (Trigwell, 2002, p. 70)

The intention behind the development of the *Skills* and *Practice* scales was to further contextualise the studio and project based approaches. This is explored by making distinctions between (a) those teachers who intend for their students to develop competence in the craft skills of the subject and (b) those who see their role as inducting the student into the community of practice of the subject.

7.1 Inventory Item Descriptives

The table which follows (Table 7.1) shows all the 25 items described in terms of means, standard deviations, minimum, maximum and numbers (n) of respondents

who answered the item (total n = 73). All items were scored on a 1-5 scale and all were scored positively. The score numbers stand for the following responses:

- 1 - this item was **only rarely** true for me in this subject.
- 2 - this item was **sometimes** true for me in this subject.
- 3 - this item was true for me **about half the time** in this subject.
- 4 - this item was **frequently** true for me in this subject.
- 5 - this item was almost **always** true for me in this subject.

Item		Mean	Std Dev	Min	Max	N
1	I design my teaching in this subject with the assumption that most of the students have very little useful knowledge of the topics to be covered.	2.69	1.35	1.00	5.00	72
2	I feel it is important that this subject should be completely described in terms of specific objectives relating to what students have to know for formal assessment items.	3.11	1.26	1.00	5.00	71
3	My aim in this subject is to develop students' technical competence in basic skills.	2.86	1.21	1.00	5.00	73
4	In my interactions with students in this subject I try to develop a conversation with them about the topics we are studying.	4.78	0.51	3.00	5.00	73
5	I feel it is important to present a lot of facts to students so that they know what they have to learn for this subject.	2.33	1.04	1.00	5.00	73
6	I think that an important reason for running teaching sessions in this subject is to demonstrate technical procedures correctly.	2.44	1.23	1.00	5.00	72
7	I feel that the assessment in this subject should be an opportunity for students to reveal their changed conceptual understanding of the subject.	4.34	0.95	1.00	5.00	70
8	I set aside some teaching time so that the students can discuss, among themselves, the difficulties that they encounter studying this subject.	3.66	1.28	1.00	5.00	73
9	Being able to use the basic skills is a key aim I have for students in this subject.	3.13	1.35	1.00	5.00	71
10	In this subject I concentrate on covering the information that might be available from a good textbook.	1.85	0.95	1.00	5.00	71
11	I encourage students to restructure their existing knowledge in terms of the new way of thinking about the subject that they will develop.	4.42	0.73	2.00	5.00	72
12	In this subject, I think it is important for students to have opportunities to practise their skills with my support.	4.38	1.01	1.00	5.00	73

13	In teaching sessions for this subject, I use difficult or undefined examples to provoke debate.	2.89	1.33	1.00	5.00	72
14	I structure this subject to help students to pass the formal assessment items.	3.01	1.28	1.00	5.00	71
15	I feel that it is important for students to experience the practice in a “real world” situation in this subject.	3.86	1.08	1.00	5.00	73
16	I think an important reason for running teaching sessions in this subject is to give students a reliable record of what I think are key issues.	2.85	1.38	1.00	5.00	72
17	In this subject, I only provide the students with the information they will need to pass the formal assessments.	1.24	0.54	1.00	4.00	72
18	In this subject I help students apply their skills to “real world” projects.	3.92	1.08	1.00	5.00	71
19	I feel that I should know the answers to any questions that students may put to me during this subject.	2.33	1.24	1.00	5.00	70
20	I make available opportunities for students in this subject to discuss their changing understanding of the subject.	4.43	0.85	1.00	5.00	72
21	I think it is important in this subject for students to develop their practice through individually negotiated study.	4.42	0.85	1.00	5.00	72
22	I feel that it is better for students in this subject to generate their own record of key events than to be relying on what I give them.	4.22	0.86	1.00	5.00	72
23	I feel a lot of teaching time in this subject should be used to question students’ ideas.	3.73	1.05	1.00	5.00	70
24	To get students to think and act like a practitioner is my aim in this subject.	4.04	1.10	1.00	5.00	69
25	In this subject I feel it is more important for students to engage with “real world” projects and to act like a practitioner than to develop and practice basic skills.	3.27	1.14	1.00	5.00	67

Table 7.1 Item Descriptives

In all but three items the whole scoring range is used. It appears that respondents to questions 4 and 11 only used higher scores and these items also record higher

means (4.78 and 4.42 respectively). Both items 4 and 11 are items from the CCSF scale, and these results are consistent with other findings. For example, respondents to item 17 used lower scores and recorded the lowest mean (1.24); item 10 respondents used the whole range of scores but also record a low mean (1.85). Both items 17 and 10 are from the ITTF scale.

Analysis of the additional items

The additional 9 items were analysed in a number of different ways, firstly by scanning correlations between each of the items (Table 7.2), by exploratory factor analysis (Table 7.3), and the resulting *Skills* and *Practice* scales were also tested for correlations with the ITTF and CCSF scales (Table 7.6).

7.2 Correlation matrix of additional items

The *Skills* scale was originally designed with items 3, 6, 9 and 12. This first analysis shows that there are some significant relations between items 3,6 and 9, but that item 12 in this scale is less strongly related to other items in the scale. Item 12 correlates positively ($r=0.26$) and statistically significantly ($p < 0.05$) with item 6. Item 12 also correlates positively (0.36) and statistically significantly ($p < 0.01$) with item 9. However, item 12 correlates positively (0.12) but not statistically significantly with item 3. All the other items in the scale (3, 6 and 9) correlate positively and statistically significantly ($p < 0.001$) with each other.

The *Practice* scale was originally designed with items 15, 18, 21, 24 and 25. This first analysis shows that there are some significant relations between items 15, 18, 24 and 25, but that item 21 in this scale shows no significant correlation with any other items in either scale. Item 15 correlates positively ($r=0.51$, 0.34 and 0.44 respectively) and statistically significantly with items 18 ($p < 0.001$), 24 ($p < 0.01$) and

25 ($p < 0.001$). Item 18 also correlates positively ($r = 0.32$ and 0.49 respectively) and statistically significantly with items 24 ($p < 0.01$) and 25 ($p < 0.001$). Finally, item 24 also correlates positively ($r = 0.35$) and statistically significantly with item 25 ($p < 0.01$).

There are some anomalous results showing that item 18 (*Practice*) correlates positively (0.24) and statistically significantly with items 9 and 12 ($p < 0.05$), both of which are from the skills scale. This result is not as statistically significant and could be explained by the content of each of the items having some relation to skills development and application, but that item 18 further develops the practice context in projects and is designed to relate to the other community of practice items.

9 Being able to use the basic skills is a key aim I have for students in this subject.

12 In this subject, I think it is important for students to have opportunities to practise their skills with my support

18 In this subject I help students apply their skills to “real world” projects.

	3	6	9	12	15	18	21	24	25
3	-	0.56***	0.43***	0.12	0.01	0.05	-0.12	-0.15	-0.22
6		-	0.45***	0.26*	0.04	-0.02	-0.01	0.25*	-0.23
9			-	0.36**	0.03	0.24*	-0.11	0.14	-0.14
12				-	0.04	0.24*	-0.19	-0.05	0.02
15					-	0.51***	0.02	0.34**	0.44***
18						-	-0.01	0.32**	0.49***
21							-	0.18	0.04
24								-	0.35**
25									-

Table 7.2 Correlation Matrix (Pearson correlation coefficients, r) of all 9 additional inventory items

$N = 73$ * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

7.3 Factor Analysis

All nine additional items were subjected to a Principal Component Analysis (PCA) factor analysis. This analysis was sought to confirm the structure of the *Skills* and *Practice* scales and to further clarify relations between items 9, 12 and 18 and whether items 12 and 21 were loading into either of those scales as the correlation analysis had raised some queries about these items.

Table 7.3 Factor analysis results of all 9 additional inventory items

Item	Factor		
	1	2	3
3	-.098	.810	-.029
6	-.040	.856	-.036
9	.126	.681	.337
12	.162	.137	.740
15	.738	.026	-.159
18	.811	.069	.255
21	.126	-.020	-.578
24	.574	.316	-.492
25	.798	-.273	-.015

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations.

Three factor solution for Eigenvalues >1.00

The figures shown in bold are for loading >0.5 or < -0.5. Three of the items relating to skills (items 3, 6, 9) load heavily on the second factor. Four of the practice-based items load heavily on the first factor. Item 25 helped respondents to discern whether a *Practice* approach was more or less important to them than a *Skills* approach. Items 12 and 21 load heavily on the third factor but not on factors 1 and 2. This confirms the correlation analysis results and the decision to exclude items 12 and 21 from the scales.

The PCA factor analysis of the 9 additional items suggests the following scale structure. Items 15, 18, 24 and 25 (*Practice*) from factor 1, and Items 3, 6 and 9 (*Skills*) from factor 2. Items 12 and 21 were not included in any scales.

Skills Items

- 3 My aim in this subject is to develop students' technical competence in basic skills.
- 6 I think that an important reason for running teaching sessions in this subject is to demonstrate technical procedures correctly.
- 9 Being able to use the basic skills is a key aim I have for students in this subject.

Practice Items

- 15 I feel that it is important for students to experience the practice in a "real world" situation in this subject.
- 18 In this subject I help students apply their skills to "real world" projects.
- 24 To get students to think and act like a practitioner is my aim in this subject.
- 25 In this subject I feel it is more important for students to engage with "real world" projects and to act like a practitioner than to develop and practice basic skills.

7.4 Analysis of the scales and the scale scores

The structure of the scales has been explored by correlation analysis and factor analysis. In this section, overall scale scores for all four scales are further subject to PCA factor analysis (Table 7.4) and scale descriptives including Cronbach alpha reliability scores are produced (Table 7.5). The four scales are also analysed in a correlation matrix (Table 7.6) with illustrative scatterplot graphs (Figs 7.i, 7.ii, 7.iii, 7.iv, 7.v and 7.vi).

Table 7.4 Factor analysis of all four scales

Scale	Factor	
	1	2
CCSF	-.249	.786
ITTF	.872	.168
PRACTICE	.244	.796
SKILLS	.866	-.171

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization, a Rotation converged in 3 iterations.

Two factor solution: Eigenvalues >0.1

The figures shown in bold are for loadings above 0.5. Information transmission/teacher-focused approach to teaching and Skills load heavily on one factor and a conceptual change/student-focused approach and Practice load heavily on the other factor. This factor analysis says nothing about the individual teachers, but does say that more of a student-focused approach is related to more time spent on real world and practitioner related problems. Conversely a teacher-focused approach is related to the development of skills.

This result has implications for the development of teachers of practice-based subjects if both a student-focused approach to teaching and a practice orientation are

observed to have strong relations. This set of relations in the factor structure of the scales is further explored in the correlation matrix of the scales (Table 7.6)

7.5 Scale Reliabilities

Table 7.5 Scale Descriptives

Scale	Mean	Std Dev	Minimum	Maximum	Alpha	N	Items in scale
ITTF	2.42	0.58	1.13	3.50	0.63	73	1,2,5,10,14,16,17,19
CCSF	4.07	0.56	2.13	5.00	0.71	73	4,7,8,11,13,20,22,23
SKILLS	2.81	1.01	1.00	5.00	0.73	73	3,6,9
PRACTICE	3.67	0.90	1.67	5.00	0.73	73	15,18,24,25

Table 7.5 Descriptives, alpha reliabilities and items for approaches to teaching and skills and practice scales

The scale alphas, while being at the lower end of acceptability are still acceptable for this exploratory study. The scale alphas for both *Skills* and *Practice* improve after items 12 and 21 are removed from these scales, the reported alphas are for the revised 3 item *Skills* scale and 4 item *Practice* scale. It would appear that the ITTF scale does not work as well in this context. In Trigwell (2002), a study using the ATI with design teachers the alpha for the ITTF scale was acceptable (0.71). This may be because the higher scores in ITTF are not consistently used in this practice-based context. The ITTF and CCSF scales come from a validated inventory (the Approaches to Teaching Inventory, Prosser and Trigwell, 1999) that has also been tested in the design context (Trigwell, 2002).

Other descriptives show significant results in this context. The means for *Practice* and CCSF are high and those for *Skills* and ITTF are low. While these scales scores

are not comparable, this result is consistent with the findings of the qualitative study reported in chapter 6 which reports teachers' conceptions of teaching in these practice-based contexts as being predominantly student-focused.

7.6 Correlation Analyses

Table 7.6 Correlation analyses (Pearson, r) for the four scales in the ATI-ADC

Scale	Scale			
	CCSF	ITTF	SKILLS	PRACTICE
CCSF	-	-0.05	-0.22	0.27*
ITTF		-	0.56***	0.23
SKILLS			-	0.02

N = 73

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

CCSF approach scores correlate positively ($r=0.27$) and statistically significantly ($p < 0.05$) with a focus on using “real world” problems (*Practice*). This is also highlighted in the scatterplot (Fig 7.i). There is a widely held view in university level teaching that a student-focused or student-centred approach helps students to develop as individuals and also fosters approaches to learning which can lead to higher quality learning outcomes (Trigwell, Prosser and Waterhouse, 1999). This finding helps us to understand that, in the teaching of creative practices, the student-focused approach also aligns with an approach in which teachers encourage their students to learn through authentic practices (“real world” projects). CCSF approaches also correlate positively ($r=0.36$) and statistically significantly ($p < 0.01$) with the view that learning to act like a practitioner and to tackle “real world” problems is more important than the development of skills (i25) (not shown in Table 7.6). However, as shall be explored further, these teachers still do develop and practice basic skills with their students, but in the context of the studio or project based learning. If teachers of these subjects value the induction of their students into the community of their practice then it also

follows that they should develop a student-focused approach and a related practice focus to their teaching. This has significance for the development of teachers in these subjects if high-level student learning outcomes in practice-based courses are a desired aim for the teaching. These implications and their relation to the findings in chapter 6 will be more fully discussed in chapter 8.

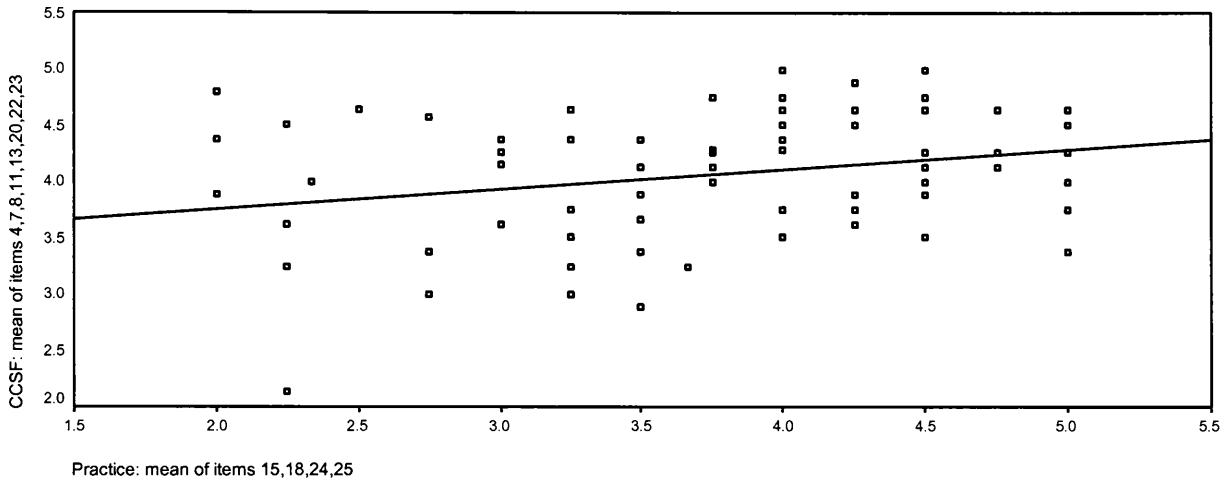


Fig 7.i CCSF and *Practice*

The scatterplot (Fig 7.ii) shows that there are no strong relations between the *Practice* and the ITTF approach scales. This accords with the previous finding and confirms that teachers do not usually induct students into a community of practice using information transmission or teacher-focused approaches.

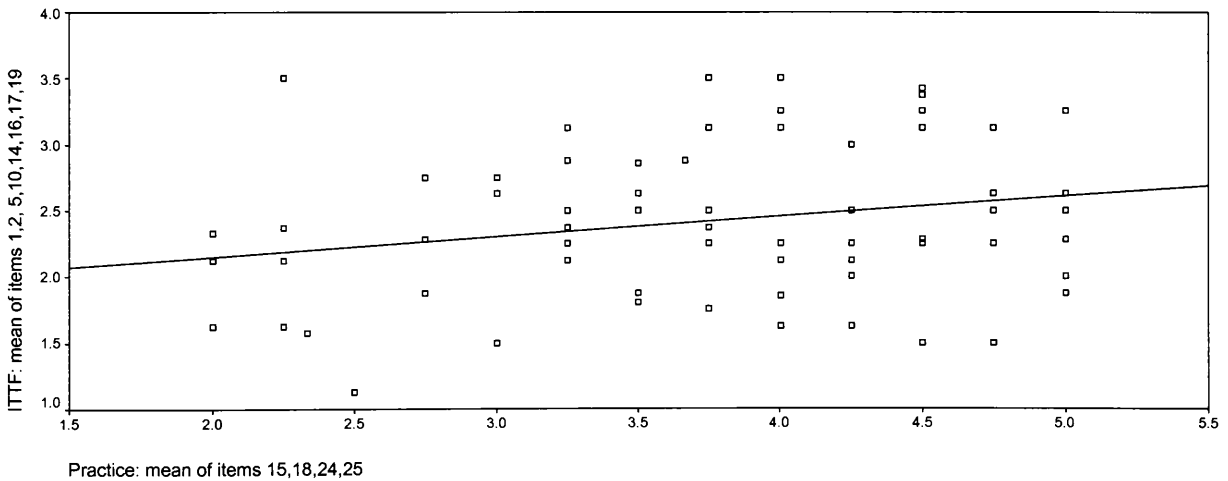


Fig 7.ii ITTF and *Practice*

ITTF approach scores correlate positively ($r=0.56$) and statistically significantly ($p < 0.001$) with an emphasis on skills development (*Skills*) as illustrated in the scatterplot (Fig 7.iii). This confirms that teachers using information transmission or teacher-focused approaches also tend to focus their teaching on the technical acquisition of basic craft skills and developing competence with those skills. These skills are developed with the teachers' guidance and support and are not related to the context of the practice.

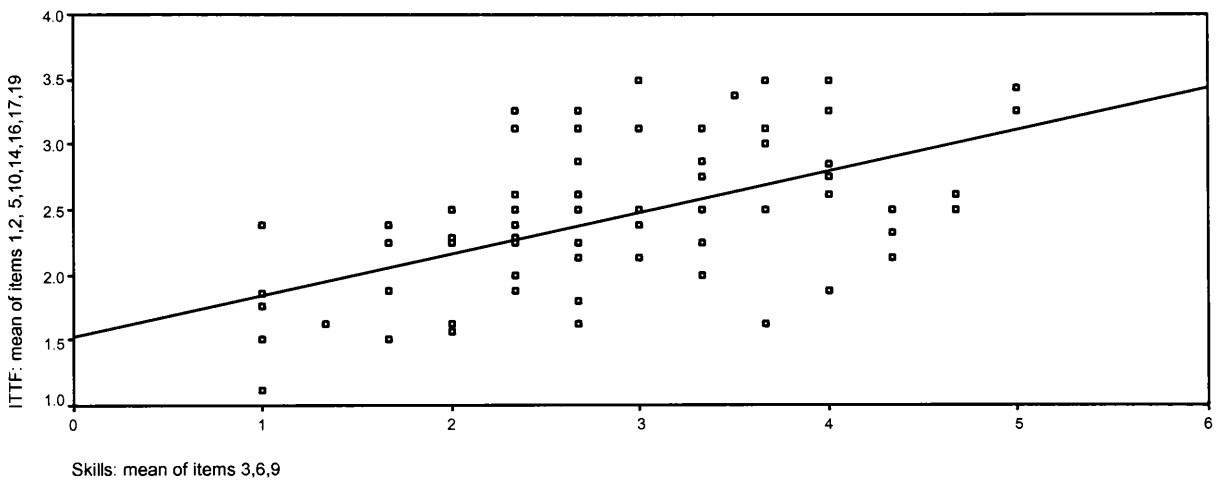


Fig 7.iii ITTF and *Skills*

As would be expected therefore, CCSF and *Skills* approaches show a negative relation ($r = -0.22$) as illustrated in the scatterplot (Fig 7.iv). The plots for *Practice* and *Skills* (Fig 7.v) and ITTF and CCSF (7.vi) are also shown.

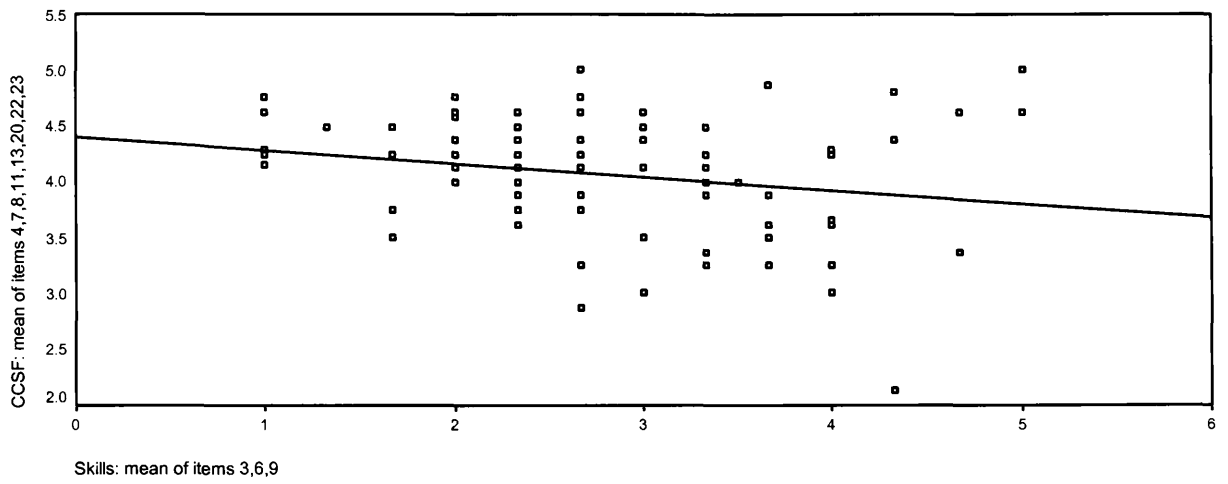


Fig 7.iv CCSF and Skills

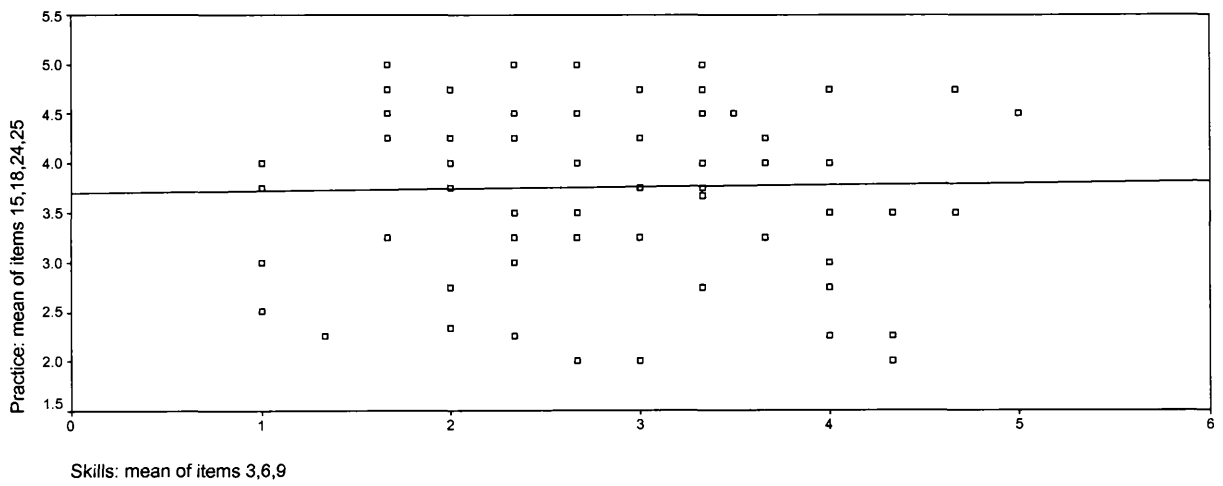


Fig 7.v Practice and Skills

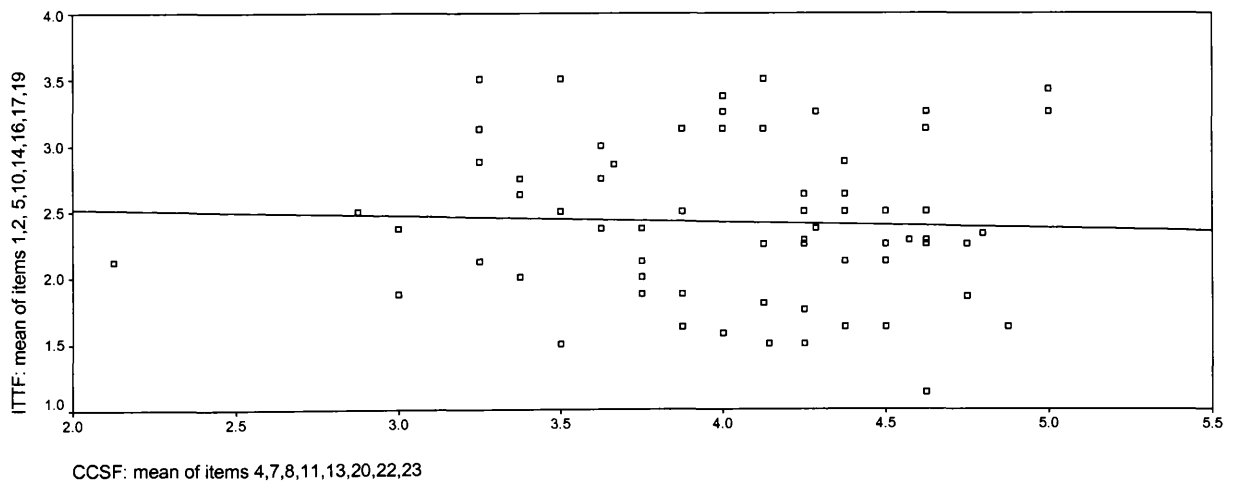


Fig 7.vi ITTF and CCSF

Chapter 8

Discussion

8.1 Introduction

This chapter aims to reiterate and discuss the main findings of this study and to examine the results in relation to the selection of literature reviewed in Chapters 2, 3 and 4. Chapter 2 was concerned with the research into teachers' experience of teaching in both school and university level teaching. Although the literature on teacher thinking broadly divides into studies of teacher beliefs and knowledge (e.g. Kember, 1997; Fox, 1983) and phenomenographic studies of teacher conceptions (e.g. Prosser et al 1994; Samuelowicz and Bain, 1992), it is the findings from the phenomenographic studies which form the main point of departure for this study. The issues arising from phenomenographic studies of conceptions of teaching are shown to have relations with studies of conceptions of learning (Prosser et al., 1994). In a study reporting conceptions of learning, Marton, Dall'Alba & Beaty (1993) found the five conceptions of learning identified by Säljö (1979) and they also identified a sixth conception: learning as changing as a person. As conceptions of learning have been demonstrated to underlie conceptions of teaching, or certainly to demonstrate a relationship between the two (Prosser et al., 1994), it would be not unreasonable to expect that the sixth conception of learning would also be related to a conception of teaching. No previous studies appear to discover changing as a person as an element of a conception of teaching. In Chapter 6, I reported a conception of teaching as *helping students to change as a person* in two different creative practice teaching contexts, Fine Art and Media practice.

This is an important principle to note as the discussion of these relational outcomes lead, in turn, to relations between teacher conceptions and approaches to teaching. The relations that are found between teacher conceptions and approaches to

teaching (Martin et al., 2000; Trigwell and Prosser, 1996a; Kember and Kwan, 2000) are confirmed using a mixed method approach to gathering data. The findings of these studies present a consistent case for relations between teachers' awareness, strategies and intentions. The variation reported in these studies is most often characterised as ranging from teacher-focused (information transmission intention) to student-focused (conceptual change intention). Other aspects of variation have been studied in relation to teacher conceptions and approaches to teaching, for example teachers' perception of their teaching situation (Prosser and Trigwell, 1997). In most of the studies of teacher conceptions and approaches reviewed, the context of teaching chosen as a focus of the study is situated within traditional university subject disciplines e.g. sciences and humanities. The limited number of phenomenographic studies of conceptions of teaching in practice-based disciplines including music (Reid, 1997; 2000) and design (Drew, 2000a; 2000b) begin to tell a distinctive tale about the characteristics of teaching a creative practice. Those teachers are more likely to experience teaching as student-focused as well as practice-focused. The practice focus of the teaching is highly context specific and varies according to the perceived practice needs of the learners. What these studies begin to tell us is that although teacher-focused teaching is indeed a feature of the variation of conceptions of teaching, it is more likely to be related to teaching of skills and techniques without reference to the context of the whole practice. Although this study also aims to describe the experience of teaching constituted as teacher conceptions and approaches to teaching, the study of relations between those approaches and communities of practice is the major point of departure from previous research.

Chapter 3 was concerned with the research into communities of practice and learning to practice. These studies particularly emphasise learning to practice in various settings. Learning to practice, whether in the workplace or simulated settings is seen as a move towards full participation in a community of practice (Lave and Wenger

1991; Lave 1993). That move to full participation takes place by engaging in 'legitimate peripheral participation' which is taking part in the authentic activities of the practice which are referred to as 'real world' projects or settings in this study. The studies examined in chapter 3 emphasise social practice as a premise for learning and that 'knowing in practice' arises from peripheral or full participation in that social practice (Billett 1998). Wenger's ideas about an *identity of participation* being constituted through the relations formed in participation complement the notion of coming to know through, or in practice.

These studies confirm that although building competence in skills is a crucial part of learning to practice, those skills are not enough on their own. There has to be a recognition of the socially situated contexts of the practice of which skills development is part of practice learning. Ideally competence in skills should be integrated into practice learning contexts so that learners construct an experience of meaning. Although there is much in the literature on practice learning there is very little which demonstrates how teachers in practice settings can engage with these concepts. In this study I have explored these issues and how they relate to teachers' conceptions and approaches to teaching. There is evidence in the conceptions reported in chapter 6 that some teachers see teaching in creative practice-based subjects as being simply about developing the skills of the practice. However, many also develop for their students an identity of participation through practice, authentic settings in the form of 'real-world' projects and help students to 'become kinds of persons'.

Chapter 4 reviewed studies of disciplinary differences and epistemological characteristics such as structures for knowledge validation and responses to changes in the context. Even for those who work in a university context, the world of the art and design faculty is often a mystery, often placed in a self contained campus

or 'off-site' due to most art schools' twentieth century mergers into university (or, more likely polytechnic) organisational structures. It is not surprising therefore that most studies of disciplinary differences do not address this particular context. This study confirms the view that teachers in the arts enhance the personal growth of their students, value the integration and application of existing knowledge (Neumann, Parry & Becher, 2002) and adopt a more Conceptual Change/Student-focused approach to their teaching (Trigwell, Prosser, Martin & Ramsden, 2000; Leuddeke, 2003). The Becher (1989) typology of disciplinary characteristics polarised by hard/soft and applied/pure dimensions also appears to have currency in this study. The disciplines of media practice, fine art and design vary themselves in orientation according to the typology. Where fine art could be said to embody the characteristics of a soft applied discipline, the same could also be said of the more conceptually focused courses in media practice. Equally, design subjects such as product design and some media practice subjects such as multimedia can demonstrate most of the characteristics of a hard applied discipline, especially the vocational slant and the emphasis on problem solving. Although some could be said to have a softer edge e.g. some aspects of fashion and illustration more closely align themselves toward the conceptual rather than focus on the hard edge of technology. This could account for the widest range in variation of conceptions in media practice from *skills* (Media Practice conception A) to changing *students as a person* (Media Practice conception E) and also for the more focused range in variation of conceptions in fine art which only address *developing conceptions* (Fine Art conception A) *changing conceptions* (Fine Art conception B) and *changing students as a person* (Fine Art conception C).

8.2 The practice-based context of the interviews

The focus in this study on the experience of teaching the practice of art, design and communication is a departure from previous research in other higher education

contexts. This study is aimed at identifying the variation that exists in conceptions of practice-based teaching and approaches to teaching from the perspectives of those teachers who were identified as teaching in a practice setting. However, the approach and focus of this study is comparable with research into the experience of teaching in other higher education contexts. It is important here to restate the practice-based focus of this study before moving on to a broader discussion of the findings. This study is concerned with the experience of teachers who teach a creative practice subject in art, design and communication. This study, therefore, and in common with previously cited research into teachers' conceptions and approaches to teaching, specifically focused on teachers' experience of teaching in their practice at a given time and in a specific context. The approach adopted here is relational. That is, these teachers were responding to interview questions that focused on conceptions of and approaches to practice-based teaching in specific courses. This focus was maintained in each interview. Given the timescale and resources available for this study it was not possible, nor considered desirable, to observe these teachers specific practices and does not make any claims in this respect. The claims made in respect of approaches to teaching and relations to communities of practice are robustly supported by the quantitative analysis of the Approaches to Teaching Inventory (Prosser and Trigwell, 1999). This inventory, and the additional items tested and validated for use in this study, was used with a similarly selected group of practice-based teachers and each teacher who completed it was specifically asked to focus on their practice-based teaching when making their responses.

To further define practice-based teaching in art, design and communication it is necessary to outline the range of specific teaching/learning contexts explored in this study. For the purposes of this study, creative practice teaching is described in the context of media practice, fine art and design. These subject areas include teaching the practices of journalism, film making, television and video production, animation

and photography, fine art, painting, sculpture, printmaking and related visual arts, graphic design and illustration, interior design and architecture, fashion and textile design. The constant context of each interview was the teachers' practice-based teaching as opposed to teaching visual studies or art history for example.

In the context of teaching the practice of art, design and communication, the research questions are:

- How do teachers express their conceptions of teaching?
- How are the qualitative differences between those conceptions constituted?
- How do teachers differ in their approach to their teaching?

8.3 Discussion in relation to the first and second research questions: variation in the experience of teaching

In chapter 6 the conceptions of teaching in each sub discipline were described, and it is clear from reading the detailed analysis that there are relations between these conceptions of teaching in media practice, fine art and design. A range of qualitatively different conceptions of teaching in media practice, fine art and design are identified in this study. For a fuller description of each these conceptions as constituted see chapter 6.

Collectively, I shall label these Conceptions of Teaching Creative Practices. The creative practices being a synthesis of media practice, fine art and design. I will compare similar and different features of variation in each of the outcome spaces and make comments which help to more clearly identify those features. It should be noted that these represent a synthesised group of categories for this purpose.

Conception A: Media Practice and Design

Teaching is offering students a range of practical and technical skills

The teacher aims to reinforce technical ability by giving demonstrations and showing individual or groups of students' ways of making or doing. The teacher believes that the students need to follow technical topics based on what the teacher feels they need to learn. The emphasis of the learning is on a product or artefact. The intention is to demonstrate or give examples of technical skills.

This is the only conception that can be said to be truly teacher-focused. It is interesting to note that it only occurs in Media Practice and Design where aspects of new and traditional technologies seem to occupy the minds of teachers rather more than what their students are learning. With the contemporary focus of Fine Art education being firmly fixed on developing conceptual fine art practitioners, it should not be a surprise that this conception could not be evidenced from the fine art teachers' data. This also accords with findings from a previous study of design teachers (Drew, 2000a)

Structural aspects of this conception are concerned with the teacher's role, in this case demonstrating, showing or instructing students how to make or do something. There is an emphasis on correct procedures and observing or checking that these are carried out correctly or for the students to demonstrate some technical competence. The focus of the teaching is on technical and practical skills. The teacher feels that they know best what skills to develop or to teach and often refer to content or objectives of the course, rules of the practice or other practical parameters which they feel the students must master before progressing in the subject.

The teachers discuss the focus of their teaching, to demonstrate a process, observe the students practising it and to check they can do it.

In this conception the teacher decides what to teach on the basis that they feel the students may not have any useful prior knowledge which they could bring to learning these skills or rules of the practice.

Conception B: Media Practice and Design

Teaching is developing students' critical, practical and technical skills through student interaction

The teacher aims to enable students to develop a critical language by working together in groups or teams to present their own work and to see the work of others. The emphasis of the learning is on peer learning and process. The teacher works with individuals, groups or teams with the intention to enable students to form opinions and ideas and to develop practical and technical skills.

Again, this conception is only present for Media Practice and design and although there is still a strong skills focus to the conception this is balanced with an emphasis on development of those skills through student interaction. This begins to build a stronger community of learning by involving other students as well as the teacher perspective. In other studies (see for example Kember, 1997) a teacher-student-interaction strategy is seen as a bridge between teacher-focused and student-focused conceptions of teaching. It is interesting that interaction in this study occurs in one of the less complete conceptions and not at all in the study of Fine Art teachers. This can lead us to believe that there are some very big differences in the ways that teachers of creative practices conceive of and go about their teaching.

In this conception the teacher still feels it is important for students to develop practical and technical skills, but the emphasis is on learning with others, sometimes in team or group situations and often with an opportunity for critical debate.

Teachers often describe their role as facilitating or encouraging the process of learning and of developing confidence in learners. In this conception, teachers are keen to emphasise elements of the process which actively engage with students.

Conception C: Media practice and Design

Conception A: Fine Art

Teaching is developing students' skills and conceptions in the context of professional practice

The teacher encourages students to manage projects involving complex problem solving skills which are set in the context of professional practice. The emphasis of the learning is on peer learning and process. The teacher works with students to develop conceptions with the intention to increase self-awareness, individual and team autonomy and for professional preparation.

This conception shares common features in all the sub disciplines and links strongly to the discussion of building a community of practice through a shared construction of meaning, engaging in authentic settings or 'real-world' projects and developing an identity of participation (Lave and Wenger, 1991; Lave, 1993; Wenger, 1998).

In this conception teachers believe that real world scenarios or projects as a simulation of professional practice enable high level learning outcomes including problem solving skills.

Teachers holding this conception believe that if students are brought into contact with practising subject experts they can bring a professional context to bear in relation to their work as well as developing ideas and concepts.

Some teachers of fine art further described their teaching role as being an artist with students in the role of apprentices to the practice of fine art making. Apprenticeship is seen as a positive experience of being inducted into the fine art social context as well as the extension of practice and making art.

Conception D: Media practice and Design

Conception B: Fine Art

Teaching is helping students change conceptions

The teacher emphasises original research and conceptual thinking skills. The emphasis of the learning is on peer learning and process. The teacher works with students with the intention to improve self-directed research, practice and conceptual skills.

This conception also shares common features in all the sub disciplines and builds further on the discussion of building a community of practice. The key aspect of the variation is that teachers intend for their students to change their conceptions of the practice, through the practice. Although practice is the main point of departure in this

study, conceptual change is also common to other studies of conceptions of teaching (e.g. Prosser, Trigwell and Taylor, 1994)

The teacher feels that students should have an ability to relate key concepts to the practice, or to develop practice through critical examination of concepts or theories. Teachers in this conception also stress 'real world' and practice-based contexts.

To enable students to change conceptions of the subject, of the world and of their work is seen as an integral part of this conception. These teachers talk about expressing ideas, changing conceptions and also about learning beyond the subject boundaries as an aim for teaching in this subject.

Conception E: Media practice

Conception C: Fine Art

Teaching is helping students to change as a person

Teachers holding this conception again emphasise original research and conceptual thinking skills and peer learning and process. They differ from those holding the previous Conception (Fine Art B or Media Practice and Design D) in seeing teaching as a way of enabling students to change themselves as a person or to make changes in their lifeworld.

It is this conception which relates strongly to the Marton, Dall'Alba & Beaty (1993) sixth conception of learning; *learning as changing as a person*. This conception of teaching goes beyond those found in previous studies and accords with a view that teachers in predominantly soft applied disciplines intend to enhance personal growth and intellectual breadth (Neumann, Parry & Becher, 2002).

Teachers also express aspects of changing as a person in this conception as relating to their practice, to concepts of creativity and beyond the practice into the student lifeworld.

The major point of departure for this study of conceptions is therefore the exploration of the student lifeworld aspects of this dimension of student-focused teaching. This goes well beyond the claims made for any previous study of teachers' conceptions (see for example Prosser, Trigwell and Taylor, 1994; Samuelowicz and Bain, 1992 and 2001). This study is characterised by fewer conceptions of teaching which are teacher-focused as in Media practice and Design conception A. It is also significant that the 'transitional orientation' (Samuelowicz and Bain, 2001) or student interaction conception (Kember, 1997) does not provide a clear 'in-between' category of conception in these findings. The student interaction element present in Media practice and Design conception B could in no way be said to be 'in-between', teacher-focused and student-focused conceptions, though the context for the discipline is characterised by student interaction in many ways (Ashton, 1997). In the study of Fine Art teachers' conceptions student interaction is an aspect of the variation found but not as a distinct category, all of the conceptions in this study are student-focused and stress the development of student conceptions and development of the student lifeworld.

An analysis of these conceptions in terms of their structural and referential components is shown in Chapter 6. This demonstrates the way the categories have a logical ordering within the outcome spaces. The community of practice dimension is present in Media practice conceptions C, D and E; Design Conceptions C and D; all of the Fine Art Conceptions A, B and C. These aspects will be discussed in more detail in the next section.

8.4 A discussion of the community of practice dimension

The conceptions of teaching which are described as demonstrating the community of practice dimension illustrate how teachers see learning as engaging with a practice, by exemplars, stories, narratives and through experience. The process of learning to practice becomes one of apprenticeship, by engaging with the 'real world' practices and understanding the process through narration, collaboration and social construction (Billett, 2001, 2002; Lave and Wenger, 1991). These teachers' experiences, their own practice and engagement with other practice-based professionals gives a different dimension to the learning, a non-canonical practice (Orr, 1996; Brown and Duguid, 1996).

Jean Lave describes the social participatory perspective on learning as individuals developing and changing their identities, "... people are becoming kinds of persons" (Lave 1996, p 157). Learning which is the result of participation in social practices means that the participants appropriate ways of seeing the world inherent in those practices. These situational and social factors are a key part of learning to practice (Billett, 2001) and are valued highly by practice-based teachers in this study who demonstrate related conceptions of teaching. The community of practice dimension is most certainly about "becoming kinds of persons", about developing ways of seeing the world through practice.

Janet Wolff's 'The Social Production of Art' (1981) is an attempt to understand the production of art from a sociological perspective. Claiming that 'art is a social product' (p. 1), she goes on to unravel assumptions about the artist as genius, working in isolation from society, placing such notions firmly in their historical, and socio-economic, contexts. In doing so, she opens up a space in which it becomes possible

for us to talk about the production of artists in the 21st century via the processes of higher education, incorporating into this process the beliefs and conceptions held by their teachers about the nature of professional practice. Billett (2001) also agrees that even an artist working in isolation will shape their practice to account for situational factors including physical environments and consideration of the market.

The findings of this study would suggest that teachers of art are drawing on some of these traditional ideas of art as a way of life (rather than 'art as manufacture' (Wolff, 1981, p. 12) when they talk about professional practice in the context of teaching art to their students. Where teachers of media practice and design talk about industry and commerce in relation to a community of practice, the art teachers tend to discuss this in terms of 'being' or 'becoming' an artist, suggesting that they see art as a way of life rather than a set of skills for employability or as something that can be easily separated from other parts of a student's lived experience.

Angela McRobbie further explores the act of producing art 'in the culture society' (1999, p. 3). Working from Jameson's (1984) claim that culture has become the logic of late capitalism, she investigates cultural practices such as art, fashion and music as 'cultural industries', arguing that these are increasingly important economically and that little is known about the lived experience of such cultural production. She focuses on questions such as 'how do artists make a living within the cultural industries?'

'As students from more diverse backgrounds enter art school, Bourdieu's notion of the artist being able to stay poor in the short term thanks to some small private income in order to achieve success on the longer term is no longer appropriate (Bourdieu, 1993). There has to be some way of being an artist and making a living.' (p. 8).

She highlights the insecure and negotiable nature of making a living in the culture industries, arguing that 'ducking and diving is no longer the fate of unqualified working-class males but almost surreptitiously has crept up on us all' (p. 8).

And, interestingly here in the context of teachers' conceptions of art's community of practice as a way of *being* rather than *being trained*, she suggests that:

'In an aestheticised culture art becomes another transferable skill. Train as an artist to become a DJ. Work nights in a club or bar and get a commission from the promoters to do an installation. Make a video, take photographs etc.,. Art can now be pursued less grandiosely.' (p. 8).

Instead of a pedagogy based on institutional teaching cultures a pedagogy of community (Billett, 2002) is based on participation and access to the activities and requirements of the community. Participation in a community of practice is a key premise to understanding learning to practice, including learning the values and appropriating an identity related to that practice.

8.5 Discussion in relation to the third research question: relations between approaches to teaching and communities of practice

The teachers that report making more use of conversations with students about the topics they are learning; who are more encouraging of students to restructure their existing knowledge; and who are more likely to create more time for discussions between students, are also the teachers who create authentic practice environments or 'real-world' projects for their students. For the sake of these aspects of art, design and communication education, these approaches need to be maintained. In his

critique of the 'sitting by Nellie' system of design teaching, Swann (2002) notes that a switch from this system to one involving more traditional methods 'can be done, without necessarily the predicted loss of standards'. The results reported in this study support his assessment, provided that the teaching staff associated with this switch are likely to continue to use CCSF approaches in the new environment. If, with the shifts in methods, they also shift to more transmission-based approaches, there is every likelihood that the standards of learning will drop, especially those associated with developing practice.

The approaches to teaching scores obtained in this study, as with the qualitative descriptions of conceptions, show high levels of adoption of student-focused approaches. These teachers are describing their approaches in terms of using time to question students ideas, of using difficult or undefined examples to provoke debate, of engaging in discussions with students, and of assessing students in ways that get at their changing conceptual understandings. Many of these aspects of their approach do not fit easily with the notions of traditional classroom teaching, and it is perhaps no surprise, given this result, that as Swann observes, art and design staff in higher education have an emotive reaction against anything which seems like classroom teaching (Swann, 2002).

There is a widely held view in university level teaching that a student-focused or student-centred approach helps students to develop as individuals. That they are also associated with approaches to learning which can lead to higher quality learning outcomes was confirmed in recent studies by Trigwell, Prosser and Waterhouse (1999). From the study described here it can now be claimed that in the teaching of creative practices the student-focused approach also aligns with an approach in which teachers encourage their students to learn through authentic practices ("real world" projects).

When teachers describe their approach as being more student-focused, they spend more of their teaching time on “real world” and practitioner related problems. On the other hand, when teachers describe their approach as being more teacher-focused, they report adopting a focus mainly on skills development. It should be emphasised here that most or all of the teachers in this study do develop skills with their students, but those with a student-focused approach focus more on inducting students into the community of practice by using “real world” projects and studio or practice-based approaches. If teachers of these subjects value the induction of their students into the community of their practice then it also follows that they should develop a student-focused approach and a related practice focus to their teaching.

In this study, from the perspective of the teachers’ constructions and conceptions, the views held by both Wenger (1998) and Billett (2001) about skills based approaches to learning to practice can be confirmed. In other words, a skills based approach to learning to practice is seen by these teachers as only one part of inducting the learner into a regime of practice. There also is evidence here that a skills based approach corresponds with an Information Transmission/Teacher-focused approach to teaching. Those teachers who do integrate skills into “real world” projects and studio or practice-based approaches, help learners develop competence in those skills so that they can construct an experience of meaning.

This has significance for the development of teachers in these subjects if high-level student learning outcomes in practice-based courses are a desired aim for the teaching.

The approaches to teaching scores in art, design and communication obtained in this study, as with one previous study (Trigwell, 2002), show high levels of adoption of

student-focused approaches. These teachers are describing their approaches in terms of using time to question students ideas, of using difficult or undefined examples to provoke debate, of engaging in discussions with students, and of assessing students in ways that get at their changing conceptual understandings. The teachers that report making more use of conversations with students about the topics they are learning; who are more encouraging of students to restructure their existing knowledge; and who are more likely to create more time for discussions between students, are also the teachers who are using 'real-world' projects and authentic settings for their students' learning.

In all reported cases of its use, including the results from this study, described above, the Approaches to Teaching Inventory yields interpretable data in the form expected using the educational principles from which it has been developed. For example, Conceptual Change/Student-focused approaches are found to relate positively with students' deep approaches to learning (Trigwell et al, 1999), with perceptions of a manageable workload, some control over what is being taught, a manageable class size and small variation in student characteristics (Prosser and Trigwell, 1997) and with teacher learning (Trigwell, 2002). From this study can also be added the correlation with a focus on the development of professional knowledge for the 'real world'.

8.6 Considerations for development of teachers in art, design and communication

Studies reported in Chapter 2 confirm that developing an awareness of conceptions and approaches to teaching is crucial in the development of more sophisticated conceptions of learning and teaching (Martin, Prosser, Trigwell, Ramsden & Benjamin, 2000; Entwistle & Walker, 2000; Ho, Watkins & Kelly, 2001). It is important

that these different conceptions are recognised and addressed when working with individuals and course teams to enhance learning and teaching in higher education. An awareness of teachers' conceptions of teaching, learning, can encourage a positive change in those conceptions and a re-evaluation of teaching strategies and approaches (Prosser and Trigwell, 1999).

This study also has implications for development of teachers in considering learning and learning environments which take into account variations in social and creative practices. For instance, how will online interaction create an authentic setting for a group of design students? How can the context of art and design in higher education meet the context of the range of creative practices? I suggest that as the creative practice and the higher education contexts are socially constructed, considerations for development need to take into account those cultural, social and contextually contingent factors. This could suggest that what might work for teachers of, say, history in one university may not work for teachers of design. This also acknowledges the notion of the teaching and learning regime, learned over time by course and disciplinary groupings (Cooper & Trowler, 2002). As the social context has a strong presence in underpinning these recommendations there are related implications for the professional development of teachers at the level of the activity system, i.e. the department or course team. See Appendix 3 for an outline plan and evaluation of a development activity designed with these principles in mind.

8.7 The activity system as a focus for teacher development

The community of practice has been further conceived as constituting smaller units or activity systems (Engeström 1987) which engage in practice through expansive learning, learning by extension and diversification of activity. Teachers and their course teams engaged in collective work and learning demonstrate all of the

principles of the activity system (Engeström, 2001). The studies which describe and actively employ activity theory reported in Chapter 3 (Billett, 1998, 2001 and Engeström, 1987, 2001) are further evoked in understanding that a course team's actions are shaped by multiple points of view over a period of time. The cycle of expansive learning is most appropriate in the context of teacher development and is proposed as a complementary process in the act of growing teacher awareness. The individual teachers question different aspects of their situation and their learning expands through this cycle of constant evaluation. The change processes which are well documented by Engeström (2001) describe the 'laboratory mode' approach to working with work or course teams. This approach can be adapted in these contexts for both evaluation and change of working practices. The closing paragraphs which follow in this section propose a methodology for integrating a development strategy which takes into account both activity theoretical perspectives and an awareness of teacher conceptions and approaches.

Staff development programmes for new and established teachers can be a useful arena for stimulating this awareness of conceptions and re-evaluation of teaching. Such staff development should take place in work groups, or teams, in order to generate a commitment to change and a common understanding of the direction of that change (Martin, 1999; Senge, 1992). Knight and Trowler (2000) further develop this theme when they argue that there are culturally prevalent views of learning, dominated by the main activity system in a teacher's experience, the department, or the sub-unit of it, the course. To focus on the main activity system, rather than on the individual, can be said to be a more effective way of influencing cultural changes leading to the improvement of learning and teaching. They emphasise that course and departmental focus is crucial to maintaining the impact of change in line with departmental culture. This also accords with Cooper and Trowler's (2002) ideas that disciplinary variation and identities in interaction can be socially constructed as

teaching and learning regimes. Change practices have to acknowledge the sets of assumptions and culturally embedded practices which teaching and learning regimes imply. The sharing of a purpose and a context for working should also therefore be extended into other contexts for professional learning. The emphasis is on the team's influence on the learning of the individual in context.

The main recommendation is that teachers of this discipline should engage in course team based development activities, primarily to increase awareness of their conceptions and approaches in learning and teaching, and within that context, to develop strategies for enhancing the community of practice dimension.

Chapter 9

Conclusions and Recommendations

9.1 Summary of the findings

The qualitative analysis presented in chapter 6 helps us to understand the aspects of variation in the experience of teaching in the creative practice-based subjects of media practice, fine art and design. The variation described in each of these sub disciplines makes an important contribution to knowledge as some of the key aspects of variation are not to be found in previous studies of conceptions of teaching (e.g. Prosser, Trigwell & Taylor, 1994). The main point of departure in this study is the focus on practice-based subjects, and all of the conceptions reveal different aspects of variation of practice-based teaching. Some of these conceptions (Media Practice A and B; Design A and B) focus on practising and developing skills such as practical, technical and critical skills. Other conceptions (Media Practice C and D; Fine Art A and B; Design C and D) focus on developing and changing conceptions in a practice-based context of which skills are an inclusive part. Finally, some conceptions focus on change in the student lifeworld (Media Practice E; Fine Art C). These latter conceptions are a significant discovery in that they relate to an earlier study of students' conceptions of learning (Marton, Dall'Alba & Beaty, 1993). Marton et al (1993) found a sixth conception of learning, *learning as changing as a person*, this study of conceptions of teaching complements that finding, *teaching is helping students to change as a person*.

The Approaches to Teaching Inventory has been adapted with the addition of two scales, *Skills* and *Practice*. These scales demonstrate validity in this context and correlate positively with the scales for CCSF (Conceptual Change/Student Focus) and ITTF (Information Transmission/Teacher Focus). Scale descriptives show

significant results in this context. The means for *Practice* and CCSF are high and those for *Skills* and ITTF are low. While these scale scores are not comparable, this result is consistent with the findings of the qualitative study reported in chapter 6 which reports teachers' conceptions of teaching in these practice-based contexts as being predominantly student-focused.

The approaches to teaching scores obtained in this study, as with the qualitative descriptions of conceptions, show high levels of adoption of student-focused approaches. These teachers are describing their approaches in terms of using time to question students ideas, of using difficult or undefined examples to provoke debate, of engaging in discussions with students, and of assessing students in ways that get at their changing conceptual understandings. It is these teachers who also create authentic practice environments or 'real-world' projects for their students.

The analysis of the approaches to teaching scores also demonstrates that a skills based approach to learning to practice is simply not enough on its own. There is evidence here that a skills based approach corresponds with an Information Transmission/Teacher-focused approach to teaching. Those teachers who do integrate skills into "real world" projects and studio or practice-based approaches, help learners develop competence in those skills so that they can construct an *identity of participation through an experience of meaning*.

9.2 Reflections on the research process

I feel I have described the methodology and research methods used clearly and stage by stage, where possible I avoided the use of over technical language, or provided a 'translation' of terms used. It was more difficult than I thought to describe phenomenography as a method, so some of the philosophy had to be explained in

context. Phenomenography is, it seems, not clearly described in many research papers which purport to use it as a methodology or as an underpinning process of enquiry.

Interviews and transcripts

When I wrote the original proposal as part of the (PhD) conversion process, I thought nothing of my description that I would carry out 33 to 54 interviews. After all, I had conducted some interviews before and I was proposing to work with another researcher in my own department to carry out some of those interviews. Between us we interviewed 44 teachers and the job of transcription was a major undertaking for doctoral research in this context. I was able to employ agency staff to do the transcription which was paid for by the faculty and not my department. Even so, I had underestimated the amount of time it would take to set up the agency staff, the different styles of transcription each of them adopted and the eventual sense making I had to go through in making each transcript usable. I went through each transcript and tape, to expand my understanding and to figure out what any gaps in the transcription might be. This also helped me to understand and interrogate the transcripts, because by the time I had done this for each transcript I had become at least superficially acquainted with each one.

When it came to analysis, the transcripts now lodged in a huge pile in my office, I was completely daunted. I must admit I put it off for quite a while, the task seemed as mountainous as the pile. I split the pile into the three sub disciplines (Media practice, Fine Art and Design) and worked on a smaller pile at any one time. First I wrote an abstract of no more than one side of A4 to condense the major features of each transcript, respondent details, teaching subject and context, analysis of teaching conceptions and analysis of teaching approaches. I had noted this strategy from a chapter in the collection on Phenomenography (Bowden & Walsh, 2000) and

discussed it with other doctoral students and my supervisor. Our discussions about this helped me to realise that although this might have seemed tedious, it was very useful to reduce down the key information for analysis. We also discussed the pros and cons of using a qualitative analysis package (e.g. Nvivo, Atlas-Ti etc). I decided against using these because this analysis was not a simple content analysis, but required both observation and discernment in a multi dimensional way at the structure of variation across the transcripts rather than looking for similarities within each transcript. In other words I was looking for structural and referential aspects of variation in, and between, the transcripts.

Inventory adaptation

Not only did I decide to do all those interviews but also to use an existing inventory (ATI) and adapt it for use with an extensive sample. This meant going back to the teachers' transcripts to distil the most pertinent statements about the way they went about their practice-based teaching. I had to make these statements as close as possible to actual statements in the interviews, adjusted to make sense to respondents. Here, my doctoral cohort peers were little help as the context was much more important. Unfortunately, I was doing this in the summer term last year and used colleagues and peers in art and design at my university to ask them to sample the questions. I also asked some of the original interviewees, on reflection I could have done this earlier or let them know at the interview stage that I intended to do this because many of them didn't even bother to respond to my request.

Reflecting on the mock viva

By the time of the mock viva, my original supervisor had moved to another institution so I was getting all my feedback from peers. As a result my motivation with the progress of the writing up was low. The preparation and enactment of the mock viva was a turning point for my learning relating to the thesis and particularly to the

methodology. I was asked lots of questions about the significance of my study and its contribution to new knowledge. This helped me to make connections of which I was previously unaware, rather than I was bringing some of my tacit understanding into an explicit dimension. The articulation of the methodology and subsequent cross examination by the (mock) internal examiner really helped me to further define how I was going to go about restructuring this chapter. I was asked what was distinctive about the phenomenographic approach and why had I chosen it in this context. She also asked about wider issues such as the ontological foundations of the methodology. The (mock) external examiner asked me how this study compared with other phenomenographic studies in the field, I was surprised by the breadth of my understanding of this context, I suppose this was another example of having taken for granted some aspects of my learning or understanding. Getting formative feedback from them at the end of the mock viva was also extremely encouraging. It was very encouraging to know that, even though I felt I had not made much progress, I was working at the appropriate methodological and conceptual level. The constant aspects have been interaction with peers, who have always been there to read drafts and comment. I have also read other doctoral students' chapters, sending comments to them as if I were a referee or a peer tutor. I feel I have learnt as much, if not more, from commenting on others writing and understanding, particularly of phenomenography. I built some of this reflection in to my articulation of the methodology in chapter 5.

During this study, three papers on the topic of this thesis were presented at conferences (Drew and Williams, 2002; Drew 2003; Drew and Trigwell, 2003).

9.3 Future research as an outcome of this study

Some further research has already been conducted and reported (Drew and Trigwell, 2003) at an invited symposium at the 2003 EARLI (European Association for Learning and Instruction) conference. Although the paper discusses the ATI and the *Skills* and *Practice* scales first explored in this thesis it also looks at another factor, teacher satisfaction and motivation. Positive correlations are found between an emphasis on development for the professions and a student-focused approach to teaching, and teacher satisfaction.

A second paper (Drew, 2003) on 'Approaches to teaching: extending 'theory' in the context of art, design and communication' draws on the experience described in this thesis of adapting the Approaches to Teaching Inventory, and developing the *Skills* and *Practice* scales. Conclusions of this paper ask if these scales and items might have validity in other practice settings.

There are two major areas of immediate future interest in research which relates to this study. The first would be to extend the study of conceptions and approaches to different practice contexts. This could further test the notion of a community of practice dimension and constitute it in various contexts. This kind of study could also explore the nature of variation in teacher-focused and student-focused conceptions and approaches.

The second area of interest would be the student experience of learning a practice, in conceptions of the practice and student approaches to learning. This could further confirm and extend a non-dualist perspective on practice-based learning and seek

evidence that learning authentic practices are feature of the variation in ways of experiencing learning.

The third and final area of research interest summarised here would be to link these first two areas, especially in seeking relations between student approaches and teachers' experiences as the Trigwell, Prosser and Waterhouse (1999) study established. Each of these areas would also build on a now growing literature of practice-based learning in higher education.

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Appendices

Appendix 1

Interview Schedule

The Experience of Teaching in Art, Design and Communication

The interviewees will be teachers of practice-based subjects in art, design or communication e.g.

1. Studio teachers: painting, sculpture, etc.
2. Workshop teachers: fashion, textiles, ceramics, etc.
3. Media and technology teachers: film, video, multimedia, etc.

All teachers like to talk about their practice, of teaching and professional practice, and this interview has to be focussed on one particular aspect of their teaching e.g. a specific course, module, unit or project.

The phenomenographic method requires that the researcher focuses on the interviewees' experience of the phenomenon to be studied. The relationship between the teacher and their teaching in a learning context is the prime focus of this study. The teachers' perceptions of their learning context will also be explored to ascertain the different ways they experience things such as traditional or new learning technologies.

Introduction

As a general introduction, I would like to tell you a bit about the research I am conducting. This research is a phenomenographic study of teachers' conceptions of teaching as part of a bigger study which explores the experience of teaching in art, design and communication. This research will contribute to knowledge to be used to develop awareness in individuals and within HE Art, Design and Communication departments which bring learning and teaching to the fore in personal and institutional strategies. I am particularly interested in how the qualitative differences between conceptions are constituted. I will also be asking some questions which particularly relate to the context of your teaching and how you perceive it. At this stage I aim to interview 11 -18 teachers in each of the subject areas of art, design and communication, approximately 33 - 54 in total. Depending on your responses, these questions may be followed up by other questions aimed at exploring your experience of teaching. An analysis of the data and results and discussions will be produced, would you like to see a copy of that when it is completed?

Key questions can be followed by **probing questions** to pursue themes e.g. when the teacher refers to learning, understanding, knowing.

Key questions

- 1) Can you tell me about a course (module or unit) which you teach?
- 2) Can you tell me what the course (module or unit) is about?
- 3) How do you prepare for teaching in this course (module or unit)?
- 4) How do you go about teaching in this course (module or unit)?
Probing questions as appropriate

May follow stages of practice i.e.

Brief or personal rationale

Studio and technical interaction e.g. weave, sample, model, multimedia

etc.

Interim crit

Final crit

- 5) Why do you want students to learn this or that?
Probing questions as appropriate
- 6) How do you know if they've achieved what you've set out for them to achieve?
Probing questions as appropriate

May follow stages of practice i.e.

Interim crit

Final crit

- 7) Can you tell me about the learning context for this course (module or unit)?
Probing questions as appropriate

May discuss physical, technical, human resources e.g. studios, computers, team members

Professional, virtual and social contexts e.g. live projects, visits, web or email interactions, team meetings/briefings

- 8) Finally - is there anything else you would like to further clarify in relation to how you go about teaching in this course (module or unit)?
- 9) Thank you for your time.

Probing questions

Can you explain further?

How do you do that?

What is your intention when you do that?

What is your role?

What do you mean by that?

Is there anything else you would like to say about that?

Why do you want students to learn this or that?

How do you know when they've learned this or that?

Appendix 2

APPROACHES TO TEACHING INVENTORY

This inventory is designed to explore the way that academics go about teaching in a specific context or subject or course. This may mean that your responses to these items in one context may be different to the responses you might make on your teaching in other contexts or subjects. For this reason we ask you to describe your context. Examples of subjects and courses include: Editorial Photography; Printed Textile Design; Site Specific Sculpture; Introduction to Typography.

Please describe the subject of your response here:

For each item please circle one of the numbers (1-5). The numbers stand for the following responses:

- 1 - this item was **only rarely** true for me in this subject.
- 2 - this item was **sometimes** true for me in this subject.
- 3 - this item was true for me **about half the time** in this subject.
- 4 - this item was **frequently** true for me in this subject.
- 5 - this item was almost **always** true for me in this subject.

Please answer each item. Do not spend a long time on each: your first reaction is probably the best one.

		only rarely			almost always	
1	I design my teaching in this subject with the assumption that most of the students have very little useful knowledge of the topics to be covered.	1	2	3	4	5
2	I feel it is important that this subject should be completely described in terms of specific objectives relating to what students have to know for formal assessment items.	1	2	3	4	5
3	My aim in this subject is to develop students' technical competence in basic skills.	1	2	3	4	5
4	In my interactions with students in this subject I try to develop a conversation with them about the topics we are studying.	1	2	3	4	5
5	I feel it is important to present a lot of facts to students so that they know what they have to learn for this subject.	1	2	3	4	5
6	I think that an important reason for running teaching sessions in this subject is to demonstrate technical procedures correctly.	1	2	3	4	5
7	I feel that the assessment in this subject should be an opportunity for students to reveal their changed conceptual understanding of the subject.	1	2	3	4	5
8	I set aside some teaching time so that the students can discuss, among themselves, the difficulties that they encounter studying this subject.	1	2	3	4	5
9	Being able to use the basic skills is a key aim I have for students in this subject.	1	2	3	4	5
10	In this subject I concentrate on covering the information that might be available from a good textbook.	1	2	3	4	5
11	I encourage students to restructure their existing knowledge in terms of the new way of thinking about the subject that they will develop.	1	2	3	4	5
12	In this subject, I think it is important for students to have opportunities to practise their skills with my support.	1	2	3	4	5
13	In teaching sessions for this subject, I use difficult or undefined examples to provoke debate.	1	2	3	4	5
14	I structure this subject to help students to pass the formal assessment items.	1	2	3	4	5
15	I feel that it is important for students to experience the practice in a "real world" situation in this subject.	1	2	3	4	5

16	I think an important reason for running teaching sessions in this subject is to give students a reliable record of what I think are key issues.	1	2	3	4	5
17	In this subject, I only provide the students with the information they will need to pass the formal assessments.	1	2	3	4	5
18	In this subject I help students apply their skills to “real world” projects.	1	2	3	4	5
19	I feel that I should know the answers to any questions that students may put to me during this subject.	1	2	3	4	5
20	I make available opportunities for students in this subject to discuss their changing understanding of the subject.	1	2	3	4	5
21	I think it is important in this subject for students to develop their practice through individually negotiated study.	1	2	3	4	5
22	I feel that it is better for students in this subject to generate their own record of key events than to be relying on what I give them.	1	2	3	4	5
23	I feel a lot of teaching time in this subject should be used to question students’ ideas.	1	2	3	4	5
24	To get students to think and act like a practitioner is my aim in this subject.	1	2	3	4	5
25	In this subject I feel it is more important for students to engage with “real world” projects and to act like a practitioner than to develop and practice basic skills.	1	2	3	4	5
26	I design this subject in such a way that students have the opportunity to explore, and be assessed on, their own creative ideas	1	2	3	4	5
27	Teaching this subject is a satisfying experience	1	2	3	4	5
28	I am certain that I have the necessary skills to teach this subject	1	2	3	4	5

Thank you

Appendix 3

Pilot Staff Development Activity

Workshop Plan

A workshop was planned and delivered at the University of Brighton with staff from a range of course teams. A lively discussion was encouraged about conceptions and approaches to teaching with examples and quotations from a range of research findings including Trigwell and Prosser, 1999 and Drew, 2000b. After this discussion course teams were encouraged to explore their own conceptions and approaches in the context of their own courses using an exercise question sheet.

The aim, in line with recommendations outlined in Chapter 8, was to explore participants' conceptions and approaches in the context of their course team or activity system. What follows is the outline of the exercise used with participants to prompt debate about their conceptions and approaches.

Awareness of conceptions and approaches to learning and teaching

In one sentence describe your understanding of learning

Learning is

In one sentence describe your understanding of teaching

Teaching is

In one sentence describe your teaching strategy

I go about teaching by

In one sentence describe what you intend for your students to learn using this strategy

My intention is

Compare these understandings with the research findings, identify the conceptions of learning and teaching that best fit with your conceptions.

Discuss in groups of 3 or 4

How might your conceptions influence your strategies and intentions?

Would those conceptions be different if the context changes? (e.g. using Blackboard)

Workshop Evaluation

Evaluation was completed by using a written question and answer format with participants at the workshop. Written responses were generally positive as illustrated in these quotations:

It was very relevant and useful, and the offer of supporting information (papers, links etc.) is good. The relationship... to teaching and learning, and how to provide opportunities for interaction and construction of meaning was really interesting to me.

Opened up a range of viewpoints in approaching teaching ...

Raising ideas and challenging concepts.

These participants appeared to value the opportunity to consider both their own and others' conceptions of teaching, and the relationship of the context to learning and teaching.

There was one suggestion made for improvement, indicating that some teaching staff may have a limited understanding of these issues.

Perhaps a short explanation of pedagogic issues? Most people seemed fairly unaware of them, though how this could be done in the time available...

This illustrates the confusion over learning and teaching issues which need to be addressed in far more fundamental way, and the need for development workshops that encourage teachers to focus on their teaching and how they understand it.

The workshop was, perhaps, limited by a lack of time and further development should perhaps take place over a whole day and over time as suggested in Chapter 8. It seems that pedagogic concepts need much explanation and exploration.

Furthermore, some participants, particularly those from more engineering design backgrounds, tended to get bogged down in the findings illustrated using phenomenographic research. We need to find a way to use the research to create development activities, which avoid placing too much emphasis on the methodology. I had attempted this by providing a previously published research paper for background information (Drew & Williams, 2001).

Another observation was that some participants appeared to feel intimidated by the workshop activities, as if they would reveal themselves to be 'bad' teachers in some way, and this led some to doubt the findings of the research as a result.

Phenomenographic analysis results in a *hierarchical* outcome space in which 'higher' conceptions incorporate 'lower' ones – the explanation of this is complex to those unfamiliar with the approach and can easily be misinterpreted to mean that there are 'good' and 'right' ways of perceiving teaching and 'bad' and 'wrong' ways. Comments overheard during group discussions in the development workshop showed that participants thought they could 'see what I'm *meant* to say', suggesting that they weren't really considering their own conceptions, perhaps as a result of the hierarchical nature of the outcome space. This is an issue that needs careful consideration when developing strategies for staff development, as the benefits of encouraging an awareness of teaching conceptions and contexts are great.