

**FACILITATING IMPROVEMENTS IN TEACHING AND
LEARNING THROUGH SELF-DIRECTED PROFESSIONAL
DEVELOPMENT**

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ABSTRACT

GILLIAN ANN TURNER

FACILITATING IMPROVEMENTS IN TEACHING AND LEARNING THROUGH SELF-DIRECTED PROFESSIONAL DEVELOPMENT

In post-compulsory education settings opportunities for more appropriate interpersonal communication between a teacher and their students are required. However, reflective practice, proposed as a means of empowering teachers to enhance the process of teaching and learning, is neglected or ineffective and action research, suggested as a way of facilitating reflective practice, may not always be appropriate or possible. Thus, there is a need to better understand how to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning.

Volunteer teachers in post-compulsory education settings used a Communication Styles Questionnaire to identify the pattern of interaction between themselves and their students with a view to developing, where desired, a wider, more flexible style of communicating to enhance teaching and learning. Using an action research methodology and a case study method, these instances of reflective practice were examined to establish the process involved in, and the influences on, improving teaching and learning. In addition, previous experiences of self-directed professional development engaged in by these teachers were investigated, to illuminate ways in which desires and attempts to improve teaching and learning are generally facilitated and hindered.

The findings indicate that a majority of teachers engage in self-directed professional development on at least an occasional basis and, therefore, in principle, may be favourably disposed towards reflective practice; reflective practice may be facilitated primarily by collaboration, time, teacher autonomy and cultural change within the institution; the process of accomplishing self-directed improvements in teaching and learning through reflective practice may be best guided by a revised action research model.

Recommendations are put forward to enable reflective practice and the development of teaching and learning to be a natural and integral part of a teacher's experience and expectations.

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PREFACE

The author of the thesis

The author of this thesis is not, nor ever has been a teacher within the educational sector. After spending fourteen years working in the financial services industry she became a mature student at Oxford Brookes University studying psychology and statistics (BSc. 1st class honours, 1996). During this time, alongside an aptitude for analysing and interpreting data, an interest in issues of personal development and individual differences was developed. This interest subsequently became the foundation for this research.

As a consequence of the author's background, this enquiry into the professional development of teachers was not approached with, nor informed by, a first-hand knowledge or understanding of the experiences and issues that are key to the work and lives of teachers. Instead, insights into matters of a contextual nature were gained from her encounters with teachers during her recent role as an undergraduate student; from conversations with the participants during the research itself; and from background reading. As the research progressed, the author's grasp of a teacher's perspective on their environment and circumstances broadened and has resulted in a thesis focused on the practicalities, rather than the policy, of enabling teachers to become more effective facilitators of teaching and learning.

Exactly how the author became involved in the research is explained in the next section.

The origins of this thesis

This thesis has its roots in the Communication Styles of Teachers project, directed by Dr. Joe Harkin (Harkin and Davis, 1996a, 1996b; Harkin *et al.*, 1999). The project is primarily focused on the development of a Communication Styles Questionnaire (CSQ) as a means by which teachers may reflect on how they tend to interact with their students, with a view to broadening their repertoire of styles when they wish to do so. Initially, the author of this thesis was employed as a researcher on the project to assist with the development and validation of the CSQ (about which more is said in chapter three). However, as the development of the CSQ progressed, the researcher's attention became more focused on a new, separate strand of enquiry concerning how teachers direct their own professional development. This distinct enquiry is the subject matter of the research upon which this thesis is based. Consequently, it should be clarified that, whilst the CSQ has a central role in the research as a methodological tool for prompting reflective practice, the thesis is not a critique of the CSQ.

Dr. Joe Harkin has remained closely associated with this study as it has progressed. This has been in a number of capacities. Firstly, he was appointed as the researcher's Director of Studies and, in that capacity, has advised on and guided the course of the research. Secondly, he has acted as a role model for and trainer of the researcher in the use of the CSQ and certain other research techniques employed in the study. Thirdly, as director of the Communication Styles of Teachers project he has been interested in determining what can be learned from the research about the efficacy of the CSQ as a tool for self-directed professional development and how the questionnaire may be further developed. As a consequence of this involvement, Dr. Harkin's presence at various points in the study is acknowledged where appropriate in the main text.

The structure of the thesis

In order to help the reader understand the progression of the investigation, the manner in which the evidence was found and the ways in which conclusions were drawn, there follows a description of the structure of the thesis.

The opening chapter sets out the rationale for investigating the process of, and influences on, the self-directed professional development of teachers and reviews the literature concerning the appropriateness of reflective practice and action research in assisting this activity. This is followed by an explanation of the methodology in chapter two and an introduction to the Communication Styles Questionnaire in chapter three. Chapter four then describes Phase One of the study and the creation of the opportunity for teachers to direct their own professional development, aimed at improving teaching and learning, without the application of any particular model to guide them. As a consequence of reflective practice having occurred and subsequent development being reported during this initial phase, a further and broader literature review of the process of, and influences on, self-directed professional development is carried out in chapter five. This review provides the foundation for Phase Two of the study, reported in chapter six, which explores and analyses the teachers' experiences of reflective practice, both in Phase One and on previous occasions. Although a model of the process of self-directed professional development is identified during this second phase, the factors that may facilitate this activity are not so clear. Therefore, Phase Three of the study was designed to illuminate this issue and chapter seven explains this final aspect of the investigation. Chapter eight concludes the thesis by drawing together the findings from the three phases and providing recommendations for promoting and facilitating the self-directed professional development of teachers, aimed at improving teaching and learning.

CHAPTER ONE

THE NEED TO FACILITATE IMPROVEMENTS IN TEACHING AND LEARNING

Introduction

This research is concerned with facilitating improvements in teaching and learning within post-compulsory education settings. It is not focused on professional development that is imposed on teachers by 'someone outside the classroom' (Richardson, 1990:11). Instead it focuses on professional development that is self-directed which, based on a definition of continuing professional development, is considered as instances of people taking responsibility for identifying and attending to all types of learning needs of themselves and their institutions (Craft, 1996). In addressing this issue, the research seeks to illuminate the nature of, and influences on, reflective practice - one particular form of self-directed professional development - and to identify ways of encouraging participation in, and accomplishment of, this activity as it relates to improving teaching and learning.

This opening chapter sets out the rationale for engaging in this research. Firstly, it explains the need for improvements in the process of teaching and learning. It does so by showing that interpersonal communication is an important component in effective teaching and learning but that appropriate interpersonal communication is often not incorporated in post-compulsory education settings. Secondly, it explains the need to empower teachers to exercise their responsibility for enhancing opportunities for effective teaching and learning. It shows that reflective practice, which provides a framework for teachers to review and develop teaching and learning, may lack efficacy and may require a model - possibly action research - to encourage and facilitate attempts to improve teaching and learning. Thirdly, as a consequence of these two points, it concludes by stating how an investigation into instances of self-directed professional

development aimed at improving teaching and learning, that do not draw on a specific model, may illuminate ways in which reflective practice can be encouraged and facilitated.

The need to improve the process of teaching and learning

The importance of interpersonal communication in teaching and learning

The research upon which this study is based, together with the relevant literature, shows that interpersonal communication, comprising language, social interaction and affect, is an important dynamic in effective teaching and learning (e.g. Vygotsky, 1962, 1978; Bruner, 1966; Greenhalgh, 1994; Goleman, 1996). Interpersonal communication can be an influence on both the elicitation of what an individual already knows and the enabling of that individual to develop further their abilities and understandings. However, as a later part of this chapter shows, the kind of interpersonal communication which may facilitate this development is not always found in educational settings.

The idea that interpersonal communication facilitates learning is embedded in the work of Vygotsky (1962, 1978) into language and social interaction. He perceived that during childhood an individual moves from using language purely as a means to communicate overtly with others, to using language as an instrument to direct their own internal dialogue and thoughts to deal with problems they encounter in their environment and to guide and regulate their behaviour. This ability to use abstract verbal concepts allows the conceptualisation of alternative and increasingly complex constructions and meanings. These, in turn, provide opportunities to learn: to acquire new understandings, insights, ways of interpreting events and planning for future actions.

Vygotsky perceived learning fundamentally as a social process. From the start of life, a child interacts with others. This interaction leads them to construct

understanding and meaning from the speech of others; provides nurture and support for their efforts to achieve their goals; introduces thinking and acting in more complex ways in order to master new skills and competencies which they found previously unattainable. In these collaborative activities with more expert or adept persons, Vygotsky noticed a child often achieved more than could be done alone. Consequently two key ideas emerged. One was the zone of proximal development - the measure of learning potential which exists between an individual's present development level and that which they are able to reach with the aid of others. The other was that teaching and learning should be based on social interaction, led by instruction which is set in advance of present abilities, using language to introduce new concepts and synthesise them with existing meanings and ideas. In this way, at any stage of life, with the assistance of more capable others, tasks and learning beyond immediate capabilities can be attained.

Vygotsky's work was extended into the realm of formal education by Bruner (1966). He perceived that language and social interaction were essential to learning - for the intellectual development of individuals, and for equipping them to fully participate in discussion and debate within their society, thus contributing to the development of their own culture. To this end, Bruner considered that the educational experience should enable participants to engage in dialogue and interaction, help them negotiate meaning, allow them to create or constitute knowledge and provoke them into moving through the zone of proximal development.

To facilitate formal learning in this way Bruner explicated Vygotsky's process of collaborative learning. Observing the way mothers interact with their children during a construction task, it was noted that a combination of general and specific instructions geared towards a child's successes and failures guided the child's progress. The idea of 'scaffolding' (Wood *et al*, 1976) was derived and became an effective way for teachers to organise their interpersonal communication with learners and promote cognitive development within the zone of proximal development. By engaging the learner in dialogue and interaction with the teacher the student's thought processes can be stimulated to nurture ideas and

enquiry and to encourage competency. Through this interaction, which develops through a process of prompts, pointers and questions from the teacher, a learner is facilitated in the organisation and mastery of their experience. They construct or extend current skills and knowledge and consequently develop higher levels of competence and control. With this comes a gain in confidence and ability to investigate and develop their own ideas and direct their own learning. Eventually little or no help is required from the teacher as learners become equipped, through their interaction with the more expert other, to instruct or scaffold themselves through tasks.

More recent research (e.g. Salmon and Claire, 1984; Light and Glachan, 1985; Gillies and Ashman, 1997) shows how interpersonal communication between learners, and not just between teacher and learner, can promote effective learning. These studies have found that when learners work in collaborative peer groups learning gains can occur. The act of collaboration permits learners to talk to each other about possible solutions to problems or tasks and engages them jointly in practical actions needed to test potential outcomes. The process of collaboration can encourage learners to think aloud, acknowledge their own and each others' uncertainties, formulate ideas together, compare and negotiate differences, support each other in the process and create a sense of commonality of purpose. The dialogue, discussion and argument can stimulate enquiry, enable alternative constructions of knowledge to be shared or created between learners and allow them to explore their own sense of meaning. The sociality and commonality of the group setting can also allow power and authority to be released from the realms of 'teacher talk' to the students' own conversations, giving them freedom to shape their own understanding and providing the opportunity for them to have more responsibility for constructing and organising their own learning.

Interpersonal communication has not been perceived purely as a combination of language and social interaction but is also seen to include an affective mode. Goleman (1996) and Greenhalgh (1994) summarise research from the past twenty-five years concerning the place of affect in education and conclude that, in learning, it is as important to attend to the emotions as it is to cognitive capacities.

Insights into the brain's structure indicate that there is an interplay between thinking and emotions and, when passions overwhelm reason, the ability to think and learn is disrupted (LeDoux, 1998). When individuals are frequently unable to recognise and handle their emotions this can lead to a failure to realise their potential as they neglect developing ways of managing their lives or interacting well with others. Since most emotional responses are learned and reinforced through experiences of life, it follows that those responses which hinder an individual's ability to develop can be unlearned, avoided or diffused. This can be achieved by making the individual feel safe, modelling to them ways of appropriately handling situations and emotions or helping them to create alternative, less damaging emotions. In educational settings, this 'schooling of the emotions' demands a key role be played by teachers. Primarily, this role requires that teachers create a safe environment by displaying affective behaviours such as unconditional positive regard for learners (Rogers, 1969, 1983) and modelling appropriate handling of situations and emotions. Additionally, it may mean teachers offering learning support, such as guidance and counselling (Huddleston and Unwin, 1997).

A growing literature cites a link between effective learning and the quality of the teacher-learner relationship, as exhibited by teacher behaviour. Tabberer (1994) summarised conclusions from various studies in compulsory education in countries such as England, The United States of America (USA), Canada and New Zealand. His conclusions indicate that positive correlates with student achievement are found when teachers are warm, enthusiastic, consistent, supportive and helpful of students when needed; negative correlates occur when teachers are strongly critical, dislike students, and concentrate on discipline and authority measures. Wubbels *et al.* (1993) investigated interpersonal relationships in secondary education in The Netherlands, the USA, Australia and Israel. Students considered their best and ideal teachers to be strong leaders (confident, clear, enthusiastic about the subject, holds the students' attention, knows what is going on in class); friendly (helps students with their work, is someone the students can depend on, has a sense of humour, can take a joke, creates a pleasant atmosphere in class) and understanding (trusts the students, talks to the students

when they disagree with the teacher, explains things again, listens to the students, realises when students don't understand, is patient). In addition, students desired more co-operation from teachers in their interpersonal communications with students, as displayed in the characteristics of being friendly and understanding, rather than dominance as displayed by leadership. This too was detected by Deiro (1996) from her observations of six competent secondary teachers - effective interpersonal communication involved a bonding between teacher and students. This required teachers to treat students with dignity and respect; to establish and maintain high academic standards for students in the belief that they can be reached; to communicate care for the students by giving time, attention and support to individuals; to create a safe environment in which students can learn; and to develop a close and trusting relationship through appropriate self-disclosure.

Similar findings are emerging in post-compulsory settings. Schneider *et al.* (1985) researched effective teaching in an adult degree program in an American university by comparing a group of particularly effective teachers with a control group. Those perceived as highly effective were student centred; displayed high levels of positive regard for their learners, showed sensitivity to the special claims of adult learners; identified students' learning needs and interests; and engaged with their students' interests, attitudes and experiences. In England, Grayson *et al.* (1998) write about the importance of the teacher-student relationship in that students both expect and want their lecturers to be approachable and a source of help, not only in respect of academic problems but personal problems too. Harkin (1998), when interviewing students in further education, found that many of the characteristics mentioned in describing the 'tutor from whom the student learned the most' related to the affective dimension of interpersonal communication - having a sense of humour, being understanding, encouraging students, being helpful and friendly, being interested in the subject and providing good explanations. Research in Norway (Johannessen *et al.*, 1997) also indicates that affective and emotional aspects of the interpersonal communication between teacher and student were related to students' overall satisfaction with a teacher -

being made to feel secure and accepted on the part of the teacher were the major factors.

The lack of interpersonal communication in teaching and learning contexts

There is considerable evidence supporting the view that learning is facilitated by interpersonal communication. However, over the years, this is not reflected substantially in the reality of either compulsory or post-compulsory education. For example, in secondary education, back in the late 1960s, Barnes (1969) noted that interpersonal communication was restricted to that which occurred between teacher and learners, with the type of language prevalent tending to suppress rather than create opportunities for learning. Teachers used, or expected from their secondary school students, language which led to passive learner participation and learning by reproduction. The asking of factual rather than reasoning questions, closed rather than open questions and the lack of interest in using anecdotal contributions restricted learners' chances to develop both their own thinking for themselves and their power of using language to determine their realms of private and personal meaning. Interpersonal communication in the classroom as a means of exchanging ideas, making observations and formulating meaning in an activity shared by teacher and students alike in a setting openly available to all participants was limited.

Later Phillips (1985) noted that whilst there had been moves during the seventies which permitted children to chatter whilst they worked and encouraged them to discuss things in small groups, there remained deficiencies in the styles of discourse used by teachers to intervene, support and extend middle and secondary school pupil learning in their peer interactions. Of the five modes of discourse which he identified, he perceived only two as providing a framework in which students could learn to challenge, question, suggest and hypothesise - the Hypothetical ('what if? how about?') and Experiential ('I remember once...'). The other modes had deficiencies in terms of restricting the public consideration of the reasoning processes by which a speaker selects one suggestion rather than another (Argumentational - 'yes but, yes well...'); discouraging the articulation of

thoughts, possibilities and probable outcomes (Operational - use of 'this, that, these' etc.); and failing to engage everyone in the process of reflective thought and communication of their considered reasoning (Expositional - use of 'where, what, who, which, why' etc.). In general, the structure of classroom discussions did not direct participants' attention to the content and purpose of conversation and engage them in a shared process of review and knowledge construction. Thus many teachers, whilst allowing interpersonal communication between learners, failed to provide the help and guidance needed to move them towards another level of understanding.

More recently Newton and Harwood (1993) concluded that the transformation of teaching from the dominant 'transmissive-didactic' mode to more interactive approaches is far from complete. A small sample of classroom observations considered the extent of the adoption of active learning strategies (discussions in pairs, small groups, games, simulations, role-play or practical activities) after several decades of promotion by the likes of Barnes, Flanders (1970) and Delamont (1976). Analysis found strong evidence that the quality of teacher-student relationships was good with teachers displaying sensitivity, care, respect for pupils, good humour and leadership. However, the degree to which active learning strategies were experienced by students was limited. Four broad categories of teaching strategy were noted - 'Active/ progressive', 'Discipline-based' 'Skill-based' and 'Disrupted'. The dominant classroom experience was still discipline-based teaching (47% of lessons) which was characterised by objectives concerned with outcomes; right and wrong answers; high levels of teacher control and domination of the interaction; and passive students reacting to teacher prompts rather than initiating their own enquiries. Active/ progressive teaching (process oriented; learning related to experience; teacher acts as a facilitator of student enquiries, discussions, interpretation and use of knowledge; problem solving and decision making a feature) accounted for only 18% of the lessons. In concluding, Newton and Harwood suggested that interactive styles of teaching were less prevalent than generally supposed. Students continued to lack opportunities to develop skills in problem solving, decision making and leadership; their development of qualities of sensitivity, responsibility, care and

respect for others was diminished, as was their ability to work collaboratively with each other in groups.

Although there is a smaller and much more recent literature in post-compulsory education, the situation appears to be similar. Firstly, opportunities for interactive learning in Further Education (FE) need increasing - Dearing (1996), found indications from employers' perceptions of the low ability of many school leavers to communicate effectively and to take responsibility. Abilities which could and should have been learned through an interactive curriculum - good inter-personal skills including the experience of team working, presentation and interview skills, positive problem-solving approaches, and planning and management skills - were perceived as insufficient to equip learners for the world of work. Evidence that this may be due to schools and colleges continuing to treat learning as the transmission of knowledge from teacher to learner is provided by research into the communication styles of teachers (Harkin and Turner, 1997). Even when teachers were perceived to be otherwise effective, Harkin and Turner found that many students were restricted in the opportunities they had for developing and controlling their own learning, particularly in matters of presenting work to others, exercising choice in their studies and assignments, and carrying out their own research. Further confirmation that some teachers still view students as passive receptacles rather than as active participants in the creation of their own understanding is provided by the Further Education Funding Council (FEFC). Inspection reports of some colleges cite that classroom interaction in some areas of the curriculum lacks stimulation (FEFC, 2000), interest (FEFC, 1999a) and efficacy (FEFC, 1997a).

Secondly, the affective element is also sometimes insufficiently developed. The Further Education Development Agency (1998), reviewing non-completion of GNVQs, found that failure to complete courses was linked to students' dissatisfaction not only with the perceived quality of teaching, but also with their relationships with teachers and the help and support that was provided. By contrast, staff rarely perceived these relational aspects as the problems for non-completion, instead attributing drop-out to low student motivation or ability.

Consequently, this dissatisfaction with the perceived teacher-student relationship on the part of the students, and the lack of awareness of its significance on the part of institutions, are major contributors to low retention rates recorded across the sector and to missed opportunities for student achievement (FEFC, 1997b; Martinez and Munday, 1998).

In Higher Education (HE) similar findings to those in FE are found. Dearing (1997) reported employers' dissatisfaction with the inadequate communication skills of a substantial number of graduate entrants; found a predominance of transmission mode teaching and learning; and stated the need for students to become more active participants in the learning process. The struggle to provide warmth in student-teacher relationships is also evident. Yorke (1999) found that non-completion for almost a quarter of those students who failed to complete courses was influenced by 'inadequate staff support outside the timetable' and 'lack of personal support from staff'. Sumsion (2000), a lecturer in HE, confirms this, declaring that for all her good intentions, it is difficult to sustain care for students in the context of escalating expectations, commitments and constraints experienced in the university workplace. This challenge to maintaining an 'ethic of care' was attributed to increased workloads, pressures to publish and to attract research funding whilst simultaneously maintaining the teaching role amidst diminishing resources and, often, a lack of recognition.

Clearly, in post-compulsory education settings, as in compulsory settings, there is a need to improve levels of interpersonal communication to enhance students' experience of effective teaching and learning. However, that classroom interaction even in post-16 education is still dominated by teacher talk is due, in part, to the acquiescence of students to what they perceive as the norm for learning settings. Through a process of socialisation during their early years in compulsory education students have come to see the teacher as the one who holds power in the classroom (Ruddock, 1991). Teachers exert control over their students and the situation through their status as adults; through their traditional authority as a teacher; through their legal authority and through their expertise in the subject matter being taught (Hargreaves, 1972). In response, students perceive

their role as being to accept and obey. Consequently they do not feel in a position to voice their own questions or interpretations or to actively seek their own understandings. They have become dependant on the teacher for their own certainty of knowledge, are reluctant or scared to take responsibility for the construction of their own understanding, or are unaware that this is a valid option. This attitude persists when they enter post-compulsory education because, as Ruddock says, it is difficult to shake off after so many years.

Teachers not only establish the teacher control-centred classroom but also help to maintain it, often out of a lack of awareness, anxiety or lack of trust. Young (1992), analysing transcripts of classroom discourse, found that even teachers who professed to offer pupils a chance to talk and express themselves failed to do so in reality. One such teacher dominated classroom talk 50% of the time; posed only 'closed' questions which restricted the flow of conversation; and did little to encourage pupil-pupil interaction. Through her lack of awareness of the quality and quantity of her talk, student participation in and ownership of the learning process was reduced. Hargreaves (1988) expressed how teachers feel vulnerable and uncomfortable if they move outside the confines of the familiar transmission mode, becoming anxious about their personal competence, style, and professional security. Ruddock (1991), reviewing sixth-form teaching in 20 schools, states that many teachers perceived themselves as providers of knowledge rather than facilitators or guides of students' own development of their intellect because they did not trust the students' abilities to think and create meaning for themselves. In order to cover the curriculum and ensure good examination grades, it was deemed unsuitable to introduce a more enquiry based approach to teaching. Consequently, since students themselves have no strategy for modifying teacher behaviour, the instructional mode is maintained.

This form of interaction, persistent throughout much of a student's educational experience, is not serving them well. Whilst it can be argued that standards are improving (Department for Education and Skills (DfES) 2001a, 2001b), this is sometimes at the expense of students' general motivation towards education and achievement. Substantial numbers of learners in secondary schools find school

work boring (30%); count the minutes to the end of their lessons (70%); and take the view that they would rather not go to school (30-40%; Barber, 1994). This affects their longer term aspirations with only 71.6% making the transition into post-compulsory education at the age of sixteen (DfES, 2001c). This number is further reduced to 36.9% at the age of eighteen (DfES, 2001c) as students continue to experience 'boring classes', 'bossy teachers' and being treated 'like kids at school' and, consequently, opt to withdraw from education rather than complete their studies (Martinez and Munday, 1998). The figures are even less for those who continue into higher education. Yet, research suggests that more stimulating and interesting teaching and learning, incorporating greater levels of interpersonal communication, may help to reverse the trend.

It was hoped that the introduction to post-compulsory education of key skills, including *Communication, Working with Others, Taking Responsibility for Your Own Learning* and *Problem Solving*, would alter the process of learning so that students would be more active and work together to direct and develop their own knowledge and understanding (Harkin *et al.*, 2001). The intention was that this range of generic skills, focusing on effective communication and collaboration, would be developed through a process in which individuals practise the skills in their everyday learning. The use of these skills would be the medium through which learning and teaching took place, and would relate to and occur within the students' specific programme of learning. However, ultimately, only three out of seven key skills originally proposed became mandatory for some learners - *Communication, Number*, and *IT* - and were bolted on to existing programmes of learning as discrete units instead of being an integral part of the learning process. Since many teachers themselves do not feel equipped to develop the skills, often learners work at them in a decontextualised way, with staff who are not their vocational or academic subject teachers. As Harkin concludes 'the endeavour to equip young people with the knowledge and skills they need in order to feel personally engaged in education and training, and to succeed in developing their talents, is thwarted' (Harkin *et al.*, 2001, p.31). The hope that key skills would help transform the dominant curriculum and pedagogy has not been realised.

The need to empower teachers to improve the effectiveness of teaching and learning

Reflective practice as a framework for development

Recent models of good practice for tutors in FE and HE (Further Education National Training Organisation (FENTO), 1999; The Institute for Learning and Teaching in Higher Education (ILT, 1999) encourage teaching and learning to be carried out, adapted and developed within a framework of reflective practice. This notion of reflective behaviour is not new but it can be viewed from several angles.

Dewey (1933) proposed that purpose, direction and achievement in learning come from thoughtful action as distinct from impulsive action which may satisfy desire but otherwise leave intellectual advancement out of reach. Thus, a teacher needs to observe the conditions and circumstances of the teaching and learning environment, and develop an understanding of the significance of what is observed in relation to who the students are, their powers and their objectives. This approach provides a basis for the selection, organisation and provision of experience, methods and materials that can bring about the intellectual growth of the students and the professional development of the teacher.

Schön (1983; 1987) noted that problems in real-life professional situations frequently do not present themselves neatly to be solved through the application of pre-defined knowledge and theory (technical rationality). Instead problems require the professional to engage in reflective conversations within the situation, to propose and test solutions, and to redefine the problem with each new interpretation and outcome. For Schön this kind of reflection-in-action is needed in education to bridge the gap between the conception of professional knowledge acquired during training and the realities faced by teachers in the classroom. Research driven understandings of learning need to be subordinated to a 'reflective practicum' in which teachers are coached to develop and use an enquiry mode of critique in their day to day activities. This requires teachers to observe their own teaching behaviours, theories and actual student learning

outcomes, and to challenge their perceptions in a reflective dialogue by considering differences perceived between their conceptions of professional practice and their descriptions of reality. In this way practice and beliefs are informed and new plans and actions are implemented. Consequently, this reflective activity can bring about an awareness of what is needed to promote more effective teaching and learning.

Kolb views reflection as part of a continuous learning process whose purpose is to effect relearning through a cycle which appraises experience (Kolb, 1993). The place of reflection in a four stage cycle is to review experience, firstly observing and questioning it (reflective observation) and secondly analysing it, drawing conclusions and forming hypotheses (abstract conceptualisation). This double activity of reflection leads subsequently to actively testing the implications (active experimentation) which gives rise to a new experience (Figure 1.1).

Figure 1.1 Kolb's Experiential Learning Cycle

Kolb's perspective is that reflection on its own is insufficient to alter situations and that individuals also must involve themselves fully and with open minds in new experiences which lead to adaptations of and in the social and physical environment. Thus implementing the Experiential Learning Cycle helps an individual to move from actor to observer and back again as the process progresses. For teachers this means moving from the experience of taking a lesson to reflecting on perceptions of how the lesson went and proposing improvements, and back to implementing the proposals in another lesson, which then forms a new experience around which the cycle continues.

Like Kolb, Carr and Kemmis (1986) perceive the practice of reflection as both action oriented and a continuous spiral. Critical reflection consists of planning actions, implementing the proposals, monitoring the actions and then evaluating them in the light of evidence collected. However, instead of an individualistic process it is seen as a collaborative process engaging other participants affected by the action in a joint enquiry through communication, decision making and further action. Through researching and critiquing their own situation within the overarching social and institutional norms, their beliefs, goals and actions can be viewed, discussed and developed in light of both their perceptions and those of others, such as colleagues, students, parents. Within this social forum those involved are collectively empowered to transform the particular situation that affects them.

The terminology and processes differ between each of these descriptions of reflective practice. Yet, there are commonalities which allow reflective practice to be defined as an activity that requires teachers to become learners, responding to their experience of teaching with a conscious and deliberate intent to check their practice, critically evaluating its everyday content with the objective of bringing about improvement or transformation where appropriate. However, fostering reflective practice as a wide-spread and effective means of bringing about improvements in teaching and learning is problematic.

Fostering reflective practice

The difficulty in fostering reflective practice lies partly in there being no mandatory requirement for a reflective stance towards teaching practice to be taken and partly in there being no widely recommended model to enable the process of reflection to be effective. Consequently, two aspects impede the adoption of a truly reflective approach to teaching. One is lack of time (van Lier, 1996), linked to the absence of a mandatory requirement; and the other is lack of appropriate form and purpose (Ecclestone, 1996), linked to the need for an effective model.

Lack of time during the working day makes it difficult for reflective practice to be accomplished. The daily demands of teaching make it hard to step back and consider what is going on and why some things are happening. There is little space or opportunity during the 'press' of the working day (Huberman, 1983 cited in Fullan, 1991, p.33) to consider long term perspectives; to have meaningful interactions with colleagues; for discussion, assessment and exploration of opportunities for teaching and learning. Whereas teachers are sometimes given time for planning, time is not officially set aside for reflection. Any time given to staff development initiatives tends to focus on new information, ideas, strategies and not on the practice and meaning of their current pedagogical experiences. Consequently, reflective activity, and subsequent improvements in teaching and learning, is limited to those with the most enquiring minds prepared to invest in it in their own time. A way needs to be found to encourage teachers to adopt a reflective stance.

Lack of appropriate form and purpose (Ecclestone, 1996), or content (van Lier, 1996), has led to the suggestion that much of what passes for reflective practice in professional development is not reflective practice (Ecclestone, 1996). Since what a teacher reflects on and why is not guided by a common approach, a myriad of options exist, yet not all are effective. Consequently, instead of teachers engaging in an enquiry that explores, explains and questions practice and theory, values, principles and ideology, they are often merely participating in an activity

that is a means for evaluating and accounting for competence. Instead of selecting both a focus for reflection that is appropriate for their level of skills acquisition (between novice and expert) and a process of reflection that exposes them to different rationales and models of development, teachers at whatever level are increasingly asked to consider their practice in the light of externally defined criteria, techniques and methods. Teachers' autonomy over the development of their environment as a result of independent and thoughtful enquiry is minimised as reflective practice is reduced to little more than ensuring teaching is 'the efficient and effective application of knowledge to given ends' (Ecclestone, p.155); the examination of why it is so practised and how it could be improved is sidelined. This is reinforced by the fact that teachers have little feedback from, or discussion with, peers or students about their effectiveness, a consequence of working in isolation from their colleagues (Hargreaves, 1988) and rarely possessing an appropriate means with which to engage students in a useful review of classroom interaction (Harkin *et al.*, 1999). Teachers require opportunities for and assistance with reflecting on day to day teaching and learning practices in order to implement effective professional development.

It is recognised that more teachers need to be enabled to engage in a critical, thoughtful, systematic consideration of teaching. To this end, action research has increasingly been suggested as a means to facilitate reflective practice (e.g. Hopkins, 1985; Carr and Kemmis, 1986; Elliott, 1991; McNiff, 1993). It is seen as providing a way of reflecting on teaching which links theory and practice, encourages both practical concerns and the wider socio-political context of educational work to be addressed simultaneously and in situ, and seeks improvement. Elliott (1991) defines action research as '*the Study of a social situation with a view to improving the quality of action within it*' (p.69). 'The fundamental aim of action research' he declares, 'is to improve practice rather than to produce knowledge' (p.49). Carr and Kemmis (1986) go further in stating that action research aims not only to improve practice but also to improve both 'the *understanding* of the practice by its practitioners; and the *situation* in which the practice takes place' (p.165).

The characteristics believed to make these improvements possible, derived from the work of Lewin (1946) on bringing about change in social situations, are the participative, collaborative nature of the research and successive cycle of activities.

Action research is concerned with people examining their own practice within the community in which it takes place, with a view to bringing about improvement (e.g. Kemmis and McTaggart, 1988; Kemmis and Wilkinson, 1998; Elliott, 1991; Winter, 1989; McNiff, 1988, 1993). It is research *by* those involved in the situations and not research done *on* them by others. This enables individuals to investigate their own reality taking full account of their own perspectives, placing the decision making process into their hands and empowering them to determine where, how and when to intervene in their own situations. It is a collaborative examination, taking place within and working with the community of others who are engaged in, affected by or interested in the situation, bestowing a sense of equality of status on all involved - colleagues, students, parents, principals, universities, for instance. This, states McNiff (1988), encourages dialogue - the sharing of perspectives, experiences, ideas, objectives; leads to common understandings and the moving of views; encourages participants to question their practice and to articulate their own answers, in order to explore new ways of working that are beneficial to the community as a whole.

Participative collaboration contains features which can encourage and lead to a greater understanding of and an improvement in practice through the application of the action research cycle, described later in this chapter. These features are relevance, autonomy and challenge. Relevance is created as teachers focus the research process on aspects of their own practice and, as potential benefits from this emerge, they act as a spur for further improvements (McKen, 1996). By directing the research process and determining the outcomes for themselves, participants exercise responsibility for their own actions, experiencing an autonomy which empowers them to believe in themselves and to use their own abilities to effect change (McKen, 1996; Kemmis and Wilkinson, 1998; McNiff, 1993). By interacting with others in the research enquiry, each individual's

subjectivity (starting points and assumptions) is considered, taken as provisional and challenged as to its significance to the situation (Winter, 1989), prompting individuals to critically review how their current understanding shapes and constrains their action and to explore the possibility of improvement (Kemmis and Wilkinson, 1998).

Literature supports the role of participative collaboration in contributing to successful reflection and the development of practice through action research. Reid (1988) describes how she and her students collaborated in the development of the curriculum, negotiating what would be studied and how it would be studied in a course. She explains how, through this interaction, she was 'astounded at the differences between what I had anticipated the areas of study would be and what the students themselves decided they needed to know' (p.115) and was encouraged to adapt her plans to accommodate the students' views. By viewing her students as responsible, trustworthy people capable of directing their learning in a meaningful way, she re-defined her role as teacher not as one of controlling what happened but as one of leading students in furthering their own understanding.

The benefits of collegial collaboration are evidenced by (1999a) who, as a principal manager, investigated the effect of incorporation on staff motivation by carrying out a survey of colleagues' views. This provoked discussion among staff, raised their awareness, influenced their determination to do something about the results and provided impetus to address the concerns. The effect on the staff was of a sense of them and their views being appreciated; the effect on Lumby was a sense of reassurance gained from knowing that she was not alone in his views on the issue and had support for taking action.

Bone (1996), a head teacher, explains how collaboration works with a number of individuals in different roles but all acting as critical friends - someone who will offer a critique of and support during the research process (Lomax *et al.* 1996; Kember and Gow, 1992). His deputy head provided a challenge to the way he

handled situations and another staff member questioned some of his actions, both prompting extra reflection; an old school friend, not connected with education, enabled him to explain himself more clearly; the support group of other head teachers suggested alternative avenues for consideration, and assisted him to identify and clarify situations and meanings within his research focus. As Bone sought improvements the various critical friends responded in a range of different ways to help him reflect on and validate his research claims.

Another dimension of collaboration is the involvement of university researchers as partners. Garrido *et al* (1999), as university researchers, fostered teacher development by stimulating intellectual curiosity and a desire to study in a systematic way and then helping the school staff involved to think collectively, search for collective solutions, learn the art of dialogue, become more capable in critical reflection and be more daring in implementing change.

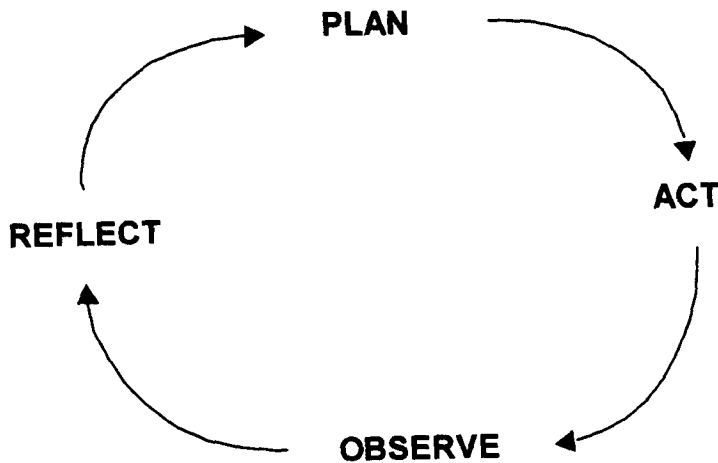
However, participative collaboration is not unproblematic or always viewed favourably. Involving students in the critique of one's professional practice can be seen by others as a confession of not having got it right, as the ultimate in 'publicly confessing to shortcomings in ... expertise, and ... likely to lower the image of the profession' (James and Ebbutt, 1980, quoted in Elliott, 1991, p.59). Collaboration with colleagues can have mixed effects as promoting reflective conversations, informing practice and building relationships also carry the risk of exposing areas of perceived weakness; encourage latent conflicts and tensions into the open; and give rise to a sense of vulnerability and judgement in front of others (Elliott, 1991). It can also be looked on with suspicion because it may result in involving colleagues in more work (Lumby, 1999b). The position of researchers from outside the immediate research situation who participate as facilitators or partners can also be difficult. Gorodetsky *et al* (1997) reveal the possibility of a conceptual gulf between external researchers and teacher researchers with the two parties ascribing different meanings to the same terms and associating them with different practices, hindering both collaboration and progress. Elliott (1991) shows that whilst the role of external facilitators is unlikely to constitute any threat to the professional autonomy of those researching their own practice and

their involvement can foster capacities for self-reflection, analysis and theorising, it can also lead to unequal power relations. Instead of all participants having equal status, external researchers can be perceived by others as having all the answers or themselves treat the theoretical perspectives as solely their territory. These attitudes can influence the extent to which others are willing to develop their own reflection and concepts, creating an atmosphere whereby 'insider' (practitioner) researchers are disempowered, restricted in their contribution to dialogue, dependant on the facilitators for self-understanding and defensive about their own practice. The involvement of someone who holds a position of power is also two-edged (Lumby, 1999b). For instance, a head teacher's authority can be used positively to increase the possible use of the research but negatively to force others into co-operating in the review of their practice. However, Coleman (1999) states that the lack of involvement, interest and support from someone in a position of power can frustrate the potential use of the research findings because it lacks the necessary authority to push through its implementation in a wider context.

Despite these drawbacks, participative collaboration is perceived to empower individuals to investigate, understand and develop their practice in a personalised way, yet with the support, encouragement, critique and like-minded purpose of others which provides the incentive to continue the exploration. However it is the second characteristic of action research - the action research cycle - which provides a mechanism for ensuring that the investigation is carried out in a manner that is illuminative and rigorous.

The action-research cycle is a sequence of steps involving a spiral of self-reflective cycles (Kemmis and Wilkinson, 1998). The classic activities which form this cycle (Figure 1.2) are commonly described as planning, acting, observing and reflecting (e.g. Kemmis and McTaggart, 1988; Winter, 1989; Elliott, 1991).

Figure 1.2 The action research cycle



Engaging deliberately in these activities, according to Kemmis and McTaggart (1988) means:

- identifying a general focus and developing a plan of critically informed action to improve the current situation,
- taking action to implement the plan,
- observing the effects of the action in the context in which it occurs, and
- reflecting on the effects as a basis for further planning, action, observation etc.

When followed in a systematic manner, each stage is mutually supportive of and feeds into the next. This makes it possible to enter the cycle at any stage and follow it through its logical sequence, although it is assumed that one should begin with a general focus around which a plan should develop (e.g. Kemmis and McTaggart, 1988). Thus participants are offered an integrated method for initially reviewing a situation in order to identify, articulate and attend to a particular area of interest or concern, and continuing that reflection and development through a succession of cycles. Hence a cycle of enquiry is created.

The details of each stage (Kemmis and McTaggart, 1988; Elliott, 1991) are important to explaining why the action research cycle is effective in bringing about contextual understanding and improvement. Planning concerns looking ahead to future events or situations, with the intention to take action, and involves theorising about what might be appropriate, assessing risks, considering and negotiating constraints and resources, deeming what is possible. Taking action means implementing the plan, creating a new event or situation- taking risks in a purposeful, deliberate and controlled manner, putting ideas into practice in real time, in context, being flexible and open to change in the light of emerging circumstances. The action is then subjected to observation, where the event or situation is monitored in order to describe perceptions of the facts of the situation, the effects of the action and the way in which circumstances limit or enhance the intended effects. This observation becomes the basis for reflection which seeks to describe, explain and evaluate the relevant facts, issues, processes and problems that have arisen from the experience so that the situation is further illuminated for future planning. When participants complete an action research cycle they meld together experience and theories, reflection and action, with the result that understanding may be enhanced and improvement may be achieved.

The nature of the different activities are perceived by Kolb (Kolb and Fry, 1975; Kolb, 1993) and Winter (1989) to be the crux of why the action research cycle works. The four activities are distinct from each other and also describe conflicts between opposing ways of dealing with the world. Two dialectics are involved - the conflict between focusing on experience (through observation of events and situations) and theorising (through planning for future events and situations), and the conflict between reflection (through description, explanation and evaluation) and action (implementing the plans). To effectively reinterpret and reshape an event or situation individuals must negotiate the tensions and resolve the conflicts arising from all four activities. For instance, since purposeful action is not achieved solely through experience and experience is not reshaped by considering only the theoretical possibility of change, an individual needs to be able to move between being an actor, involved in and dominated by experience (the observation stage) and being an observer, detached from, analysing and creating concepts

about experience (the planning stage). Similarly, as a predominance of reflection on experience will inhibit active testing of theories, and constant action and experimentation will preclude the development of thinking intelligently about experience, an individual needs also to be able to move between interpreting the data collected from experience (the reflective stage) and actively testing the theories subsequently devised (the action stage). Hence no stage of the cycle is sufficient by itself to bring about effective understanding and improvement, and the provision of the cycle encourages individuals to engage in every stage to confront the conflicts and avoid any tendency to specialise around a preferred activity. In these ways, the action research model is said to work and an individual can gain new experiences, perspectives, understanding and knowledge to improve future experiences.

This classic presentation of the action research cycle - planning, observing, reflecting and acting - can make it appear that implementation is straightforward and the content of the cycle is uncontested. This is not the case. Fixing the focus for improvement in advance can prove to be unrealistic as the underlying nature of the initial idea turns out to have been misunderstood; what was originally identified as a need for improvement is superseded by the emergence of another more pressing issue during the course of the research; the idea becomes an issue about which the researcher can do nothing. Instead what is required, states Elliott (1991), is that the general idea be allowed to shift according to the prevailing circumstances. Rigid adherence to the cycle can also be too constricting, stifling creativity, restricting the exploration of novel situations and unknown aspects. In these circumstances the cycle needs to be adapted so that the researcher creates their own framework within which related problems can be pursued without losing sight of the main focus (McKen, 1996). It is also perceived as being purely mechanistic, a system that when used alone allows the researcher to move round the loop of activities without having to account for their own personal and professional development - the practitioner is not required to confront how and why their practice originated in the first place, nor to offer explanations of how and why they have been prompted to change and neither do they have to demonstrate publicly that their activity has led to improvement (McNiff, 1988).

This is why McNiff and Zuber-Skerritt (1992) view the cycle as only fully effective when used in collaborative settings which introduce an element of public accountability to fellow researchers that will encourage practitioners to explain how they have come to understand their own practice, to produce personal theories of education and to substantiate their claims for knowledge. The cycle can also be daunting to those who are new researchers or lack confidence in undertaking research (Kember and Gow, 1992) and, therefore, help has to be sought to develop the necessary skills to tackle each stage. It takes time, energy and determination to complete the cycle and bring about improvement or change (Hopkins, 1985; Coleman, 1999; Lumby, 1999c). It also requires the exercise of care so as not to interfere with the practitioner researcher's primary role of teaching whilst seeking at the same time to develop that very same practice (Hopkins, 1985).

In summarising the impact of action research on a teacher's consideration of improving teaching and learning, its strengths can also be deemed to be its weaknesses. People working and dialoguing together with the common objective of improving the situation encourages reflection and development. Implementing, in a systematic way, discrete yet connected stages of activities - planning, observing, reflecting and acting - helps them maintain their focus, be persistent and take action. However, when collaboration fails, is perceived as too risky or threatening; or the action research cycle is perceived as too cumbersome, or used too prescriptively or mechanistically then reflection and development is hindered. In addition intra-personal factors such as determination and energy, and extra-personal factors such as time appear to influence individuals' abilities to successfully engage in this form of enquiry into their practice.

The conclusion to be drawn about the use of action research is that whilst it addresses some of the concerns about how to foster reflective practice, it may not be suitable for all circumstances and may, itself, require facilitating to ensure and enable wider use. Therefore, some doubts surround the adequacy of this model as a useful approach to encouraging and enabling reflective practice.

The proposal to investigate reflective practice and self-directed professional development

It has been argued in this chapter that there is a need to improve levels of interpersonal communication in post-compulsory education settings in order to enhance students' experience of effective teaching and learning. Reflective practice has been proposed as a means of empowering teachers to accomplish such improvements. However, it is often neglected or ineffective and, therefore, it requires facilitation. Action research offers a way of incorporating and assisting reflection within a teacher's everyday activities but problematic aspects of the model lead to querying whether it is appropriate or sufficient for ensuring widespread and effective reflective practice.

One way of considering the suitability of action research is to investigate examples of reflective practice, aimed at improving teaching and learning, which do not resort to the application of any particular model to facilitate the activity. By observing and enquiring into these instances insights into the process involved in, and influences on, improving teaching and learning can be gained.

Furthermore, as reflective practice is only one form of achieving self-directed improvements in teaching and learning, investigating other experiences of self-directed professional development could illuminate ways in which participation in, and accomplishment of, improvements in teaching and learning are facilitated and hindered.

The understandings gained from these two sources could identify ways of promoting participation in, and enabling accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning. It should then be possible to assess whether action research should be pursued as an appropriate strategy for encouraging and empowering improvements in teaching and learning through reflective practice, or whether alternative or additional means should be recommended.

This research

This research aims to enquire into the facilitation of self-directed improvements in teaching and learning. Firstly, this entails the investigation of teachers' experiences as they engage in reflective practice without the application of any particular model to assist the activity. Secondly, it involves an examination of other instances of self-directed professional development which the participants have previously undertaken. The manner in which self-directed improvements in teaching and learning are achieved is examined and the influences on teachers' participation in, and their accomplishment of this activity are considered. It is anticipated that the outcomes could be used to inform the facilitation of reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings.

The research adopted an action research methodology (described in chapter two) and was carried out over a three year period in post-compulsory education settings. Using the recently developed Communication Styles Questionnaire (Harkin *et al.*, 1999) to identify patterns of interaction between a teacher and their students, volunteer teachers explored their interpersonal communication with one or more student groups with a view to developing a wider or more flexible style of communicating to enhance teaching and learning.

Two broad research questions were formulated:

- If, following the use of the Communication Styles Questionnaire, teachers developed aspects of their interpersonal communication, how had such self-directed professional development aimed at improving teaching and learning been achieved and influenced during this experience of reflective practice?
- What do these, and other, experiences of self-directed professional development indicate about how best to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings?

The methodology and design of the study are explained in more detail in chapter two.

CHAPTER TWO

THE RESEARCH METHODOLOGY

Introduction

As outlined at the end of chapter one, this research is an enquiry into the facilitation of improvements in teaching and learning. This involves the investigation of teachers' experiences as they engage in reflective practice without the application of any particular model to assist the activity, and an examination of other instances of self-directed professional development which the participants have previously undertaken. The manner in which self-directed improvements in teaching and learning are achieved is explored and the influences on teachers' participation in, and their accomplishment of this activity are considered. It is anticipated that the outcomes could be used to inform the facilitation of reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings.

This second chapter outlines the approach to the research. It states the characteristics inherent in the study; explains the suitability of action research as the methodology and multiple case studies as the method; describes the sampling, data collection and analysis procedures and gives due attention to issues of validity and ethics.

Characteristics required of the methodology

The fundamental feature of the research is the way that teachers were invited to participate jointly with the researcher in an investigation into the nature of self-directed professional development and the influences on participation and accomplishment of this activity. The instances of self-directed professional

development that were to be researched would involve volunteer teachers using the Communication Styles Questionnaire (CSQ) to identify and explore their interpersonal communication with one or more student groups with a view to developing a wider, more flexible style of communicating to enhance teaching and learning. A methodology suitable for the research had to take into account the fundamental feature mentioned at the start of this paragraph and criteria regarded as basic to the notion of self-directed professional development and the development and use of the CSQ, which is described fully in chapter three. It needed:

- to allow teachers to participate jointly with the researcher in researching the nature of the review and development of their communication style, and the influences upon their participation and accomplishment;
- to allow each teacher to engage in reflective activity on their communication style with a view to improving teaching and learning;
- to allow each teacher to take responsibility for directing their own review and, where desired, development of aspects of their communication style which could improve teaching and learning;
- to provide the opportunity for students to co-participate in the review and the possible development of a teacher's communication style;
- to be sensitive to context;
- to enable the researcher and Communication Styles project director to work alongside each teacher to facilitate understanding and interpretation of the CSQ profiles and to follow each teacher's progress through the study;
- to allow the researcher to reflect on the outcomes of each phase of the research and to follow-up in ways most appropriate to the progress of the study.

It was concluded that an action research methodology would satisfy these requirements.

The methodology of action research

In chapter one action research was reviewed as a method which could facilitate reflective practice. However, it is also considered to be a methodology which can be used as the framework for research. To consider it as a research methodology it is necessary to turn to the work of Kurt Lewin (1946) from which action research evolved. Lewin advocated action research as a means of reflective enquiry by participants in a social situation in order to bring about understanding, improvement and transformation of that situation. This was seen to be achieved best through a cycle of practical steps of planning, fact-finding and execution, (more readily described today as planning, acting, observing and reflecting).

As explained in chapter one, the reflective nature of an action research enquiry encourages participants to critically scrutinise a situation and aids development of their capacities for discrimination and judgement in respect of subsequent action (Elliott, 1991). This occurs *in situ* so that the focus of reflection can be considered, interpreted and tackled in its particular context (Cohen and Manion, 1980). With the research being engaged in and driven by those participating, or with an interest in the situation, reflection and decision making become activities of joint ownership, dialectics and collaboration (e.g. McKen, 1996). By making the objective of the enquiry that of improving the situation the act of reflection is infused with an orientation towards taking action (Kemmis, 1985). The method of enquiry in terms of the practical steps of the action research cycle ensures that the research becomes an integrated and active process whereby participants are required to observe their experience, analyse and draw conclusions from it, make plans for improvements and execute them. This mechanism enables the operation both to progress and achieve its original objectives, and to bring about further improvements as these activities are repeated in a continuous spiral of reflection.

These are the qualities that made action research the appropriate methodology for this study. The participatory aspect would permit three things: the teachers and the researcher to engage in a collective enquiry into the nature of self-directed professional development and the influences on participation and accomplishment

of this activity; each teacher, the researcher, project direct and students, (where desired and appropriate), to collectively engage in the review of a teacher's communication style through the use of the CSQ; all participants to take responsibility for and own their contributions to and behaviour in the research. The reflective character would allow critical reviews by a teacher of their communication style and by both a teacher and the researcher of self-directed professional development. The *in situ* nature would enable a teacher to review and develop their communication style in ways appropriate to their individual situation, and allow teachers and the researcher to consider self-directed professional development within the context of a teacher's daily practice and working environment. The action research cycle would provide a way for the researcher to thoroughly consider the progress of the research into self-directed professional development and to determine the actions most appropriate at each phase.

The method of investigation

The investigation intended to follow a number of teachers in a variety of post-compulsory education settings over a period of time, observing and exploring their use of the CSQ, the process or events involved and the influences associated with their participation and accomplishment of self-directed professional development, both in this instance and generally. The action research methodology meant that the scientific, deductive approach was not appropriate. The researcher was not to be an objective observer working with a sample of individuals; the confines of a pre-determined theoretical framework requiring experimentation, manipulation, replication or refinement did not apply; the data would not be offered as evidence in support (or otherwise) of a pre-specified hypothesis and generalised to the whole population. Therefore a method in which the researcher maintains a distance from and a tight control over the actions of the participants was not required. Instead the investigation was based within an inductive or interpretive methodology in which the researcher was a subjective participant in a number of naturalistic settings; the data across settings were to be

a source from which to generate theories and hypotheses about the topic under investigation; the analysis of the data was to aid exploration, interpretation and explanation of the reality of the situations as viewed by the various participants. Thus a method that would readily accept the active involvement of the researcher, allow events to evolve naturally, and take into consideration a variety of contexts had to be chosen. Accordingly, an exploratory multiple case study approach was considered most suitable.

A case study is defined by Robson (1993) as

‘a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence.’ (p5)

In his view the case study is an overarching approach to carrying out research, allowing the characteristics of the individual, unit or phenomenon under investigation to be observed and the data collected within its naturalistic setting, using a variety of appropriate methods. In this way the case is something that is studied in its own right and not as a sample from a population, the data from which will be interpreted with a view to making statistical generalisations. However the use of multiple case studies can ensure that an area is covered in depth, point to other areas worthy of investigation, provide complementary evidence by focusing on something not covered in other cases or illuminate patterns across cases.

This description of a case study was well-suited to the nature of this investigation. The naturalistic setting of the classroom could be used; the researcher could work alongside the other participants, both contributing to and observing the process or events; various methods of collecting the data could be employed depending on the setting, the questions being raised and the phase of the study; each teacher working on their own or groups of teachers working together could be studied as a unit in their own right, allowing unique and varied responses to be noted yet possibly giving rise to similarities across the many different cases.

The phases of the investigation

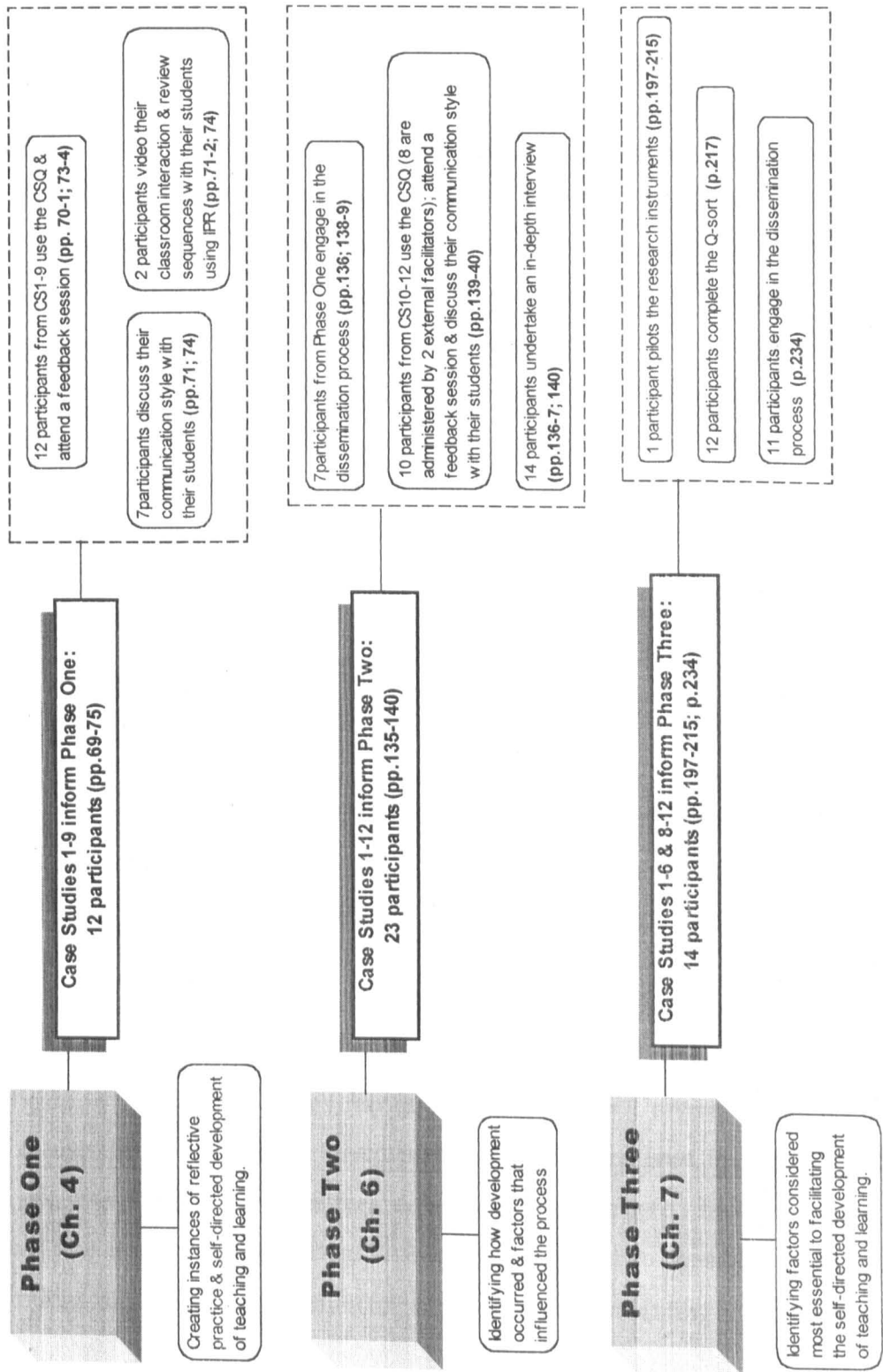
In adopting the action research methodology and by using the action research cycle of observe, reflect, plan and act, the resultant investigation consisted of three phases, with the outcome of one phase being used to inform its successor. A brief outline of the purpose of each phase, the participants and the methods used is shown in Figure 2.1 by way of route map through the study. Full details of each phase are found in chapters four, six and seven whilst particulars of the participants and their selection follows in the next section.

The case studies

It was proposed that the research would take place in a variety of post-compulsory educational settings. Twelve to fourteen teachers were originally to be recruited with at least four from HE and eight from FE, between them representing both genders, varying ages and teaching experience; working as individuals within their departments or with colleagues; covering various course types and subjects. Eventually twenty four teachers took part, of whom one later withdrew from the project due to ill health, and two acted as external facilitators of the administration of the CSQ and its associated procedures within their institution (pp.139-140). Overall, five were from HE, eighteen from FE and one from a comprehensive school 6th Form. Seven were male and seventeen female. For the twenty for whom complete biographical details were obtained ages ranged from mid twenties to early sixties; teaching experience ranged from two to forty years; all except one were teacher trained to at least City and Guilds 730 standard by the end of their participation in the study, with seven undergoing training during the course of their involvement. The twenty four teachers came from six different institutions; covered seventeen courses; and twenty subjects.

In total twelve case studies informed the research (Table 2.1). Five case studies covered HE, six covered FE and one took place in a comprehensive school 6th form. Nine case studies focused on individual teachers researching their practice

Figure 2.1 Route Map of the Study



in isolation from colleagues; one focused on a course program being taught to the same student group by three teachers who researched their practice together; one focused on a departmental setting where two teachers from the same study area researched their practice together; one consisted of a college setting where individual teachers researched their practice facilitated by trained college staff as distinct from the researcher. The duration of participation ranged from eleven to thirty months. Full details can be found in Appendix 1.1.

All teachers who participated were volunteers. This was necessary for three reasons. Firstly, ethical considerations required that all who took part consented to do so and were not forced or coerced in any way. Secondly, the CSQ which formed the basis for the research is intended for voluntary use by teachers. Lastly, because the implications for self-directed (as distinct from compulsory or imposed) professional development were to be studied it was important to consider the research within a context where teachers initiated their own review and development.

Table 2.1 The case studies (CS) informing the research (no. participants)

	Individuals	Course	Department	College
HE	CS 1 (1); 2 (1); 5 (1); 6 (1); 11 (1)			
FE	CS 7 (1); 8 (1); 9 (1)	CS 3 (3)	CS 4 (2)	CS 12 (10)
6th Form	CS 10 (1)			

The twenty-four volunteers were recruited in a number of ways. The project director made presentations about the CSQ to teachers and trainers on in-service Certificate in Education courses run at Oxford Brookes University and invited them to use the Questionnaire; seven participants were enlisted in this way. Of these seven teachers, two invited their colleagues to participate which resulted in a further three teachers volunteering. An invitation from two members of staff at one college led to the project director and researcher presenting the CSQ to all

teaching staff who were interested and culminated in the recruitment of ten participants. A request by the project director, to the head of one of the Schools at Oxford Brookes University, for teachers to pilot the HE version of the Questionnaire (see p.56) yielded two more volunteers. Another participant was recruited by the project director, at a meeting about another research project, in response to the teacher's expression of interest in researching issues surrounding teaching. Finally, one participant (T11) was the researcher's second supervisor who volunteered to use the CSQ as an aid to their understanding of this research; this participant was the only teacher known to the researcher prior to this study.

The intention was to have a variety of case studies to consider the phenomenon under a range of circumstances, although the study was restricted to those who were willing to participate. Since the case studies were not to be a representative sample from a population to which any results would be generalised, the voluntary nature of the participants was not problematic. However, it did mean that the study was potentially vulnerable to falling short of the intended number of participants and diversity of settings required for the purpose of making analytical generalisations. In the event the number of participants exceeded that originally intended but the diversity of settings was less satisfactory. Whilst this was not intended to be a comparative study of FE, HE and schools, it was acknowledged that context could have a bearing on teachers' views on, and accomplishment of, reflective practice and self-directed professional development. Consequently, it was anticipated that the impact of context would be analysed if teachers from different settings displayed different attitudes and actions in relation to the research issues. Ultimately, this intention was not fulfilled because, as the analysis proceeded, it became clear that the emerging key issues were common to all individuals regardless of setting. Yet the fact that some settings were not studied does leave the question regarding the impact of context open to further research.

The main problem concerned the variety of HE case studies. To add confidence to the findings it would have been useful for the research to have been informed by HE case studies which matched the nature of the FE 'course' and

‘departmental’ case studies. However, as time and recruiting progressed, it transpired that the nature of the HE institute from which participants were drawn was such that obtaining these case studies was unlikely. Teachers teaching on the same course program within the institution concerned was rare. Teachers collaborating with each other within departments was not widely established and, unsurprisingly, the two individuals who came from the same School did not seek to reflect and develop together. Ultimately only five ‘individual’ case studies from HE were included, with an awareness that this could limit the depth of the investigation and the extent to which the findings may illuminate similarities and differences across cases, and hence, context.

The single school case study was also unsatisfactory. Again, it would have been useful for the research to have been informed by school case studies which matched the nature of those from further education. Although an opportunity did arise for a school ‘departmental’ case study to be studied, this occurred late on in the research when it was considered that there was insufficient time to investigate it fully. Consequently, the investigation ran with only CS10 from the school sector, aware that this imposed the same limitations as those which applied to the number of HE case studies.

Finally, one further point about the composition of the case studies needs to be made with regard to the issue of gender. Although both males and females were represented in the case studies the gender perspective was not specifically considered in relation to the research questions. However, reflection on the findings has led to a point concerning gender being made in the concluding chapter (p.264).

Data collection and analysis

It was anticipated, and it transpired, that the investigation would consist of several sequential phases in which the findings of one phase would not only answer

earlier questions but also raise further questions for exploration. As a result a variety of quantitative and qualitative methods for collecting data were employed, each according to its suitability for the questions posed and the participants' situations. These included the CSQ (Harkin *et al.*, 1999) which was administered to students and teachers to obtain comparative profiles of *Actual* and *Ideal* communication style (described more fully in chapter three); feedback sessions with each teacher to discuss aspects of the CSQ data; discussion sessions with students and their teacher based on the CSQ data; use of video recordings of classroom interaction reviewed by the teacher with the students using the technique of Interpersonal Process Recall (Kagan and Krathwohl, 1967); telephone conversations; in-depth face-to-face interviews; research dissemination sessions with opportunities for teachers to take part in discussions; teacher assignments on the experience; Repertory Grid technique (Fransella, 1981); Q Sort technique (Brown, 1980); and questionnaires.

Different elements of the data were examined in different ways. Statistical techniques were employed to analyse and present the Repertory Grid data, the Q Sort data, the questionnaire data and some aspects of the CSQ profiles. This analysis used the computer software Microsoft Excel 97 and the Statistical Package for Social Sciences for Windows (SPSS) Version 9.0.0. The investigation of the remaining data took an exploratory approach involving identifying and coding categories; detecting and matching patterns across cases; highlighting important similarities and differences between cases and used the computer software Microsoft Word 97 and Microsoft Excel 97.

The precise data collection and analysis methods used throughout the investigation are explained in more detail in relation to each phase of the study as the thesis progresses.

Issues of quality

Much, if not all, research attracts questions about the trustworthiness of the results (Robson, 1993; Cohen and Manion, 1980; Yin, 1994; Miles and Huberman, 1994). Qualitative research such as these exploratory multiple case studies is often criticised for being subjective, biased, idiosyncratic, lacking in quantifiable measurable outcomes and, therefore, the credibility of the findings is deemed by some to be questionable. The findings are intimately tied up with the researchers who are actively engaged with the participants and have their own perspectives, understandings, preferences, biases, and agenda which influence data gathering and interpretation. However, for this very reason Tindall (1994) points out that there is no such thing as completely valid research which ‘represents an unchallengeable “truthful” view of reality’ (p.157). Taking a Kellyian perspective, Tindall views knowledge as a construction even when it arises from research and, therefore, it remains uncertain as the final evaluation is one particular understanding of the research process, reliant on one particular individual’s interpretation. Other individuals will have different understandings of the research. This is true even of quantitative research. Yet it is both responsible and professional to ensure that confidence in the conclusions of an investigation is maximised. In the light of this, the issues of reliability and validity have been considered and addressed.

Reliability in qualitative studies refers to whether ‘the process of the study is consistent, reasonably stable over time and across researchers and methods’ (Miles and Huberman, 1994, p.278). It is difficult to achieve total reliability in a study that involves people, as one would expect them to change to a certain extent over time. However, reliability can be assisted by ensuring the data collection procedures are standardised across settings or between people. Therefore, in this investigation protocols or procedures were used where appropriate. This occurred, for example, in the administration of the CSQ; in the feedback discussion of the CSQ data; in the later in-depth semi-structured interviews and the Q Sort. Such action allowed some comparability between the various participants of aspects of the data collection and of the same individual at different times during the study.

Validity concerns whether the research findings make sense, are authentic, and have any larger import, given the issues being studied (Miles and Huberman, 1994). Two aspects of the investigation contribute towards establishing validity. These are the multiple case studies and triangulation. The use of multiple case studies constitutes a replication strategy (Yin, 1994) which helps to strengthen the conceptual framework of the findings. The selection of a range of similar and contrasting cases for investigation allowed the conditions under which certain ideas or insights held to be determined. Through a process of confirmation and disconfirmation of underlying theories across cases, general statements about particular aspects of the findings and their generalisability could be made.

Triangulation is the use of different vantage points to verify views and insights relating to the interpretation of the findings. According to Tindall (1994) it can take five forms. Three of these were used in the investigation - data triangulation, method triangulation and theoretical triangulation. Data triangulation allows similarities and contrasts of the experiences and understandings of the participants to emerge, extending and adding depth to the descriptive and analytical processes. In this investigation it involved collecting accounts from the different participants at different stages within the duration of the case studies. Method triangulation aims to ensure that information collected is not purely the product of a particular method. To this end the investigation used a combination of methods which included interviews, copies of teachers' assignments for teacher training courses; articles written for journal publication; and dissemination sessions in which participants provided feedback on the findings. Theoretical triangulation acknowledges the complexity and diversity of situations, experiences and understandings and considers more than one theory when arriving at explanations. Therefore, although this investigation is rooted in education within the specific methodology of action research, to increase awareness and insight the data collection and analysis is also informed by other theories of development and evidence from other disciplines (see chapter five).

To summarise, the issue of quality concerns the trustworthiness of research findings. Steps have been taken, as outlined, to enable this study to adequately

access and represent the area under investigation; to responsibly and effectively examine the information collected; and to draw substantiated conclusions that will illuminate the issue of self-directed professional development.

Issues of ethics

Action research is essentially a practical and problem solving approach to development and change of social processes or situations. Consequently as this investigation demonstrates, it is intensely relational and interventionist. It is relational in the way that collaboration brings individuals and groups of individuals together to offer, exchange, discuss and confront views that are personal and intimate with a view to determining a better outcome for all. It is interventionist in the sense that it intervenes directly into people's lives - not only what they do and how, but also why they do it, exposing them to evidence and situations they may otherwise have preferred to avoid. Therefore, as much as action research has the capacity for doing or bringing about good, it also has the capacity for harm. To this end steps were taken to ensure that, as well as aiming for a beneficial outcome, the well-being, health, values and dignity of all participants were preserved.

Since much of the investigation was carried out and completed prior to the finalisation of the Oxford Brookes' Ethical Standards for Research involving Human Participants, other ethical guidelines were adopted for the investigation. These principally were those associated with the British Educational Research Association and the British Psychological Association. However, broadly speaking, the following four issues used to guide this research process conform to the later Brookes guidelines: informed consent, protection of participants, confidentiality and anonymity, and accountability. All participants - teachers and students, who were all aged 16 or over - were orally informed at the outset and at each subsequent stage about the purposes of the research, the nature of the CSQ, and the content and consequences of their anticipated involvement; all were advised of the voluntary nature of their participation; agreement to participate was

actively requested and all were reminded that they could withdraw at any point during the research. This latter option was especially important for those who felt exposed or vulnerable during reflection (whether teacher or student), since they knew they could bring a halt to their part in the proceedings if necessary. It was stressed to everyone that anonymity and confidentiality were ensured. This was important to the students who needed to know that their responses could not be traced to them as individuals by the teacher when completing the CSQ; and for teachers when findings were disseminated. Means to maintain this in respect of the storage of information and data relating to all participants have been taken. Accountability was built into the investigation by regularly disseminating the findings, principally to the teachers involved, through group feedback sessions and written summaries, and asking participants for their comments for verification and further consideration. Lastly, where requested any additional guidelines of the institutions in which the research took place were adhered to.

The Communication Styles Questionnaire and Phase One

With this outline of the investigation in mind, chapter four describes Phase One of the study. The purpose of this first phase was to engage teachers in reflective practice which was aimed at bringing about improvements in teaching and learning without the application of any particular model to facilitate the experience. Through their use of the CSQ it was anticipated that some teachers would develop aspects of their communication style that could enhance teaching and learning. If so, this would provide the basis both to examine the manner in which self-directed improvements in teaching and learning were achieved and consider the influences on teachers' participation in, and their accomplishment of this activity.

However before proceeding to Phase One, chapter three provides a full description of the CSQ - its purpose; its development; its use and early findings from research in which it was used. This instrument is integral to the study,

forming the basis of each teacher's reflective activity and the foundation for any subsequent self-directed professional development.

CHAPTER THREE

THE COMMUNICATION STYLES QUESTIONNAIRE

Introduction

The purpose of this research, explained in chapter one, is to investigate how self-directed improvements in teaching and learning may be facilitated in order to encourage teachers' participation in, and enable their accomplishment of, reflective practice. The first phase of the investigation, mentioned at the end of chapter two, is to create an opportunity for teachers to engage in reflective practice aimed at bringing about improvements in teaching and learning, without the application of any particular model to facilitate the activity. This experience would be created through the teachers' use of the Communication Styles Questionnaire (Harkin *et al.*, 1999).

The Communication Styles Questionnaire (CSQ) is a means by which teachers in post-compulsory education settings may, alone or with colleagues, review how they tend to interact with their students. The CSQ is completed by teachers and their students in two formats. The *Actual* format elicits the teacher's and the students' perceptions of the interaction that occurs routinely; the *Ideal* format elicits the respondents' perceptions of how they would prefer to interact. The subsequent communication style profiles arising from the Questionnaire provide a focus for reflection on, and the possible development of, the patterns of teaching and learning.

This chapter describes the CSQ - its purpose; its nature; its use and early findings from research in which it was used. These indicate the suitability of the CSQ for forming the basis for teachers' reflective activity aimed at improving teaching and learning.

The purpose of the Communication Styles Questionnaire

The decision to research a communications styles questionnaire arose from work on developing the key skills units for communication where it emerged that many teachers in English 16-19 education, although committed to developing the language skills of their learners, felt that they themselves lacked the knowledge necessary to do this (Oates and Harkin, 1994). Few had received training in language development, received little help in communicating with their learners, had little conceptual understanding of the nature of human communication, and lacked a vocabulary to discuss interaction with their learners. Since interpersonal communication is an important dynamic in effective teaching and learning, teachers needed help to redress this situation. The CSQ is aimed at providing such assistance.

Teaching is a complex activity that is affected by, among other things, the subject matter, the time available, the character of the teacher, the dispositions of the learners, resources, and the ethos of the institution. It follows that, although certain features (such as interpersonal communication) are important in effective teaching and learning, there is no absolutely right or wrong way to teach and that teachers need to vary their approach according to particular circumstances. Therefore, the CSQ is not intended as a means for judging or classifying teachers as good or bad in any absolute sense, or better or worse than others. Instead it is intended to facilitate thought and discussion about teaching styles; help teachers who wish to do so to broaden their repertoire of communication to teach more effectively, in particular allowing more learner autonomy; and provide a way for reviewing the opportunities for students' development of key skills, such as communication and working with others. By questioning all participants in the classroom - students as well as teachers - an accurate picture can be obtained of the nature of the day-to-day communication, upon which teachers and learners may reflect and use as a basis for discussion.

Thus the development of the CSQ was considered worthwhile for three purposes - to improve teachers' pedagogic knowledge; to help foster more autonomous learners; and to develop key skills in communication and working with others.

To improve teachers' pedagogic knowledge concerning communication

Primarily what teachers do is communicate. But as has already been mentioned in chapter one (p.17), this is often carried out in isolation from other teachers and with little feedback from, or discussion with, either colleagues or students about the patterns of interaction they tend to use. Therefore, teachers lack a comprehensive view of how they are communicating with their students. Furthermore, as was also pointed out in chapter one, although reflective practice encourages teachers to review even their habitual actions, a conceptual framework for critically considering such activities with a view to improving teaching and learning where appropriate, is not always available. Consequently, teachers lack the means to assess the effectiveness of their communication.

The development of the CSQ set out to address these issues. The questionnaire provides teachers, who desire more detailed feedback about how they communicate with students, with a mechanism to obtain this in a valid and reliable way. It offers a vocabulary that teachers and learners can use as a foundation for exploration and discussion of classroom interaction. In addition, the model on which the CSQ is based, described later in this chapter, provides teachers with a conceptual framework to critically reflect on their habitual practices, either alone or with colleagues.

To help teachers foster more autonomous learners

The second reason for developing the CSQ was to provide a staff development instrument by which, if they choose to do so, teachers could adapt their teaching style to encourage more autonomy on the part of the learners. The notion that learner autonomy is desirable was alluded to in chapter one (p.4) when reporting studies that show that, when students are released from the power and authority of

'teacher talk' to interact collaboratively with their peers, learning gains can occur from the resultant freedom to shape their own understanding and construct and organise their own learning. In keeping with such studies, there is widespread support for the encouragement of greater learner autonomy in further and higher education, with an emphasis on skills and attributes such as communication, problem-solving, improving one's own learning and working with others. This has come from a number of quarters - educators who desire to engage learners more actively in the process of learning and to equip them more appropriately for work and adult life; teachers who advocate education as democracy and wish to develop more democratic educational processes; employers who require skills and attributes characteristic of effective employees; and policies of successive governments who want higher student numbers but at a lower cost per capita.

However, whilst learner autonomy is an encouraged educational objective, there are few means to assess the extent of students' responsibility for their own learning and to determine how this can be facilitated. To this end, the CSQ is intended to offer a way both to identify the degree of learner autonomy and to highlight areas of classroom interaction that may be developed or modified where desired to increase this educational ideal.

To develop key skills in communication and working with others

The third reason for the development of the CSQ relates to the fact that key skills in communication and working with others are now part of many learning programmes in post-compulsory education. The development of these skills requires an environment in which teachers teach less didactically; create more interactive classrooms where learners work more closely together in groups; and enable a lot of oracy, including the use of language to explore ideas and to present findings. However, as chapter one showed (pp.7-12), such learning environments are not the norm and, as Oates and Harkin (1994) discovered, many teachers perceive they lack the confidence and knowledge to facilitate this kind of interaction.

Therefore, a third purpose of the CSQ was to help teachers to review whether sufficient opportunities exist for students to develop these key skills, and to highlight aspects of the learning environment that could be improved to promote skill development.

The development of the Communication Styles Questionnaire

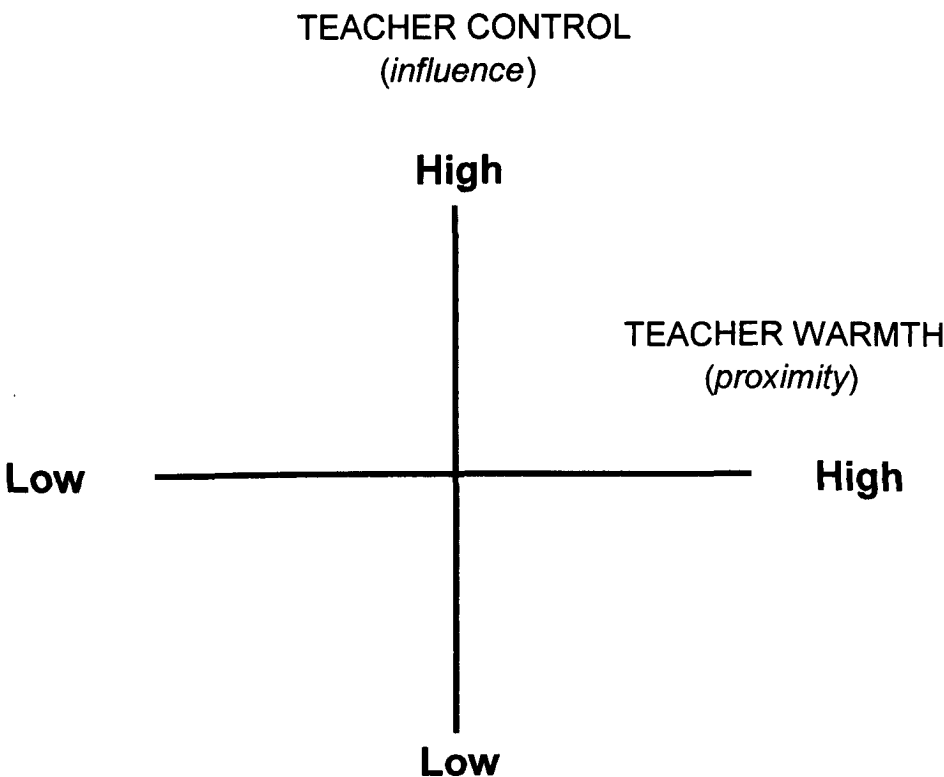
The CSQ, for use in post-compulsory education, is founded on the Questionnaire on Teacher Interaction (QTI) developed by Wubbels and colleagues at the University of Utrecht for use by secondary school teachers (Wubbels and Levy, 1993). It elicits the views of learners as well as the teacher because classroom interaction is regarded as a reciprocal system. It concentrates comprehensively on interaction in the classroom, and provides representations of that interaction based on the perceptions of all participants. This is achieved by teachers and students completing the CSQ in two formats. The *Actual* format elicits perceptions of the interaction that occurs routinely; the *Ideal* format elicits perceptions of preferred interaction. The subsequent communication style profiles provide a focus for reflection on, discussion about and possible development of teaching and learning.

The theoretical framework

The theoretical framework of the CSQ is that of human interaction derived from clinical and social psychology (Leary, 1957; Argyle, 1982). The underlying assumption is that human interaction can be described by two independent factors: *influence*, running from dominance to submission, and *proximity*, running from opposition to co-operation. Consequently, in a teaching situation *influence* assesses who controls the interaction by measuring the dominance of a teacher and the extent to which learners are active and responsible for their own learning. Thus a high *influence* rating would indicate that it is the teacher who controls the interaction. *Proximity* assesses the degree of warmth or affectivity in the teaching situation by measuring the extent to which a supportive relationship exists between teacher and students, actively encouraging students' participation. Thus,

a high rating for *proximity* would indicate that the teacher has fostered a co-operative learning environment. Therefore, this model allows for any teacher behaviour to be thought of in terms of a degree of influence and a degree of proximity. For the purposes of aiding comprehension of the CSQ the terms are referred to as *control* and *warmth* respectively (Figure 3.1).

Figure 3.1 The factors of the CSQ Model



The theory of human interaction asserts that these factors of *warmth* and *control* encompass different kinds of interpersonal behaviour which can be categorised. Eight categories representing four bi-polar dimensions of interpersonal behaviour are consequently defined which allow the two independent factors to be more fully described and enable the components and style of an individual's overall communication pattern to be identified. For teaching in English 16-19 education the eight categories, (called scales in the CSQ results), representing the four bi-polar dimensions identified during the development of the CSQ, are: *High*

Standards - Lenient and *Learner Autonomy - Authoritarian*, which relate to the *control* dimension; and *Leadership - Uncertain*; and *Understanding - Dissatisfied* which relate to the *warmth* dimension. The behavioural characteristics associated with each scale are shown in Tables 3.1 and 3.2.

Table 3.1 Scales of Communication used by the CSQ - *Warmth* Factor

<p>Dissatisfied e.g. teacher:</p> <p>Displays a pessimistic view of students, as people who are unable to act responsibly or to learn successfully.</p> <p>Takes little or no interest in students as individual persons.</p> <p>Is heavy-handed in criticism, undermining learner self-confidence.</p> <p>Is prone to sarcasm and/or anger.</p> <p>Instils a negative opinion of learner potential.</p>	<p>Leadership e.g. teacher:</p> <p>Appears to be a dependable, ‘safe’ pair of hands</p> <p>Understands the subject and its assessment.</p> <p>Designs learning activities with a particular group of students in mind.</p> <p>Is prepared to change tack and vary activities to enhance learning by, for example, drawing on learner experience and interest.</p> <p>Is confident enough to share jokes and humour with students.</p> <p>Instils respect for the teacher.</p>
<p>Uncertain e.g. teacher:</p> <p>Appears unsure of the subject and/or the assessment requirements.</p> <p>Displays a weak grasp of the learning needs of a particular group of students.</p> <p>Changes tack for no apparent reason and/or responds too much to student red herrings</p> <p>Instils disrespect for the teacher.</p>	<p>Understanding e.g. teacher:</p> <p>Displays an optimistic view of students as people who are capable of acting responsibly and of learning successfully.</p> <p>Knows individual students by name</p> <p>Monitors individual performance and gives help when needed.</p> <p>Takes an interest in students beyond their role as learners.</p> <p>Instils self-respect and confidence in learners.</p>

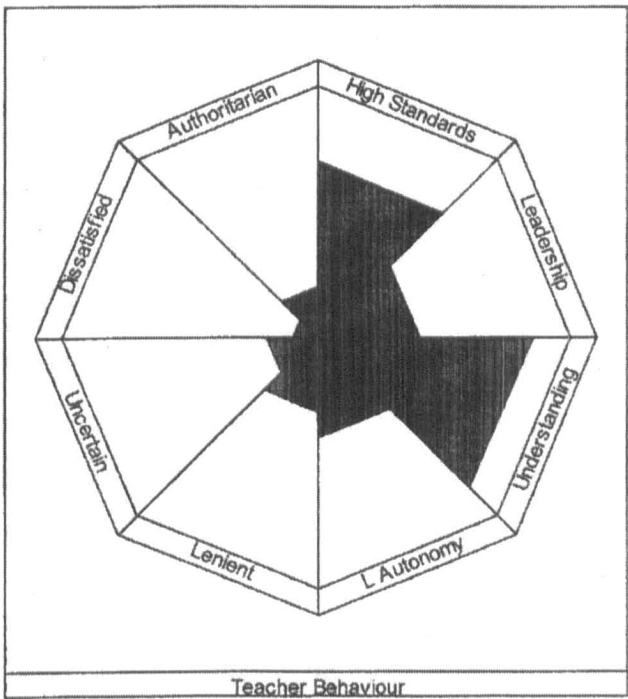
Table 3.2 Scales of Communication used by the CSQ - *Control* Factor

<p>Authoritarian e.g. teacher:</p> <p>Prefers students to be quiet and passive, to listen and take notes.</p> <p>Dominates interaction, even during discussions.</p> <p>Uses assessment to control and motivate.</p> <p>Instils fear of learning and of the teacher.</p>	<p>High standards e.g. teacher:</p> <p>Is punctual</p> <p>Is well prepared to teach</p> <p>Has high expectations of student effort and performance.</p> <p>Is fair in assessing against criteria and gives useful, critical feedback.</p> <p>Will not tolerate bullying or other offensive behaviour</p> <p>Instils respect for learning.</p>
<p>Lenient e.g. teacher:</p> <p>May not be punctual</p> <p>Is not well prepared to teach</p> <p>Has low expectations of student effort and performance.</p> <p>Is lenient in assessment, passing poor quality work.</p> <p>Fails to control student behaviour and may abdicate responsibility for this.</p> <p>Instils lack of respect for learning.</p>	<p>Learner autonomy e.g. teacher:</p> <p>Encourages students to play an active role in learning by, for example, consulting them about activities, setting work that challenges them to find out for themselves and to solve real-life problems.</p> <p>Encourages student-student, as well as teacher-student interaction.</p> <p>Uses self and peer assessment to help learners understand what they know and still need to learn.</p> <p>Instils independent learning.</p>

The theoretical model allows for human interaction to be represented graphically. In this representation the scales are shown as equal sectors forming a regular octagon superimposed on the *warmth* and *control* factors (Figure 3.2). Each scale correlates most strongly with the scales next to it and most negatively or weakly with the scale opposite. Each sector is shaded appropriately with the proportion of time the behaviours within a scale are perceived to be present in an interaction. Thus, at one extreme, a sector without any shading indicates that the behaviours in that scale are never displayed. At the other extreme, a sector that is completely shaded indicates that the behaviours in that scale are always displayed.

Ultimately, this octagon creates a profile representing an individual's pattern of interaction within a particular setting. In the case of the CSQ this profile represents a teacher's communication style with a particular class.

Figure 3.2 Octagon profile



Development of the CSQ

The original QTI, consisting of 48 statements, was designed for use in secondary schools in the Netherlands, and later adapted for use in the USA, Australia and Israel. The initial research for an English version focused on English 16-19 education and indicated that there were substantial difficulties with adopting the QTI for use in the English context. Statistical analysis of the QTI, which had been administered in its original format to 66 volunteer teachers and 992 students in six further education colleges, showed that internal consistency of the scales was weak and that the structure of the data did not compare well with the theoretical model. In addition, video observation of whole lessons and subsequent

student-teacher discussions of sequences of interaction from those lessons showed that the QTI failed to differentiate adequately between the different teaching styles observed. For instance, profiles of more authoritarian teachers with a more didactic style were hardly discernible from teachers with a more relaxed approach who tended to use small group work (Harkin and Davis, 1996b). Consequently, the questionnaire was revised in response to the statistical analysis on the QTI, the data from the video observations and the classroom discussions, resulting in the CSQ.

The initial CSQ contained 75 statements (Appendix 2.1), relating to issues that research has concluded are involved in effective teaching and learning, as discussed in chapter one. These included the original 48 statements from the QTI plus a further 27 statements, added as a result of the weaknesses found with the QTI. These additional statements were considered pertinent to English further education, especially with regard to increased learner autonomy and to interactive modes of teaching and learning and would, therefore, assist differentiation between teaching styles.

The CSQ for English 16-19 education was administered to 30 volunteer teachers and 358 students from nine post-compulsory settings. From this sample, 10 teachers agreed to video observations of whole lessons and subsequent sessions of discussion with their students using Interpersonal Process Recall (IPR) developed by Kagan and Krathwohl (1967) to elicit more detail about patterns of classroom interaction and to validate the results of the CSQ data.

Validation of the CSQ focused on the *Actual* questionnaire completed by the students, in accordance with the precedent set by the QTI. This approach was considered most appropriate since it was important that teachers received reliable feedback from their students about their interpersonal behaviour (Wubbels *et al.*, 1993). The statistical analysis confirmed the data broadly adhered to the theoretical model and that the scale measurements were reliable (Harkin *et al.*, 1999). Principal Components analysis indicated two underlying contrasting

dimensions which could be deemed to represent the *control* and *warmth* factors. It also confirmed that the positioning of the eight scales approximated to a regular octagon shape when superimposed on the *control* and *warmth* factors, although a better fit was desired. Cronbach's Alpha confirmed the scales had adequate internal consistency (although there was room for improvement) and, therefore, the items within a scale referred to the common concept they were deemed to represent.

The statistical findings were backed up by the video recordings of lessons, followed by the IPR feedback. Joint discussions between the researchers, teacher and students showed that the patterns of interaction revealed by the CSQ corresponded with teacher and student perceptions. Consequently, these confirmed that the new questionnaire was able to differentiate between the range of communication styles found in English 16-19 education.

Shortcomings were identified by the statistical analysis - the positioning of the scales in an octagon shape around the two factors could have been better, and the reliability of some of the scales was no more than adequate. Yet, it was considered that the CSQ, adapted from the QTI, could be used by teachers as a reliable source of information about their classroom interaction. A 'good enough' adherence to the theoretical model was considered acceptable for the questionnaire to be used as the basis for a teacher's reflection on their communication style.

However, development of the CSQ has continued, partly in response to the statistical findings. This has taken two forms. Firstly, in English 16-19 education, the original CSQ containing 75 statements has been revised and revalidated. The revision increased the utility of the questionnaire and improved the levels of internal consistency. Consequently, by dropping or re-wording existing statements and adding new ones, a reduction in the overall number to 64 statements plus increased reliability have been achieved whilst maintaining adherence to the theoretical model (Appendix 2.2).

Secondly, a CSQ for higher education (HE) is being developed. Whilst the theoretical framework is applicable to HE, some questions in the CSQ for further education were not considered relevant to the HE context. Consequently, the CSQ has been modified for HE. After piloting a 74 statement questionnaire (Appendix 2.3), a CSQ containing 73 statements has been adapted from the original, dropping statements considered unsuitable and adding new ones considered more appropriate to the more mature nature of HE students (Appendix 2.4). Although this is currently in the final process of validation, for the purposes of this research, the CSQ (HE) used by teachers in this study does adhere to a 'good enough' fit to form the basis of self-directed reflection on patterns of teacher-student interaction in HE.

Using the Communication Styles Questionnaire

The Communication Styles Questionnaire is intended for voluntary use by a teacher with a group of their students, who also consent to participation. It is normally administered only after the first month of a teacher's work with the group to enable a communication style to be established and a routine pattern of teacher interaction to be measured. Both the teacher and the students are then in a position to rate each statement relating to interpersonal communication on a 5 point Likert scale. A rating of 1 indicates that a communicative behaviour is 'Never' displayed; a rating of 5 indicates that a communicative behaviour is 'Always' displayed. Ratings of 2, 3 and 4 represent in-between frequencies. These statements are answered by both teacher and students in two formats, *Actual* and *Ideal*. The *Actual* format elicits the respondents' perceptions of the interaction that occurs routinely; the *Ideal* format elicits the respondents' perceptions of the interaction as they would prefer it to be. Consequently, a teacher receives details of four different perceptions on classroom interaction on which to reflect.

Each statement in the CSQ reflects the characteristics associated with one of the eight scales of communicative behaviour (Table 3.3). Thus the proportion of time

a particular scale of communicative behaviour is perceived to be displayed (*Actual*) or desired (*Ideal*) relates to the responses to the statements which form the basis of that scale. This proportion is calculated by applying a formula to the combined ratings for the statements within a scale and results in a numeric score between 0 and 1. Consequently, at one extreme, a score of 0 suggests that the behaviours in a scale are never displayed or desired. At the other extreme, a score of 1 suggests that the behaviours in a scale are always displayed or desired. Once the scores for every scale have been calculated, the overall communication style can be described.

Table 3.3 Sample statements associated with the CSQ scales

<p><i>High Standards</i></p> <p>I demand that work is handed in on time</p>
<p><i>Leadership</i></p> <p>I hold the students' attention</p>
<p><i>Understanding</i></p> <p>I help the students with their work</p>
<p><i>Learner Autonomy</i></p> <p>I allow the students choice in what they study</p>
<p><i>Lenient</i></p> <p>I let the students fool around in class</p>
<p><i>Uncertain</i></p> <p>I am not sure what to do when the students fool around</p>
<p><i>Dissatisfied</i></p> <p>I put the students down</p>
<p><i>Authoritarian</i></p> <p>The students need my permission before they speak</p>

The results from the CSQ, describing the communication styles arising from the four questionnaire formats, are presented in both graphic and tabular form, with the students' results representing a class average.

Octagon shaped graphs summarise the four sets of results side by side (Appendix 3.1). Each sector is shaded to correspond with the calculated scale score described earlier. Consequently, a completely unshaded sector represents a score of 0 whilst a fully shaded sector represents a score of 1. Scores between 0 and 1 are shaded intermediately as appropriate. These Octagons are supplemented by a bar chart (Appendix 3.2) and a statement of the scale scores (Appendix 3.3). All of these items indicate the proportion of time a particular scale of communicative behaviour is perceived to be displayed (*Actual*) or desired (*Ideal*). Together, they provide an overview of the perceptions of the general characteristics of a teacher's communication style, allowing similarities and differences between the various participants' views to be seen at a glance.

Accompanying these three items is a detailed breakdown of the ratings given to each individual statement within a scale, for each format of the questionnaire (Appendix 3.4). This breakdown enables a teacher to identify the contributions made by specific communicative behaviours to the overall pattern indicated by the other results. Altogether, these four items provide a comprehensive basis for reflection, discussion and possible development.

Interpreting the results and using them as a basis for reflection requires being mindful of both meaning and context. Regard for meaning is important because the results are based on perceptions and not facts. Individuals have responded to the CSQ according to how they have construed the meaning of the statements in the questionnaire and in light of their own interpretation of the reality of the classroom interaction. Attention to context is necessary because there are constraints upon the way that teachers may communicate. Teachers are not free to interact with learners in any way they wish. Communication is an interactive process and learners, as well as teachers, determine what is possible in a particular

situation. Therefore certain guidelines are recommended to assist a teacher with their exploration of the results. These are as follows:

- Firstly, the teacher considers the octagon profiles and the statement of scale scores, highlighting and deliberating the possible meaning of :
 - any scales which show a difference of 0.1 or more between the *Actual* and *Ideal* scores of the teacher or students;
 - any scales where the teacher's score (*Actual* or *Ideal*) differs from the corresponding students' score by 0.1 or more;

giving particular attention to scales which show a difference of 0.1 or more in the same direction between *Actual* and *Ideal* scores of both the teacher and students;

- Secondly, the teacher considers the detailed breakdown of the ratings to each individual statement within a scale, again highlighting and deliberating the possible meaning of:
 - any statements which show a difference of 1.0 or more between the *Actual* and *Ideal* ratings of the teacher or students;
 - any statements where the teacher's score (*Actual* or *Ideal*) differs from the corresponding students' ratings by 1.0 or more;

giving particular attention to statements which show a difference of 1.0 or more in the same direction between *Actual* and *Ideal* ratings of both the teacher and students;

- Lastly, the teacher considers three things in response to their review of the results:
 - whether any development of the way in which they communicate with their learners is indicated;
 - whether any such development is feasible given the context in which they live and work;
 - whether they desire to implement any such development.

Reflecting on the results in this manner helps a teacher to focus on specific aspects of their communication style which, taken at face value, seem to suggest significant differences between the various perceptions. The numeric values of 0.1 and 1.0 selected to identify the differences in scale scores and statement ratings respectively, were a pragmatic choice. Since individuals' perceptions differ to a greater or lesser extent from each other, some variation between the responses to the various formats of the CSQ is to be expected. Therefore, it is necessary to determine a point at which it becomes worthwhile to consider differences between perceptions as possibly containing some real meaning. Thus it was thought that the values chosen should represent the least difference between responses that a teacher should consider, having the added advantage of being easy to identify.

Teachers may reflect on their results alone but it is recommended that the data is reviewed with a facilitator, preferably a colleague, who is trained in the use and sensitive interpretation of the CSQ. In this way it is anticipated that more interesting and probing insights will be gained within a supportive atmosphere. Where a teacher chooses to review their results in this way it is important to remember that the facilitator's role is to help a teacher to interpret the feedback in light of the teacher's own context and knowledge of their students. If, during the conversation, any desired changes in how a teacher communicates with their learners is identified, these changes should arise from a teacher's own perceptions of desirable professional development and, therefore, should be self-directed. Teaching style is something personal to an individual and rarely responds to enforced change. The CSQ and its guidelines are intended to help teachers, in a non-threatening process that is controlled by the teacher, to identify aspects of their teaching style that they themselves consider suitable for development.

Use of the CSQ is beneficial to individual teachers. It is also hoped that it will be useful to groups of teachers working with a particular group or groups of students who wish to develop their team approach to communication styles. The CSQ results for an individual teacher may depend in part on the teaching styles of colleagues in contact with the students, since students may judge behaviour

relative to their other experiences of learning. The questionnaire may be of most use, therefore, when used collaboratively by small groups of colleagues interested in developing their teaching styles together. When teams or groups of staff use the CSQ, it is expected that useful discussions will take place about different patterns of communication, even with the same students. Working with colleagues in this way may enable teachers who wish to develop their communication styles to benefit from the group's wider experience, support and encouragement.

Furthermore, it is suggested that teachers give consideration to sharing some or all of their CSQ results with their students. Through discussion this provides another opportunity to consider the meanings of any differences highlighted during earlier reflections and the appropriateness of any proposed development. It opens up a dialogue that can lead to further insights into students' perceptions of communicative interaction in the classroom, and their thoughts and feelings about the process of teaching and learning. From this the appropriateness of a teacher's communication style, and the need for any development, can be greatly informed. It is recommended that any teacher-student discussion takes place after an initial interpretation of the results but prior to planning or implementing any changes in communication style.

Preliminary findings of communication styles of teachers in English 16-19 education

Evidence of communication styles of teachers in English 16-19 education has been gathered from phases of the CSQ Project prior to the research upon which this thesis is based. This earlier evidence indicates that those teachers volunteering to use the CSQ in further education are communicating effectively with scores between moderate to good being observed for most scales (Harkin and Davis, 1996a; Harkin and Davis, 1996b; Harkin and Turner, 1997). There is much agreement between teachers' and students' perceptions of *Ideal* and *Actual* behaviour. Most teachers perceive themselves to be providing a purposeful and

coherent structure for learning, in which there is co-operation between teachers and learners. This view is matched by that of the students who perceive a majority of the teachers to display relatively high *warmth* and high *control* behaviours. Teachers believe that, ideally, they should get closer to the students, display more behaviours relating to the *warmth* factor and generally create a more supportive environment for learning. This too is mirrored by their students who desire a greater degree of *warmth* in the interaction (Harkin and Davis, 1996a). These findings not only suggest that these teachers are doing a good job but, also, that in desiring an *Ideal* that could be even more effective, the *warmth* dimension is considered to be more important than that of *control* (Harkin and Davis, 1996b). This is seen across differences of learning programme, sex and age.

However, whilst this overview of teachers' communication styles is encouraging there are differences between perceptions of those participating in classroom interaction. Firstly, teachers accentuate the positive qualities in their behaviour; compared with their students' perceptions: teachers see themselves setting *higher standards*; displaying better *leadership* qualities; showing greater *understanding*; and allowing more *learner autonomy*. In addition a teacher's *Ideal* is similarly higher than that of their students. This has resulted in learners, in general, wanting teachers to ideally behave more like the teachers' perceptions of how they actually behave (Harkin and Davis, 1996b; Harkin *et al.*, 1997).

Secondly, there are perceived differences in the degree of *warmth* and *control* displayed by teachers. Students taking GNVQs indicate that they experience less teacher *control* and more teacher *warmth* than that experienced by students on BTEC and A level courses. In other words, teachers on outcome-based programmes such as GNVQs, whilst displaying good management of learning, are less concerned to control classroom activities and use warmer, more supportive communication styles than teachers of other programmes (Harkin and Davis, 1996b). In addition female teachers, compared with male teachers, are perceived by students to display more *warmth* and less *control*. Women are seen to give students more autonomy over their learning, are less lenient in accepting poor

quality work, are more confident in their work and more satisfied with their students (Harkin *et al.*, 1997).

Thirdly, perceptions of levels of *learner autonomy* are not uniform. Students on more traditional courses (GCSE/ A levels) experience much less control over their learning than do their counterparts on GNVQ courses, a view that is echoed by their teachers. Students and teachers also agree that learners of language oriented subjects such as English and communication experience the highest level of control over their learning whilst those studying more technical and mechanical subjects (engineering, woodtrades and mathematics) experience the least. Where students and teachers disagree is over the *Ideal* degree of *learner autonomy*: learners on all types of programmes (A level, GNVQ, BTEC) would like to be given more responsibility for their learning whereas teachers would prefer to give them less (Harkin and Davis, 1996b).

These patterns show that, even amongst those who volunteer to use the CSQ, a wide variety of communication styles are present. Interpreting why these patterns have arisen requires caution. Concerning course type, perhaps learners having to take more responsibility for their own learning as part of the newer initiatives such as GNVQs actively encourages teachers to allow greater student control in these classes when compared with those of a more traditional nature, at the same time being mindful of the need to provide a greater level of support (Harkin and Davis, 1996a). Differences between gender can probably be attributed to the obvious - women, in general, may be less dominant and better at providing social support than men; therefore, they allow greater student control and appear warmer than male colleagues. Differences between subject areas may depend on how the teacher views their task within a given discipline - whether this is to encourage students to create their own personal meaning through active participation and exploration of their own thoughts or to transmit facts in a passive receptive process. Such differences in approach were observed by Barnes (1969) between those teaching English, and those teaching maths and sciences.

Determining whether these results indicate that changes in communication style are warranted should also be approached with caution, particularly bearing in mind that the CSQ is not intended as a measure of classifying or judging teachers. The initial impression is that all is well with the process of teaching and learning in English 16-19 education since, on the face of things, the communication styles displayed by the teachers in this sample are generally effective, showing a high degree of both control and warmth. However, two things make further enquiry and debate desirable.

Firstly, the teachers from whom this data arose were volunteers, and, therefore, are probably more able teachers than those who would have been questioned if a random sample had been possible. Therefore, it is likely that the profiles seen from these volunteers are not typical of the general population of teachers. In reality, a different picture of classroom interaction might be the case; the variety of communication styles may be greater and the differences between teacher and student perceptions more contrasting. If so, it could be appropriate to suggest that reflection should be aimed at developing a wider, more flexible range of communicative style.

Secondly, evidence from the early research indicates that even when teachers' communication styles are perceived to be effective, there may yet be room for both improvements in, and debate about, patterns of effective teaching and learning. This is seen most clearly in the differences observed across a variety of perceptions. Both a teacher's and their students' *Ideal* perceptions are higher than that of their respective *Actual*, implying that each party desires the process of teaching and learning to be different from and, therefore, possibly better than, that being experienced. Differences also exist between a teacher's *Actual* perception of their communication style and that perceived by their students, which suggest that teachers may not be communicating what they think they are communicating and, thus, perhaps is an indication that changes or improvements may be required. Differences in *warmth* and *control*, noted across a number of programmes, convey the impression that there is a need to create a more supportive environment for some students, whilst differences in *learner autonomy* across a number of subjects

as well as programmes show the need for some students to be allowed to exercise more responsibility for their learning. Lastly, differences between a teacher's *Ideal* and that of their students suggest that the expectations and ultimate aims of each party may be dissimilar and, consequently, what may be perceived as a desirable improvement by one could be perceived as undesirable by the other. This implies that intended improvements in a teacher's communication style could benefit from prior explanation, discussion and, possibly, refinement between the parties if more effective opportunities for teaching and learning are to result and disappointment, dissatisfaction and unfulfilment are to be avoided.

Overall, these initial findings highlight the need to promote discussion about patterns of teaching and learning between all participants' in the process, including students. Obviously, the differences noted in perceptions between those involved in classroom interaction may or may not have a basis in reality. However, these differences should be explored to identify the extent to which they require resolving, and to open up possibilities for mutual development of more effective learning opportunities.

The suitability of the Communication Styles Questionnaire for this research

This overview of the CSQ indicates that it is a suitable instrument for use by this research into self-directed professional development. There are five reasons which make it an appropriate choice for engaging teachers in an activity of reflective practice which is aimed at bringing about improvements in teaching and learning, without the application of any particular model to facilitate the experience.

Firstly, the CSQ is focused on interpersonal communication and its importance in the effectiveness of teaching and learning, as outlined in chapter one. It highlights communicative behaviour which involves the use of language, the opportunity for

social interaction and the degree of affect present within the teacher-student relationship. The two formats of *Actual* and *Ideal* allow for a comparison between routine classroom interaction and possibilities that could bring about more effective learning opportunities.

Secondly, the CSQ is intended as a useful aid for reflective practice with a view to teachers directing their own development of teaching and learning. By providing teachers with a perspective other than their own (i.e. their students' view); and a theory and a vocabulary with which to describe and discuss how they tend to interact with learners, the CSQ can help teachers to stand outside their own perceptions. Through an examination of how they and their students perceive current practice and future possibilities, it is hoped teachers will be encouraged to critically enquire into how the situation might be changed for mutual benefit. Consequently, it may help reflective practice to become more than a means of evaluating and accounting for competence, as described in chapter one.

Thirdly, the CSQ has been validated and, therefore, is a valid and reliable instrument. It offers a relatively simple, inexpensive, quick and realistic way of accurately recording the perceptions of the teacher and their learners and, consequently, of uncovering shared understandings and areas of differences about patterns of classroom interaction. Therefore, it is a sound basis on which teachers can begin to reflect on their interpersonal communication with a view to improving the process of teaching and learning.

Fourthly, the CSQ is flexible. It can be used with or without the application of any particular model to facilitate the experience of reflection. It can be used by a teacher on their own or in collaboration with colleagues. It can be used by a teacher with one or more of the student groups. It can be used across the wide variety of post-compulsory education programmes and subjects.

Fifthly, the findings from the use of the CSQ confirm the need to consider improving the process of teaching and learning. Whilst the CSQ is not meant as a means of judging teachers, there is an underlying suggestion that high levels of *high standards, leadership, understanding and learner autonomy* create the kind of interpersonal communication described in chapter one as important to effective teaching and learning. Teachers displaying these behaviours are likely to provide the type of learning environment in which the shared use of language between teacher and learners is evident; peer interaction is allowed and is used to encourage students to take responsibility for their own learning; and a co-operative and supportive relationship between teacher and learners exists. However, the findings show that, in reality, the learning environments in English 16-19 education do not always reflect this supposition. Therefore, a review of teaching and learning by individual teachers is to be encouraged through the use of the CSQ, with a view to assessing the appropriateness of the classroom interaction and the merits of alternatives.

Conclusion

The investigation into facilitating self-directed improvements in teaching and learning in order to encourage teachers' participation in, and enable their accomplishment of, reflective practice could be accomplished through the use of the CSQ. Through its purpose, development, use and the research findings derived from it the questionnaire indicates that it is suited to engaging teachers in a reflective activity which is aimed at bringing about improvements in teaching and learning, without the application of any particular model to facilitate the activity. The subsequent experience of the teachers using the CSQ in the research should provide information for examining the manner in which self-directed improvements in teaching and learning are achieved and for considering the influences on teachers' participation in, and their accomplishment of, this activity.

Consequently, on this basis, Phase One of the research proceeded. The voluntary use of the CSQ was offered to teachers as a means to explore their interpersonal

communication with one or more student groups, with a view to developing a wider, more flexible style of communicating to enhance teaching and learning. This is,described in chapter four.

CHAPTER FOUR

CREATING THE OPPORTUNITY FOR SELF-DIRECTED IMPROVEMENTS IN TEACHING AND LEARNING

Introduction

In order to examine the manner in which self-directed improvements in teaching and learning are achieved and to consider the influences on teachers' participation in, and accomplishment of, this activity, it was decided that Phase One of the study would observe instances of reflective practice aimed at bringing about improvements in teaching and learning without the application of any particular model to facilitate the activity. To create these opportunities teachers were offered the use of the CSQ, on a voluntary basis, to review their interpersonal communication with a view to developing a wider, more flexible repertoire of communication style where appropriate, which could enhance teaching and learning.

This chapter sets out Phase One of the investigation which concerned the creation of opportunities for self-directed professional development. It details the case studies involved; explains the research and data collection methods used; reports the outcomes and their implications; and indicates the second phase of the research.

Design of Phase One

Case study participants

The teachers who form the case studies joined the investigation over a period of time. Twelve teachers were involved in this first phase, from Case Studies (CS) One to Nine. The time frame was March 1998 to July 1999.

Research Methods

A variety of methods were used to create this opportunity for reflective practice and for determining teachers' responses to the experience.

Reviewing teaching and learning

Four methods were offered to assist the review of teaching and learning - the CSQ; a feedback session; teacher - student discussions; and video observations. All teachers participated in using the CSQ and a feedback session. Seven chose to engage in discussions with their students. Two chose to undergo video observations.

The CSQ formed the foundation of the activity in Phase One. The revised CSQ for FE containing 64 statements was used by those teachers who worked in either a school 6th form or a college of further education (Appendix 2.2). For teachers at the university, with one exception, the CSQ for HE containing 73 statements was used (Appendix 2.4); the exception was T1's first student group which piloted the 74 statement CSQ for HE (Appendix 2.3). The procedure for completing the questionnaire is explained later in this chapter.

A feedback session between the teacher and one of, or both, the project director and researcher was held after each teacher had received the communication style profiles and statements arising from the administration of the CSQ. Although not compulsory, this was considered an integral part of using the CSQ. The main purpose was for those more experienced in the interpretation of the CSQ to facilitate the less experienced teacher in sensitively understanding their profiles in light of their own teaching context and knowledge of their students, and to discuss whether any development of communication style was desired or warranted in response to the CSQ results. This discussion was loosely structured in as much as the following procedure was established:

- the purpose of the profiles and feedback session was explained;

- the teacher was invited to express their initial reflections on and reactions to the profiles;
- the researcher and/ or project director then encouraged the teacher to consider the octagon profiles, the statement of scale scores and the breakdown of individual statements as outlined in chapter three under 'Using the Communication Styles Questionnaire' (p.56-61);
- finally, the potential and desire for development of any aspect of the teacher's communication style was discussed, along with the feasibility of implementation, as outlined in chapter three under 'Using the Communication Styles Questionnaire'.

Discussions between a teacher and their student group about the CSQ profiles were encouraged. The aim was to enhance a teacher's understanding of the students' perceptions revealed in the CSQ results and to supplement the feedback session to further inform their reflection and possible development. Either or both the researcher and project director attended the discussion sessions and the following sequence occurred:

- the researcher or project director opened with a brief overview of the project and the purpose of the discussion session;
- the CSQ profiles arising from that particular group were presented and explained;
- the teacher and the researcher/ project director then took part in a discussion with the students about specific items from the CSQ which were of particular significance to the teacher.

Video observations of a teacher's classroom interaction were offered as a further aid to the review. These sessions involved videoing each teachers' communication style during a lesson and subsequently reviewing selected sequences with the teacher and their students through the technique of Interpersonal Process Recall (IPR) developed by Kagan and Krathwohl (1967). Discussion centred around what the teacher and students had thought and felt at

the time about the interaction; what had been successful; what had been less successful; and what students thought made a “good” teacher. The review was intended to stimulate discussion of the communication style by all participants. It was hoped this would provide more details about the pattern of the classroom interaction as it was perceived by both teacher and students; illuminate further the CSQ results; and assist reflection. This was facilitated by either the researcher, project director or both.

Determining the Responses

The feedback session initially identified any action already taken, or any stated intention to act, by way of a teacher developing any aspects of their communication style in response to the CSQ results. Thereafter, determining whether or not any plans had been formulated or implemented with regard to developing a wider, more flexible communication style was ascertained in a number of ways.

Copies of assignments, written about their experience of using the CSQ to support the reflective practice element of their Certificate in Education course, were provided by five teachers to form part of the evidence of their responses for the research.

Short written compositions, intended to form the basis of journal articles about their experience of using the CSQ, were provided by three teachers.

Telephone and face-to-face interviews were held with seven teachers to follow-up their responses to the CSQ profiles.

Inevitably, more than one source was used to acquire the relevant information from some teachers. This was a consequence of written articles and assignments

either not containing the requisite information or being received over a period of time, sometimes after an earlier enquiry had been made.

Procedure

As and when each teacher joined the investigation they nominated one or more classes with which to complete the CSQ. Where two or more classes were chosen this was because either a teacher wanted to compare their communication style across more than one group being taught in the same term or that they wanted to track their development over a period of time.

Once a student group had been selected, the following protocol was observed each time: Before the CSQ was administered the teacher informed the class about participation in a research project aimed at helping reflection on teaching and learning that he/ she would like the students to take part by answering a questionnaire. The researcher then explained the nature of the CSQ - that it concerned the way the teacher communicated and interacted with the students; that it was to be completed in an *Actual* and *Ideal* format; that the teacher would be completing the same questionnaires. It was stressed that the results would be anonymous and that participation was voluntary. All students were asked if they would prefer to not take part - only three (out of over 600) declined. Students were also advised to ask for clarification if any of the instructions or terminology were unclear. The *Actual* questionnaire, together with the marking instructions and answer sheets (Appendices 2.5 to 2.7), was then distributed to each member of the class. As and when each student completed the *Actual* version they were given the *Ideal* questionnaire to answer. At the same time and in the same room the teacher completed their versions of the two questionnaires. The class was thanked for their participation at the end of the administration.

The responses to the questionnaires were processed at Oxford Brookes University using an Optical Mark Reader, the computer software Microsoft Excel 97, and the computer software Teacher's Report which was developed specifically for the research. The Octagon profiles, spreadsheets and graphs displaying the results

were sent to each teacher for their initial review. After a period of a couple of weeks each teacher was contacted and a feedback meeting was arranged with one or both of the researcher and project director. Sometimes, due to circumstances, this meeting took place several weeks after the administration of the CSQ. Most teachers were seen individually and contemporaneous field notes were taken of the session. However, where a collaborative approach was adopted within the case study (CS3 comprising T3a, T3b and T3c; and CS4 comprising T4a and T4b) joint consultations took place, by agreement. In these instances the meetings were audio-tape recorded, by consent, and later transcribed.

The teachers from CS1, CS2, CS3, CS5 and CS7 disclosed their CSQ profiles to some of their student groups and engaged in a discussion about perceptions arising from the results. These teacher-student discussions were held some time after the feedback session between teacher and researcher had taken place. Most teacher-student discussions occurred during the module or unit that was the subject of reflection, but on one occasion (CS1), it was held at the end. Where the size of the group was larger than 15 students these discussions were audio-tape recorded and later transcribed; otherwise contemporaneous field notes were taken.

The two teachers from CS4 agreed to one session of each of their classes being recorded on video and subsequently reviewed selected sequences with their students through the technique of IPR. Due to time-tabling considerations there was a two week gap between these two parts of the procedure. Two out of the three IPR sessions for T4a took place prior to the feedback session whilst the third session and that of T4b occurred subsequently. Each IPR session was audio-tape recorded and later transcribed.

These activities were followed up by ascertaining what action, if any, the teachers had taken, or intended to take, in response to their experience of using the CSQ. Assignments and written accounts were collected and interviews were held, as follows:

Teachers T2, T3a, T6, T7 and T8 provided copies of their assignments of their CSQ experience, written in support of the reflective practice element within their Certificate in Education;

Teachers T1, T4a and T4b provided short written accounts of their experience of, and responses to, using the CSQ, produced in anticipation of submitting journal articles;

Interviews (telephone or face-to-face) were held with T1, T2, T3a, T3b, T3c, T5, and T6 to determine whether any plans for development had been made or any actions taken. Contemporaneous field notes of these conversation were made;

T9 was the only teacher who was not followed-up, having stated during the feedback session that changes were already in the process of being implemented which would address the issues arising from the CSQ results.

Once each teacher's response to their CSQ results had been ascertained, the data were reviewed to determine the outcomes of this phase.

Outcomes of Phase One

The data were reviewed for two reasons. One was to ascertain whether anything further could be learned about the process of teaching and learning and, thus, the need to promote reflective practice. The other was to satisfy two issues that were crucial to the research, concerning the critical nature of reflection and the accomplishment of self-directed development aimed at improvements in teaching and learning.

The process of teaching and learning in post-compulsory education

The communication style profiles arising from Phase One were reviewed for features that could inform the process of teaching and learning in post-compulsory education settings. Twenty-nine profiles were analysed in total, since nine of the twelve participants in this phase of the study used the CSQ with more than one student group resulting in the creation of a set of Octagons for each administration of the Questionnaire. Of these profiles, twenty were based on the FE Questionnaire and nine on the HE Questionnaire. However, the data from all twenty-nine sets of profiles were analysed together since both FE and HE Questionnaires are based on the same underlying model and share two-thirds of the same statements.

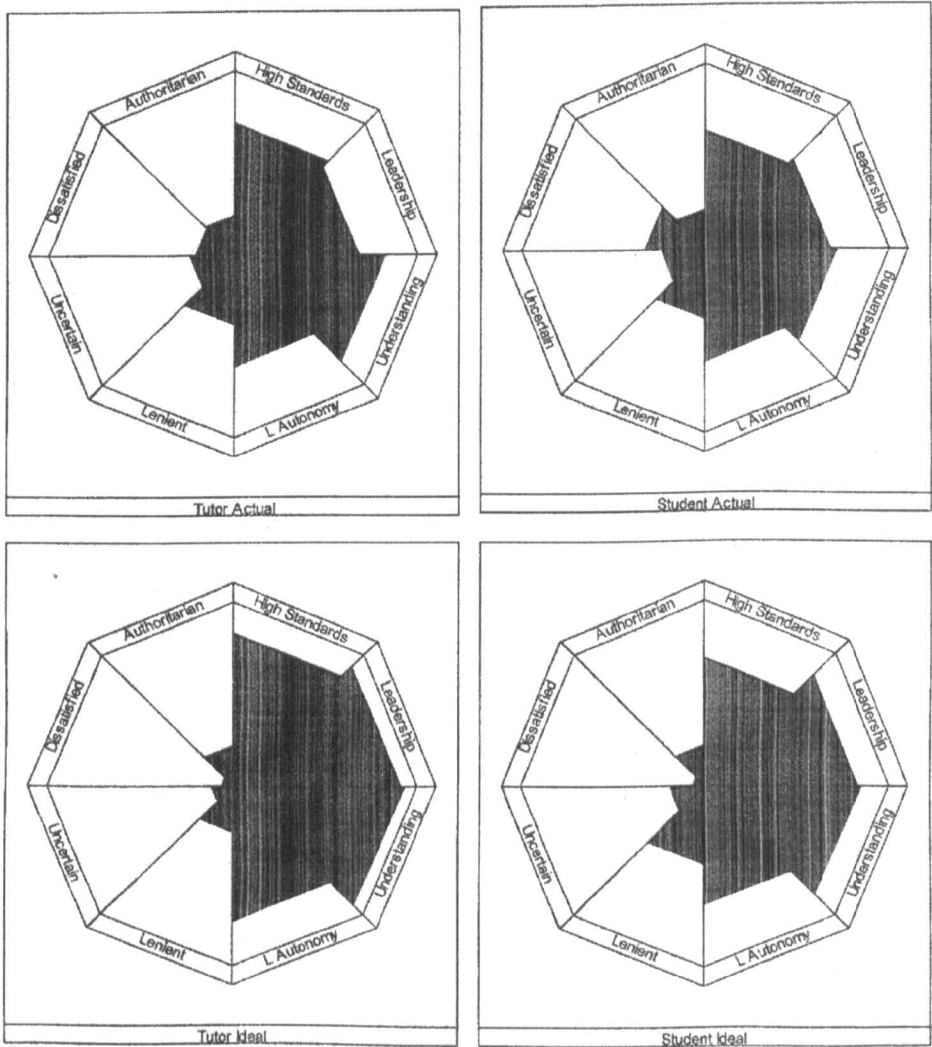
The findings from the analysis of the CSQ results of these particular teachers reveal several consistent features about patterns of classroom interaction in these settings (Table 4.1 and Figure 4.1). These consistencies indicate two things. Firstly, teachers and students do not perceive classroom interaction in exactly the same way. Secondly, teachers and students desire a communication style that is different from that currently being experienced.

Table 4.1 CSQ scale scores illustrating consistent features

Scale	ACTUAL		IDEAL	
	Teacher	Student	Teacher	Student
<i>High Standards</i>	0.75	0.67	0.86	0.67
<i>Leadership</i>	0.55	0.71	0.78	0.87
<i>Understanding</i>	0.88	0.78	0.99	0.91
<i>Learner Autonomy</i>	0.58	0.58	0.72	0.64
<i>Lenient</i>	0.36	0.36	0.23	0.36
<i>Uncertain</i>	0.22	0.22	0.10	0.13
<i>Dissatisfied</i>	0.10	0.22	0.00	0.12
<i>Authoritarian</i>	0.13	0.24	0.13	0.17

Using average scores for the ‘Student Actual’ as base values, the scale scores in Table 4.1 and the profiles in Figure 4.1 have been constructed to illustrate the features identified in the data. The consistencies refer to relationships between Teacher Actual and Student Actual; Teacher Actual and Teacher Ideal; and Student Actual and Student Ideal. The calculation of these figures is detailed in Appendix 4.1.

Figure 4.1 CSQ profiles illustrating consistent features



The consistent features concern both the overall shape of the Octagon profiles and the trends perceived between teachers' and students' perceptions, as follows:

- The *Actual* communication style of the teacher is perceived by both the teacher and their students to be clearly on the right hand side of the Octagon. This shows a high level of *warmth* (*leadership* and *understanding*) and a reasonable level of shared *control* (*high standards* and *learner autonomy*). However, greater co-operation (*warmth*) is perceived to come through *understanding* than *leadership* whilst more responsibility for directing learning (*control*) is perceived to lie with the teacher (*high standards*) than with the students (*learner autonomy*).
- The *Ideal* communication style of the teacher is also desired by both a teacher and their students to be overwhelmingly on the right hand side of the Octagon. However, the *warmth* dimension is considered to be more important than that of *control*, particularly by the students. There is a perceived greater need for good *leadership* and high *understanding* than for high levels of *high standards* and *learner autonomy*.
- Teachers tend to rate their *Actual* communication style more positively than do their students on the scales of *high standards*, *understanding*, *dissatisfied* and *authoritarian*; and more negatively on *leadership*. For each scale this is true for at least seventeen of the teacher profiles in Phase One. However, although there is a difference between teacher and student scores, the pattern of relationships between the various scales on the teacher's profile mirrors that of their students'.
- Teachers' and students' *Ideal* profiles are more demanding than their respective *Actual* profiles. For teachers this is clearly the case for all scales except *authoritarian*. For each scale this is true for at least sixteen of the teacher profiles in Phase One. For students the *Ideal* is more demanding for all scales except for *high standards* and *lenient*. For each scale this is true for twenty-three or more student profiles in Phase One.
- Differences between the *Actual* and *Ideal* ratings of certain communicative behaviours were observed in half or more of the teachers or students responses (Appendix 4.2).

Teachers indicated that ideally they should:

- Set more homework (FE only); assess work more fairly; provide more useful feedback (*high standards*);
- Talk more enthusiastically about the subject; explain things more clearly; hold students' attention more; know more about what goes on in the room; be more organised (FE only); be a better leader (HE only) (*leadership*);
- Be more dependable; have a pleasanter class (HE only); realise more when students don't understand (HE only) (*understanding*);
- Give students more choice in their assignments; allow students more choice in what they study (*learner autonomy*);
- Allow students' attention to wander less (*uncertain*);
- Be less impatient (*dissatisfied*);
- Enable students to feel more at ease to ask questions (*authoritarian*).

Students indicated that, ideally, teachers should:

- Explain things more clearly; hold students' attention more; be more organised (FE only) (*leadership*);
- Realise more when students don't understand (HE only) (*understanding*);
- Give students more choice in their assignments; allow students more choice in what they study (*learner autonomy*);
- Allow students' attention to wander less (*uncertain*).

The critical nature of reflection and the accomplishment of self-directed development aimed at improvements in teaching and learning

Teachers in this phase of the study had been offered, and accepted, the opportunity to use the CSQ to review their communication style. This engaged them in an experience of reflective practice aimed at bringing about self-directed improvements in teaching and learning, without the application of any particular

model to facilitate the activity. The nature of this experience and the influences on it were later to be studied in order to inform the facilitation of reflective practice. Therefore, it was essential to confirm two things. Firstly, the use of the CSQ needed to have created an opportunity for teachers to engage in reflective behaviour relevant to that of reflective practice. Secondly, it was important that some teachers had developed aspects of their communication style which would provide instances of self-directed development aimed at improvements in teaching and learning for further investigation. Therefore, it was necessary to determine whether any teachers had taken action to develop a more flexible communication style in response to their use of the CSQ.

Qualitative analysis was employed to explore both issues. To satisfy the aspect of reflective behaviour, the data were reviewed for evidence that supported the description in chapter one that reflective practice 'requires teachers to become learners, responding to their experience of teaching with a conscious and deliberate intent to check their practice, critically evaluating its everyday content with the objective of bringing about improvement or transformation where appropriate'. (p.15).

To satisfy the second aspect of development, the data was reviewed for teachers' reports of the action they had taken to develop their communication style in response to their CSQ results.

Evidence of reflective practice

The experience of using the CSQ created the requisite reflective activity, as defined above, which stimulated teachers' thoughts on, interest in and discussion about interpersonal relationships in the classroom and their impact on teaching and learning. The following extracts from the experience of T3a is typical of the critical reflective activity carried out by the teachers in this phase of the study. It begins with teachers finding themselves in the place of being a learner, by giving them a hitherto unknown theoretical basis on which to found their teaching and a means by which to consciously and deliberately check their practice:

T3a: 'Both these projects [Preferred Learning Styles research and the Communication Styles of Teachers research] have had a dramatic effect on my teaching and thinking and have consolidated years of muddled intuitive thinking and feeling into a justifiable structured and systematic approach to teaching and learning. . . The Communication Styles Project, developed by Joe Harkin, gave me a way to assess the effectiveness and appropriateness of my own communication style with students with mixed abilities and mixed learning styles.'

When T3a compared her own perceptions with those of her students, critical evaluation was seen to take place:

T3a: 'I was initially pleased by how similar the students perceptions were to mine, there were no glaring huge differences, however, on closer analysis I became aware of some subtle differences of perception. . . with regard to being dissatisfied with students' work the data from both the Actual and Ideal questionnaires show that I perceive myself as very rarely dissatisfied with the students. However, the students themselves on their scores for the Actual questionnaire perceived that I communicate a 0.13 score for Dissatisfied against my 0.00. Again what is interesting to me is their Ideal score for Dissatisfied which was 0.09 to my Ideal score which was 0.00. This group . . . perceived my Actual communication of High Standards to be 0.64 with their idea of Ideal as being 0.58 (again perhaps an indication that they perceive my expectations of them to be too high). Again the overall scores suggest that: High standards are less important to the students than they are to me; that they would have liked more Leadership and a little more Understanding; more Learner autonomy and in this group a less Authoritarian approach. My Ideal scores suggest that I too would ideally like to communicate better Leadership skills, more Understanding and create situations for more Learner autonomy.'

This critical evaluation led to a gathering of further information for assessment and evaluation:

T3a: 'What, however, is not clear is how the students are defining, interpreting and valuing certain words and concepts: for example one of the questions on the questionnaire asks:

"is the ideal teacher sarcastic:" always/sometimes/never.

Some people who have been painfully hurt by someone's sarcastic comments might define the word and create associations with it that are negative, where as if the person has experienced sarcasm from an intelligent, bright, witty person, the definition and associations with the word might be positive.

The next phase of this ongoing research is to go back to the students and talk to them either collectively or individually in order to get a better understanding of how they interpret some of the questions. Whether or not they perceive being Lenient as desirable or not and whether or not more

Leadership equates more with guidance and indeed whether or not this is in direct conflict with the stated desire for more Learner autonomy.'

The subsequent discussion with the students created another instance of learning for the teacher, particularly illuminating the issues of *leadership* (clear explanations) and *learner autonomy* (choice in what they studied) and giving rise to the consideration of improving or transforming teaching and learning:

Students: '[We want] to go through assignments in class before being given them in order to understand them, change things, wordings, so that we can see what is involved in writing them. [We] want more choice of assignments, say two, to suit different learning styles.'

T3a: 'Last year I did that and am considering doing it next year; it's a good idea; it makes it interesting to mark, it's also difficult to mark - you need different bench marks for each assignment so that the grades are fair; but choice can lead to confusion over grade allocation.'

This culminated in action aimed at improving teaching and learning:

T3a (from a field note): 'T3a mentioned that with her topic she had implemented the students' suggestion by getting them to write their own assignment and based it around their dominant learning style, which was visual, by using a film.'

Reported development in response to using the CSQ

The experience of using the CSQ and the subsequent reflective activity provided for further investigation instances of self-directed professional development aimed at improving teaching and learning. By September 1999, in response to their reflections, four teachers (T1, T2, T3a and T4a) reported taking specific action to develop a wider, more flexible repertoire of communication style whilst a further five had identified possibilities for future development. Brief accounts of the four actions taken and how each teacher arrived at their decision are detailed in the following pages. Unavoidably, the quotations used as supportive evidence of development reported by T3a are a repetition of some of those used earlier to analyse the critical nature of the reflective experience. The CSQ profiles, scale scores and individual statement ratings are contained in Appendices 5.1 to 5.4.

T1 - teaching Accountancy to undergraduates (Appendix 5.1)

T1 first used the CSQ in March 1998. From the possible areas for development arising from this set of CSQ results T1 selected *learner autonomy*, in particular the issues of 'Allowing students choice in what they study' and 'Students having the opportunity to choose the assignments they work on'. For both teacher and students, the differences between the *Actual* and *Ideal* scale scores and statement ratings were more than 0.1 and 1.0 respectively. T1 wanted students to take more responsibility for their own learning by setting the agenda for modules, both with respect to the subjects and emphasis:

T1: 'Much learning in accounting is traditionally associated with relatively narrow focus learning outcomes. This is necessarily so, given that graduate profiles include familiarity with the kinds of skills that are essential in professional practice. . . While accepting that such skills are important, it is also entirely possible that an accounting education based entirely on these can ignore the importance of learner autonomy in developing the potential of students to learn for themselves.'

Consequently, based solely on the CSQ results, T1 took steps to manage *learner autonomy* more effectively and to offer more opportunities within the institutional constraints. He developed a new module whereby students chose their own topic within the broadly defined subject area and set their own essay title for the assignment which constituted the assessment.

T1 continued to reflect on his communication style throughout the study by using the CSQ with a further three student groups. His objective was to monitor the effectiveness of his approach to *learner autonomy* and, where appropriate, to develop aspects further.

T2 - teaching on an MBA to mature students (Appendix 5.2)

T2 first used the CSQ with a group of part-time students in May 1998. The CSQ scale scores from this class gave no clear indication of which specific areas should form the focus of this teacher's reflections. The *Actual* communication style was considered to be very close to the *Ideal* by both parties. However, scrutiny of the individual statements led T2 to consider developing *learner autonomy* based on

differences between teacher and student views concerning 'Students' appraisal of their own work' and 'Students' assessment of each others work'. Students wanted less of each whilst T2 wanted the present levels to be increased and maintained respectively.

T2 (from field note): '[T2] thinks MBA students should be autonomous, self-managed, but clearly they do not think this should be the case in all areas - there is an issue about the degree and type of autonomy they want and have. . . [Also] The students were resistant to assessing each others work and perhaps see this as being part of a traditional tutor's role.'

A teacher-student discussion about the CSQ results confirmed students' unwillingness to engage in assessment for the purposes of furthering their ability to self-assess and peer assess in their work environments:

Student 5: 'The reason that I'm taking this course is that I do want to become more aware, I do want to become more self-appraising because at the end of the day . . . the guys in this group here are out on their own making decisions, very large decisions for their companies and we need that skill set. But when you actually come into a college environment, I think we're almost ditching some of that burden in saying "In this environment those rules don't apply". We are now looking towards somebody to provide that sort of facility for us, to judge us, to help us, evaluate how can we improve. But we know that when we walk out there, new rules apply.'

Student 6: '. . . when we come to the [peer] assessing side of it we know that there's an underlying thing that we're not going to fail anyone here; that that was our goal because we all know how important it is for the qualification and nobody's going even to attempt to put that at risk. . . when it comes down to it marks being recorded which go collectively towards a qualification, I certainly would feel very uncomfortable about anybody in this group influencing that.'

Reflecting afterwards on the students' comments, T2 was particularly concerned about their attitude towards peer-assessment:

T2 (from field note): 'He [T2] was not surprised by the comments about the task which required the group to assess each other - i.e. they were not prepared or going to fail anyone - but he had not realised that it had become an unwritten rule.'

T2 wanted to take action on this issue but there was no suitable opportunity with this group since the module was close to finishing. Instead, he reserved his response concerning peer-assessment until the module was run again in January 1999, this time with two groups of full-time students. From the outset of this module, he determined to be clearer and more directive about his expectations of what was to be covered and why:

T2 (from field note): 'For Learner Autonomy, [and peer assessment] he explained to the students that in their work environments they would be faced with situations where they couldn't delegate their responsibilities for assessing or judging others' work and therefore as MBAs they had to face up to this issue and take appropriate responsibility and behave accordingly in respect of assessing the presentations of fellow students.'

He concluded that:

T2: 'Consequently, the full-time students appeared more relaxed about assessing their peers.'

The fact that peer-assessment had been the beneficial experience T2 was hoping to create was later confirmed by the students. T2 monitored the effect of his actions by using the CSQ with each group and by subsequently holding teacher-student discussions:

Student (group one): 'Personally it's [peer-assessment] has been a very positive thing. Some of us have talked about this and had different views - it's right/not right; some felt that they could give themselves a fairly accurate mark. But it's been a very courageous thing for us, helping us to take the next step. It's been a good thing.'

Student (group two): 'I had big worries about this system, but I was surprised about how realistic the assessments were. Students accepted the feedback - it was a good thing, generally.'

T3a - teaching GNVQ Health and Social Care to 16-19 year olds (Appendix 5.3)

In June of the academic year 1997/8 T3a used the CSQ with two student groups. However, as it was too late in the year for either group to benefit from her subsequent reflections these experiences were treated as a 'trial run'. Consequently, T3a followed up the CSQ results (November 1998) from her third

student group and, by comparing the scale scores, identified several issues worth investigating further:

T3a: ‘... the overall scores suggest that: High standards are less important to the students than they are to me; that they would have liked more Leadership and a little more Understanding; more Learner autonomy and in this group a *less* Authoritarian approach. My Ideal scores suggest that I too would ideally like to communicate better Leadership skills, more Understanding and create situations for more Learner autonomy.’

A subsequent teacher-student discussion about the CSQ results was held. This highlighted that students wanted better *leadership* through clearer explanations of what was involved in assignments and more *learner autonomy* through a choice of assignment to suit their learning styles:

Students (from field notes): ‘[We want] to go through assignments in class before being given them in order to understand them, change things, wordings, so that they could see what was involved in the writing of assignments. . . [We] want more choice of assignments, say two, to suit different learning styles.’

T3a responded by incorporating the students’ remarks in the design of the next assignment. Focusing on the development of *leadership* and *learner autonomy* within her communication style, arrangements were made for the students to write the assignment, based on their choice of a film which suited their dominant learning style, which was visual.

Further reflection on the outcomes of the assignment led T3a to conclude that the actions had led to the desired improvements in teaching and learning:

T3a (from field note): [T3a] had asked them [students] to evaluate the process and found that several found it a good thing to do and were enthused by it. Part way through marking the assignments, [T3a] felt the students had understood the language and the assignment better for having written it themselves.’

T4a - teaching Nursery Nursing and GNVO Health and Social Care to 16-19 year olds (Appendix 5.4)

T4a used the CSQ with four student groups between July and November 1998. Since it was too late in the year (July administration) for the first group to benefit from the findings, T4a concentrated her actions on the three subsequent groups (November administration). The sets of CSQ results arising from these three groups showed that both teacher and students desired more *leadership* and *understanding* (differences between *Actual* and *Ideal* scores were more than 0.1 for each scale). Subsequent video recordings and IPR discussions of lessons for two of the groups suggested that *leadership* was the prominent issue, indicating that the lessons seemed to lack clarity and to be somewhat disorganised:

Lesson One:

T4a: 'It [lesson] was terribly slow. I would be feeling a bit bored by that stage. . . Because I spent so long on that work [handouts] that the students didn't get enough time to go and do the research later.'

Students: ' [We] didn't really understand the worksheet, what we had to do.'

Lesson Two:

T4a: 'I felt that it was rushed because [I] was wanting to make time for the research task.'

Students: '. . . unsure about whether we were supposed to be putting the individuals into the categories to which they had already been allocated or to where we thought they should go.'

The need for greater clarity of explanation and better organisation was also indicated in the CSQ individual statement responses (the *Actual* and *Ideal* ratings for both teacher and students differed by more than 1.0). This was acknowledged by T4a:

T4a: 'Well, there were a couple of things I did badly this year which I usually do a bit better which might have a bearing on the subject. To do with organisation and in my experience [it] gives the students a better sense of direction. One is that they have a week by week program for what I'm going to teach for that particular module. . . Often they can't see where they are going. That was one thing I didn't do. And likewise to properly review the module at the end so they can look back and see a shape and direction. . . The students I've had in the past have told me how

much they appreciate me doing that. . . Oh, the other thing was to be clear about my aims. One of the problems about the two sessions you saw was that I had two very conflicting aims and I was trying to fudge a compromise between them which didn't work..'

In response T4a concentrated on developing these aspects of *leadership*, as can be seen from T4a's subsequent write-up of the CSQ experience:

T4a: 'Re-introduced weekly programmes and earmarked time to review programme at the end. Made sure that when under pressure I simplify objectives rather than add more.'

The impact of these developments was not known at this stage of the study.

Discussion

The analysis of the data confirmed three things. Firstly, that there is a need to consider improvements in teaching and learning, since teachers and students do not perceive the process of classroom interaction in the same way and that both parties desire a communication style that is, in some ways, different from that currently being displayed. Secondly, that behaviour appropriate to critical reflection had taken place. Thirdly, that some teachers had taken action to develop aspects of their communication style and, therefore, instances of self-directed professional development had occurred.

The process of teaching and learning in post-compulsory education

The analysis of the CSQ profiles from these volunteer teachers and their students is consistent with previous CSQ results reported in chapter three and the research about effective teaching and learning reported in chapter one. It also indicates a need for teachers to at least consider improving aspects of teaching and learning.

Firstly, the *Actual* communication style of most teachers was viewed by both teacher and students to be relatively effective, as defined by research reported in

chapter one. A co-operative environment was perceived with teachers displaying considerable *warmth*, whilst students had some degree of responsibility for directing their own learning as teachers took less than total *control* of the situation. However, teachers assess some aspects of their *Actual* communication style more optimistically than do their students, confirming the earlier CSQ findings mentioned in chapter three. This may indicate real differences in teachers' and students' experiences but, as teachers tend to perceive the pattern of relationships between the various scales in the same way as their students, the differences in reality are probably one of degree rather than type.

Secondly, whilst the *Actual* profiles provide evidence that the process of teaching and learning in post-compulsory education involves suitable interpersonal communication, teachers and students alike perceive an *Ideal* that is different in some ways from their *Actual* experience. The *warmth* dimension still indicates that teachers should have an unconditional positive regard for their students but it is desired to a much greater extent. The *control* dimension indicates that students should be treated much more as collaborators with teachers in the process of learning. Yet, overall, the creation of a safe and supportive environment through a trusting relationship with the teacher is considered more important than the way learning opportunities are directed, again consistent with the research findings reported in chapter one and chapter three.

Thirdly, teachers' and students' perceptions differ on many levels. Teachers perceive some aspects of their *Actual* communication style more positively than do their students. Teachers are more idealistic than their students in their *Ideal* communication style, aiming for perfection and attaching greater importance to *control*. Teachers perceive more than twice as many individual behavioural characteristics as requiring attention than do their students. Whether these differences can or should be acted upon is for individual teachers to decide in light of their own circumstances and beliefs. However, the existence of such differences highlight the need for teachers to come together with their students to discuss perceptions and experiences of classroom interaction and to jointly and

mutually identify and develop areas that could lead to improvements in teaching and learning.

Reflective Activity

The perceptions of classroom interaction as outlined in the findings provided teachers with a number of focus points for reflection. This reflective activity in response to the CSQ results fulfilled the criteria regarded appropriate to critical, thoughtful and systematic consideration of teaching as outlined in chapter one. For different teachers this activity focused on different aspects of their communication style and followed different formats but, for most, it was rarely straight forward. Sometimes the CSQ results alone gave no clear indication of the areas a teacher may benefit most from focusing on. At other times, the results indicated that more than one scale should form the basis of reflection. Consequently, receiving the CSQ results was only the beginning of the reflective process as, to arrive at an informed decision to develop an aspect of communication style, a teacher needed to do more than take the CSQ results at face value.

During this reflective activity teachers integrated the CSQ results with both prior and current learning. Along side the views of their students, they also considered the validity of their own perceptions, assumptions and actions and took appropriate responsibility for the consequences as perceived by their students. They sought a clearer understanding of the nature of the classroom interaction under scrutiny and genuinely considered developing aspects of their communication style which could lead to improvements in teaching and learning.

Whilst it is not certain at this stage of the study how this reflective activity was facilitated, there are some pointers. The media of a questionnaire and video recordings provided ways of focusing a teacher's thoughts on issues worth investigating further, assisting them to orient their reflection towards something that was relevant to them and their students. The students' viewpoints elicited through the CSQ were thought provoking and indicated the part that specific

feedback can have in helping to assess the effectiveness and appropriateness of a particular form of classroom interaction. Discussions between a teacher and their students uncovered reasons for and causes of the perceptions and showed the value of dialogue in illuminating attitudes and assumptions which affect participants' behaviour and objectives. However, whether some or all of these, or other factors yet to be identified, are crucial remained to be investigated at this stage.

Self-directed professional development aimed at improving teaching and learning

By the end of Phase One four teachers had reported taking action to develop a wider range of communication style aimed at improving teaching and learning. The actions taken were varied, occurred under different circumstances and were arrived at by different routes. This indicates that development was considered in relationship to its appropriateness to the learning situation; was not the result of the characteristics associated with one type of case study; and accommodated a number of ways of stimulating reflective practice.

The actions taken by the teachers to develop their communication style can be classified as representing three different degrees of development. Firstly, the design of a new module by T1 could be termed as the development of an original aspect of the teacher's communication style. Secondly T2's overt explanation to his students of his internalised and implied assumptions concerning peer assessment could be considered as development which is building on existing elements of the teacher's communication style. Thirdly, the creation of the student-designed assignment by T3a and re-introduction of a course program by T4a can be seen as development which is reviving a former aspect of a teacher's communication style.

The circumstances in which the actions took place demonstrated development in teachers across a number of different characteristics. Both male and female teachers developed aspects of their communication style. Both FE and HE

institutions were represented. Different programme types were covered - degree, MBA (Masters in Business Administration), GNVQ (General National Vocational Qualification) and NNEB (Diploma in Nursery Nursing). Subject areas also differed - accountancy; business studies; health and social care; nursery nursing and child care. Lastly, whilst all four teachers each had seven or more years of teaching experience, two were undergoing formal initial teacher training.

The routes by which these teachers arrived at their decisions differed in the extent to which their students were involved in the reflective process after participating in the CSQ. T1 determined his development activity on the strength of the CSQ results alone. T2 and T3a held a discussion with their students based on their CSQ results and proceeded with action that took into account these further comments made by the students. T4a experienced video observations of three of her lessons and engaged in IPR with her students based around sequences of classroom interaction from the recordings. Action was taken after considering the students' views on teaching and learning arising from both the IPR discussions and the CSQ results.

In addition to the four teachers who had taken action, a further five had indicated that there were aspects of their communication style which could be developed in future, but action was yet to be taken. Although the reasons for the delays were not ascertained at this stage of the study, one reason may be suggested and that is that reflective practice and, consequently, self-directed improvements in teaching and learning, are not matters which can be accomplished quickly. This, of course, could be due more to the nature of the reflective opportunity created in this study rather than to anything inherent in reflective practice in general. However, it is interesting to note that the teachers who reported having developed aspects of their communication style by the end of Phase One were those who had participated longest in the study; the five yet to take action were those who had joined later. The implication is that time for reflective practice is a key factor in the accomplishment of development.

Conclusion

The aim of Phase One was to engage teachers in reflective practice aimed at bringing about self-directed improvements in teaching and learning without the application of any particular model to facilitate the activity. The conclusion to be drawn from the analysis is that the objective was achieved. The analysis of the CSQ results showing differences between teachers' and students' perceptions of classroom interaction confirmed the need to consider self-directed developments in teaching and learning. The teachers involved considered these differences to be worthwhile investigating and seemed to approach the review of their communication style as if there was something that could be learned from the experience; with a determination to illuminate their practice; and with a critical eye for possible improvements. By the end of the phase, four teachers reported developing aspects of their communication style with a view to improving teaching and learning; a further five had identified possible future developments.

Achieving the aim of Phase One meant that there was a basis for examining, in depth, the manner in which self-directed improvements in teaching and learning can be achieved and the influences on teachers' participation in, and accomplishment of, this activity. There were already some suggestions as to the factors that may be involved: the CSQ; students' feedback; teacher-student discussions; time. Consequently, Phase Two of the study was planned with a view to collecting further data which could shed light on the two main questions of the study:

- If, following the use of the Communication Styles Questionnaire, teachers developed aspects of their interpersonal communication, how had such self-directed professional development, aimed at improving teaching and learning, been achieved and influenced during this experience of reflective practice?
- What do these, and other, experiences of self-directed professional development indicate about how best to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings?

However, before embarking on Phase Two a review of the literature relevant to the area of investigation was undertaken. The issues considered relevant to this study are presented in chapter five.

CHAPTER FIVE

LITERATURE REVIEW

Introduction

Instances of reflective practice in Phase One of the study resulted in four teachers reporting the self-directed development of their communication style aimed at improving teaching and learning. In order to examine the manner in which this development occurred and to determine what could be learned from these, and other, previous experiences of self-directed professional development engaged in by these teachers, it was considered most appropriate to investigate the practicalities surrounding their achievement. Specifically it was decided to consider how teachers had come to participate in the study; the process involved in the self-directed development of their communication style; and the factors that had facilitated and hindered their reflective activity and actions. To provide a basis for this exploration literature concerning development was reviewed. This is in addition to the review of action research carried out in chapter one relating to reflective practice.

The framework for this literature review was broad for two reasons. Firstly, various terms can be associated with self-directed professional development. Secondly, the context of the study concerned issues that were personal, educational and organisational in nature. Consequently, literature was consulted concerning continuing professional development; staff development; teacher development; professional education; teachers as learners; teacher change; educational change; organisational change and psychological theories of change.

Although the main focus was on professional development that was directed by teachers themselves, inevitably some of the literature related to situations where development, training or change was determined by 'someone outside the

classroom' (Richardson, 1990: 11). However, since what teachers do, how and why they do it are central to professional development in situations of both self-directed and imposed development, it was considered appropriate to take into account the issues arising from each scenario.

The resultant review is in two parts. Part One consists of six theories which, together, offer a broad range of explanations about how and why development occurs. The reasons why these theories may have a bearing on this study into self-directed professional development are considered. Part Two reviews the factors that influence an individual's abilities or attempts to participate in and accomplish development.

PART ONE - THEORIES RELEVANT TO DEVELOPMENT

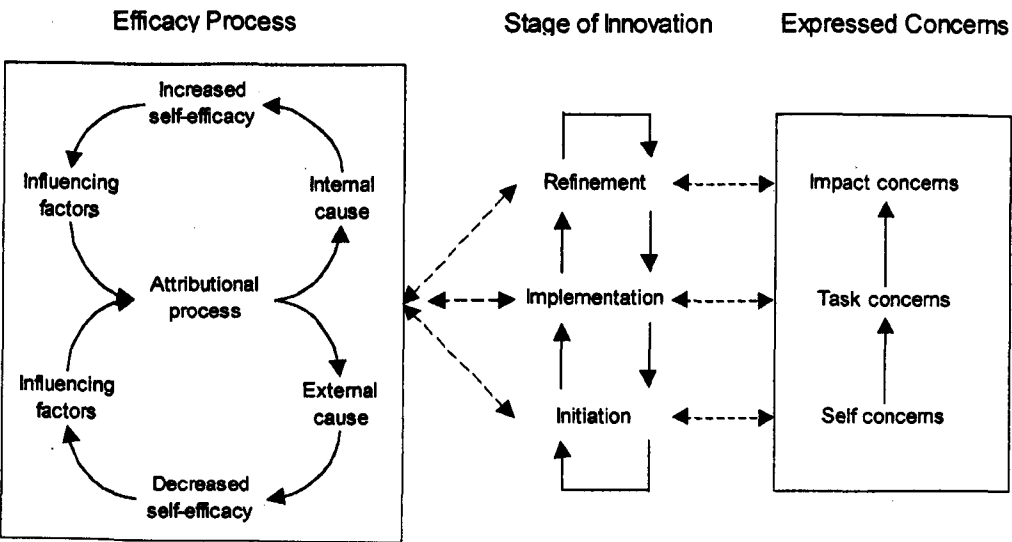
One of the first things that becomes clear from the literature is that any kind of development is a process and not a one-off event. The consideration of one's practice and the implementation of improved or new ideas - the possible use of better or new materials or teaching approaches or the alteration of beliefs - are not developed all at once. It is time consuming, involves loss, anxiety, struggle and is often characterised by ambivalence and uncertainty (Fullan, 1991). It needs persistence, support, assistance and clarity of purpose (Loucks-Horsley *et al*, 1998). It means dealing with the socialising forces at work in an institution; it requires coping with disorientation during the refinement of craft and expert knowledge; it creates insecurity when pedagogical content knowledge is threatened; it is perceived as impossible or costly when perceptions of teaching are challenged; it means accommodating changes in emotions and taking risks (Leat, 1999). Yet when development is achieved people feel a sense of mastery, accomplishment and professional growth.

It is a process which, whilst generally acknowledged to be complex and idiosyncratic (McKinney *et al.*, 1999), is considered in several theories to involve

a number of progressive and, usually, sequential stages which are common to most participants. Furthermore, an awareness and understanding of these stages and how individuals move through them can point to ways in which the development process can be facilitated.

The most integrated theory of individual development in education is that proposed by Ohlhausen *et al.* (1992) and tested by McKinney *et al.* (1999). The Efficacy-Based Change Model (EBCM) is a stage model founded on the relationships between teacher concerns, self-efficacy and attributional processes (Figure 5.1). It implies that individual change is influenced by a teacher's concerns about the issue; the factors influencing their involvement; their past experiences of change; and their confidence in their ability to tackle it.

Figure 5.1 The Efficacy-Based Change Model



The EBCM suggests that the process of change involves individuals moving through three stages of Initiation (considering the possibility of change); Implementation (carrying out alterations, improvements, innovations) and Refinement (fine-tuning the actions taken). Progress through these stages is characterised by the expression of thoughts, feelings and reactions individuals

have in connection with the notion and accomplishment of change. These expressions relate to three types of concerns - self, task and impact - each of which is substantially, though not exclusively, related to one of the stages. These concerns also consist of stages, seven in total. Self-concerns cover whether change is warranted (awareness), what change would involve (informational), and the teacher's ability to see it through (personal); task concerns focus a teacher's attention on the viability of implementation (management); and impact concerns cover how change will affect students, how colleagues will contribute to improvements and how the outcomes can be improved (consequence, collaboration and refocusing).

Where a teacher is in the stages of concern and, therefore, in the process of change, is related to their self-efficacy, or confidence, in their own ability to initiate and persist in change. Individuals with lower self-efficacy have more self-concerns than those with higher self-efficacy whose focus is on task and impact concerns. Self-efficacy, in turn, is related to attribution factors, and self-beliefs of outcome expectation and outcome value. Individuals with high self-efficacy attribute success to their own efforts as well as luck; believe that change can be implemented successfully; and believe that change is important. Thus there are at least two implications of the model. Firstly, individuals with high levels of self-efficacy are more likely to initiate and sustain change than those with low levels. Secondly, if individuals with low self-efficacy can be helped to perceive the importance and possibilities of change, their confidence may be enhanced to a level which enables them to initiate and sustain change.

McKinney *et al.*, (1999) acknowledge that further research on the EBCM is needed because aspects of their findings may have been influenced by factors not included in the model. The research involved teachers enrolled in semester-long graduate classes looking at their practice and understanding of an educational innovation known as 'a whole language approach' (Ohlhausen *et al.*, 1992, p.538-9; McKinney *et al.*, 1999, p.472) to teaching and learning. Thus, collaboration, whereby these individuals worked together within a network of supportive peers, could have contributed to feelings of self-efficacy, and therefore, to the change

process. Also, since it seemed necessary for individuals to have some knowledge base and skill level appropriate to the application of 'whole language', and the self-efficacy beliefs that they can use those skills and knowledge, it may be that knowledge and skill levels are dimensions which also contribute to the change process.

However, the EBCM is relevant to this study on self-directed professional development for three reasons. Firstly, as with the research using the CSQ, inquiry into the ECMB was conducted within the context of educational professional development as teachers sought to understand and practice 'whole language'. Secondly, McKinney *et al.* (1999) state that the nature of 'the whole language approach' to teaching and learning is based on a theory which gives teachers an opportunity to examine their practice and make changes congruent with the theory. This may be similar to the reflective opportunity provided by the CSQ which also has a theoretical underpinning. Thirdly, as with the participants in this research into self-directed professional development, the teachers were participating of their own volition, possessed a wide range of teaching experience and came from a variety of contexts.

Turning from education to the development of the individual within organisations, Jackson (1985) focuses on ways to optimise the transfer of learning from training situations into the workplace. He outlines seven steps in the process of individual change, each of which is taken in response to questions which are relevant to the individual's decision about implementing change (Table 5.1). The first four - Awareness, Understanding, Belief and Effort - are dependant on the individual; the fifth and sixth - Reward and Feedback - depends on actions by the system or organisation in which the individual works; the final step - System Accommodation - requires the attention of both parties.

In the initial stages of the change process, an individual has to become aware that there are alternatives to the current situation which may bring about better outcomes; he then needs to gain an understanding about the effect of the

alternatives and how to implement them; he requires a belief that the alternatives will work for him and then needs to proceed to action. Once engaged in a change initiative, the organisation then needs to fulfil its part by seeking ways, acceptable to the individual, of positively acknowledging and rewarding the change; and offering feedback regarding the impact of the individual's change efforts. Finally, the individual must consider how their effort to change is impacting on others whilst the organisation must ensure that the change effort becomes established, supported and maintained within the system.

Table 5.1 The Seven-Step Model of Individual Change

Change Steps	Questions Relevant to Individuals
1. Awareness	Can I experience better outcomes? Are there different ways I could behave?
2. Understanding	How could this work? What outcomes are they supposed to lead to for me?
3. Belief	Could I achieve this if I tried? Would I really be rewarded if I did perform it?
4. Effort	Shall I give it a try on my job?
5. Reward	Will anyone notice the change? Will anyone appreciate my effort?
6. Feedback	How effective are my efforts? What can I do to fine-tune my skills?
7. System Accommodation	What impact is my change in behaviour having on others? Can we find reasons for all of us to support changes by individuals?

Jackson's model has its foundations in two theories. Firstly he cites Porter and Lawler's (1968) model for employee performance and satisfaction, stating that performance is a function of an employee's efforts; their skills; and their

understanding of the expectations of their role in the organisation. Thus viable change is related to the extent an individual is willing and equipped to adapt appropriately. Secondly, Jackson cites expectancy theory (Lawler, 1973) whereby four conditions must be met to motivate an individual to change: the reward or outcome associated with their performance must be valued by the individual; the individual must believe they are capable of performing well enough to gain the reward; the individual must believe they will receive the reward if performance is satisfactory; and the individual must not perceive an adverse cost or outcome associated with their performance. The extent to which these conditions are met influences an individual's attitudes and beliefs towards the possibility of change. Between them, these two theories propose that the determinants of individual change lie both within the individual and the organisation.

It is this mix of responsibility which makes the Seven-Step Model of Change interesting from the perspective of self-directed professional development. It suggests that the impetus for implementing change is dependent on the individual whilst the organisation is charged with providing support to ensure individuals can persist with the change and maintain new behaviours. How this may relate to self-directed professional development is uncertain since, in chapter one (p.17), it was stated that teachers engaging in reflective practice frequently do so within an unsupportive environment, whereby their daily work is often isolated, unnoticed and unrewarded by colleagues and managers. However, since change has been reported in this present study, this suggests three possibilities with regard to the organisational responsibility of educational establishments as proposed in the steps of Reward, Feedback and System Accommodation. One, that organisational factors, in reality, have little or no place in individual change and, therefore, these three steps have no application in educational settings. Two, that change only occurs where the educational establishment does support the individual in the ways the Seven-Step Model proposes. Three, that the steps of Reward, Feedback and System Accommodation exist with a different orientation - perhaps they can be explained in terms of internal (individual), rather than external (organisational), dimensions in the context of educational change. Consequently, it raises the

question of whether or not everything that an individual may require to effect change is under their control.

The third model of development involving stages comes from the area of health psychology. Based on comparative analysis of eighteen leading psychotherapies, the Transtheoretical Model of Change (Prochaska and Di Clemente, 1982; Prochaska *et al*, 1992) established a structure which underlies both self-initiated and professionally assisted intentional change. It is the most commonly used model to date for aiding the understanding of why individuals adopt or avoid particular behaviours (Hevey, 1998) and proposes five stages of change. These are Pre-contemplation (individuals have no intention to consider a possible need to change behaviour in the foreseeable future); Contemplation (individuals are aware that something needs changing); Preparation (individuals intend to take action to change their behaviour); Action (individuals act to modify their behaviour), and Maintenance (individuals work to prevent a relapse and to consolidate the gains attained during action). Movement through the stages occurs as individuals engage in ten covert and overt activities and experiences aimed at modifying their behaviour. Each of these activities or processes, (Table 5.2), is a broad category covering a range of techniques, methods, and interventions which can be stimulated either by an individual's own actions (experiential) and/ or by environmental events (environmental).

These ten processes, a common and finite set repeatedly identified by research across a range of behaviours, are applied or avoided to a greater or lesser extent at each stage of change. Pre-contemplators rarely use any of the processes. Individuals in the Contemplation stage are most open to consciousness-raising, dramatic relief and self- and environmental re-evaluation. Those in the Preparation stage add counter-conditioning and stimulus control whilst during the Action stage people also focus on self-liberation. Maintenance builds on each of the processes which came before and includes helping relationships and reinforcement management. However, according to this model, implementing a behavioural change is not usually a straightforward, linear progression with individuals easily applying each process and moving smoothly from one stage to

another until they achieve their aim on their first attempt. Rather it usually requires three or four action attempts before long-term maintenance is achieved as people relapse, regress to an earlier stage and recycle through the stages again. Consequently, change becomes a spiral process.

Table 5.2 Processes of Change (Transtheoretical Model)

Process	Definitions
Consciousness raising	Increasing information about self and problem
Self re-evaluation	Assessing how one feels and thinks about oneself with respect to the problem
Self-liberation	Choosing and committing to action or belief in ability to change
Counter-conditioning	Substituting alternatives for problem behaviours
Stimulus control	Avoiding or countering stimuli that elicit problem behaviours
Reinforced management	Rewarding one's self or being rewarded by others for making changes
Helping relationships	Being open and trusting about problems with someone who cares
Dramatic relief	Experiencing and expressing feelings about one's problems and solutions
Environmental re-evaluation	Assessing how one's problem affects the physical environment
Social liberation	Increasing alternatives for non-problem behaviours available in society

Whilst much of the research into the Transtheoretical Model has been carried out in the areas of smoking, psychological distress, weight control and dietary fat consumption, there are good reasons to consider it in relation to the self-directed professional development of teachers. Firstly, although the practice of the teachers in this study is not considered to be problematic or addictive behaviour, it

can be viewed as habitually ingrained behaviour which may require modification. Secondly, the diverse behaviours to which the model has been applied confirms that the ten change processes are used across them all (Prochaska *et al.*, 1992) which suggests they may be consistent with change in other areas such as teaching. Thirdly, research evidence has identified that the predominance of specific change processes differs across different problem behaviours (e.g. Prochaska *et al.*, 1992; Bowen *et al.*, 1994; Lamb and Sissons Joshi, 1996) and this opens up the possibility for identifying those which may be specific to the self-directed professional development of teachers.

Not all theories relating to development are stage theories as the following three show. However, they are all process oriented, confirming the view stated earlier that development is not a one-off event.

Theories-in-Action (Argyris and Schön, 1974; Schön, 1987) arose in the context of endeavours to increase professional effectiveness and describes how development takes place as individuals integrate thought with action. It is based on the premise that people design their actions and hold theories for doing so. These theories include values, strategies, and assumptions which enable people to explain, predict and control their interpersonal behaviour. For an individual to develop it is necessary for them to challenge both the validity of the theories they hold (theories-in-use) and the actions purported to arise from them. To do so, individuals need to move away from: unilaterally defining purposes; maximising the potential to win in every situation; minimising the expression of negative feelings; and being predominantly rational (Model I, Table 5.3). Such values lead to a need to own and control tasks and relevant factors; to protect oneself and others from being hurt; to avoid public discussion of alternatives and to adopt a generally defensive approach to development. For the individual this results in confirmation or disconfirmation of his theories (or single-loop learning) but rarely leads to the disclosure of information that enables others to test their assumptions about the individual and, therefore, provide him with another opportunity to test his theories (or double-loop learning). To be open to the possibility of changing either or both of their theories and actions, individuals need to adopt general

Table 5.3 Model I Theory-in-Use

Values (variable) governing action	Strategies for action of individual	Consequences for individual and others	Learning consequences	Effectiveness
Define and achieve my goals	Design and manage situations unilaterally	Individual seen as defensive	Closed to change	
Maximise winning, minimise losing	Own and control task	Defensive interpersonal relationships and group dynamics	Single-loop learning	Decreased effectiveness
Minimise negative feelings	Unilateral self-protection	Defensive norms	Minimal public testing of theories	
Be rational	Unilateral protection of others	Lack of exploration, choice, personal commitment, risk-taking		

Source: Adapted from Argyris and Schön (1974), pp.68-69; and Schön (1987), p.257.

Table 5.4 Model II Theory-in-Use

Values (variable) governing action	Strategies for action	Consequences for individual and others	Learning consequences	Effectiveness
Maximise valid information	Design and manage situations bilaterally	Individual perceived as less defensive	Open to change	
Maximise free and informed choice	Control tasks jointly	Interpersonal relationships and group dynamics less defensive	Double-loop learning	Increased effectiveness
Maximise personal commitment to decisions	Protection of self is joint process	Norms oriented towards learning	Theories tested publicly	
	Bilateral protection of others			

Source: Adapted from Argyris and Schön (1974), p.87; and Schön (1987), p.258.

values, strategies and assumptions which allow them to exchange valid information, even about difficult and sensitive matters; to subject private dilemmas to shared inquiry; and to publicly test negative assumptions (Model II, Table 5.4). These enable an individual to explore different viewpoints and risky ideas, and to become more effective through the experience of development as a collaborative and supportive venture.

Theories of Action raises some interesting thoughts for the issue of self-directed professional development. The CSQ is theory based and was used in a way that allowed others to express their viewpoints; the subsequent feedback session with the researcher or project director and, where held, teacher-student discussions encouraged joint exploration of the process of teaching and learning. Consequently, it would seem to provide an opportunity for the participants to exercise double-loop learning values in consideration of development. Therefore, development of communication styles could be the result of teachers adopting the approach outlined in Model II.

Cunningham's (1994) view of the development of individuals within organisations is within the context of how people manage their own learning with the objective of integrating theory and practice (purposes and action) and strategy and tactics (why? and how?). Successful Self-Managed Learning, he believes, is governed by four principles and facilitated by four processes. The four principles are: responsibility; self-control; autonomy; and choice. Individuals need to take responsibility for their own development since they are best placed to analyse and assess their own experience, priorities, needs and goals within their organisational context. They must exercise self-control by managing the development need that is identified, and autonomy by mastering their own situation through critical thinking, informed judgements, and planned action. Finally, individuals need to perceive they have more choices than demands and constraints place upon them and be willing to break out of any self-imposed straight jackets. The four processes considered to facilitate development are - preparing; resourcing; collaborating and judging (Table 5.5).

Table 5.5 The processes of Self-Managed Learning

Process	Involves:
Preparing	Mapping (having a view of their world to direct their learning); diagnosing (becoming self-aware); planning (identify improvements); contracting (developing a learning contract).
Resourcing	Acquiring more resources (money; materials etc.) or working within limited and/ or existing resources.
Collaborating	Working with others; sharing and exchanging ideas with others; receiving and giving support.
Judging	Assessing and evaluating the use of past experience; assessing and evaluating learning and its effectiveness.

The combination of these principles and processes enables individuals to develop, design, and plan a programme to meet their own needs within their organisation. However, such development is better facilitated when the organisation is actively involved in supporting and managing the learning of its people. This requires the organisation to become a learning business, expressing its commitment and intentions through a strategic approach that is both big-picture oriented and personal. Through the big-picture dimension, the organisation values learning; develops a culture and structures that assist people to work in better ways; and clarifies the strategic direction of the organisation and individuals' contributions to this. Through the personal dimension, an organisation encourages individuals' learning by developing their capability to learn; their ability to apply such learning wisely; and their ability to take a holistic view which connects their feelings, physical attributes, values and social factors within themselves and with the world. The integration and support of the big picture and the personal approach is best achieved by the organisation creating 'learning sets' in which individuals within an organisation come together to raise ideas; jointly assess proposed and actual outcomes; allow each other to struggle with ideas; and learn to listen to and support each other.

As with Jackson's Seven-Step Model of Change, Cunningham's Self-Managed Learning method considers that for development to be mutually successful to both

individual and organisation, the two parties need to work together. The advantages for the individual are that they receive support, acknowledgement and resources for their efforts. The advantages for the organisation are that individuals' objectives can be linked with its own; large scale and long term development involving all employees can be planned and executed; personal autonomy can be developed to encourage initiative; collaboration can be developed to establish the exchange and sharing of ideas and support; and by selecting good learners into the organisation it can maximise both its and their learning potential.

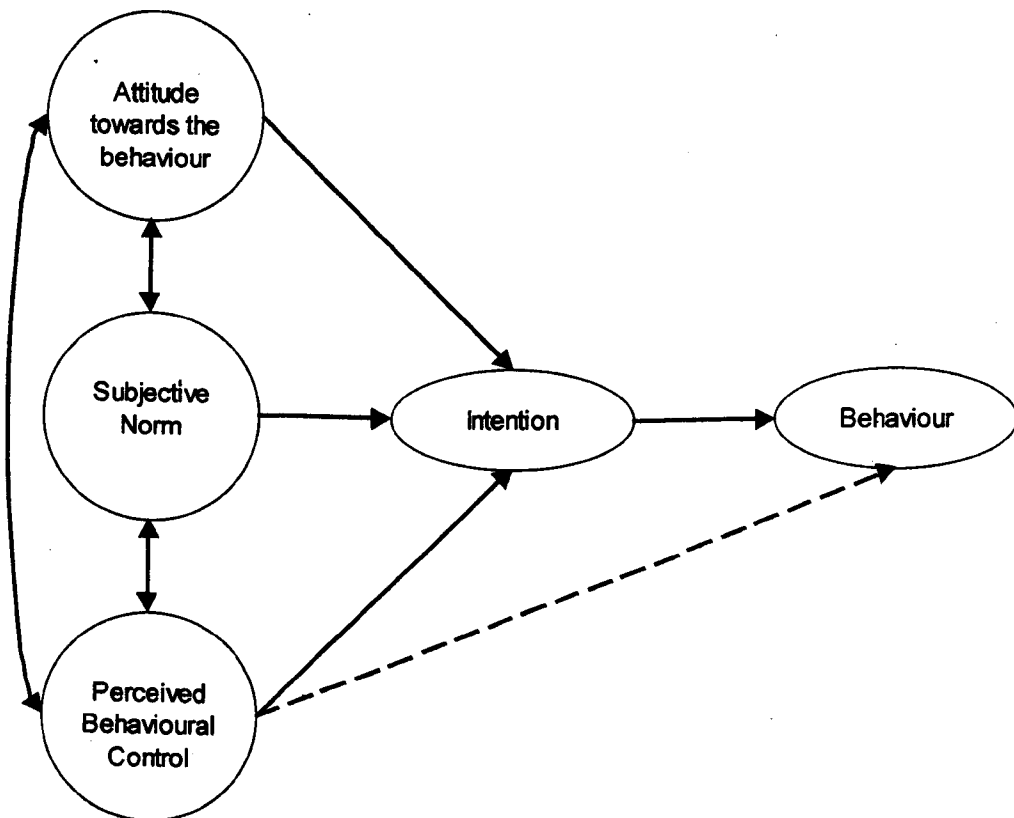
Yet, despite the advantages of this mutual approach, individual learning and development does, and will continue to, occur without organisational input. This may well be the case for the self-directed professional development reported so far in this study, for reasons that such organisational support does not exist. However, it may also be the case that individuals have chosen not to access the organisational support available to them, perhaps for reasons that it could impact adversely on the outcomes they wish to achieve. Consequently, the views of the Self-Managed Learning method are useful in exploring possible interactions between individuals and their educational institutions and the effects on self-directed professional development.

Finally, the Theory of Planned Behaviour (Ajzen, 1991) proposes that someone's actions are dependent on how strongly they intend to engage in a particular behaviour. In turn, the individual's intention to perform is a result of three factors - *attitude*, *subjective norm* and *perceived behavioural control* (Figure 5.2). It is the strength and combination of these three which influence, indirectly, the individual's actions. Therefore, whether an individual will begin and complete a development initiative will depend greatly on how each of these factors detracts from or contributes towards their intentions.

Attitude refers to the beliefs an individual has about the behaviour in question. If an individual believes that a particular behaviour will have desirable

consequences, then they will form a favourable attitude towards it. Conversely if the consequences are considered to be undesirable, then an unfavourable attitude will be formed. *Subjective Norm* is concerned with the beliefs an individual holds about the likelihood of important 'others' (e.g. individuals, groups) in their life approving or disapproving of their performing the proposed behaviour. Thus, an individual is more likely to act in a particular way if they perceive considerable social pressure to do so rather than little or no social pressure. *Perceived Behavioural Control* is related to beliefs about the existence or absence of resources or opportunities required to implement the behaviour. The more resources and opportunities individuals believe they have access to, and the fewer the obstacles they anticipate, the more they perceive control over their behaviour and the greater the likelihood of the behaviour occurring.

Figure 5.2 The Theory of Planned Behaviour



Two pieces of research using the Theory of Planned Behaviour (TPB) highlight some specifics that influence development in educational settings. Haney *et al.* (1996) investigated teacher beliefs and intentions concerning the implementation of a science education program. The likelihood of implementation was linked to positive views of how the program would: increase students' interest, independent learning and attitudes towards science; and enable them as teachers to teach the concepts and accommodate a variety of student learning styles (*attitudes*); be supported by administrators and other teachers (*social norms*); be provided with adequate staff development opportunities related to the program and available resources such as funding and curriculum materials (*perceived behavioural control*). Crawley and Salyer (1995) explored middle school teachers' intentions to introduce life science reforms into their practice and elicited several influences on behaviour. *Attitudes* were represented by an expectation of improved student learning and interest in the subject and were a key motivator to implement reform. *Social norms* reflected the need for teachers implementing a school-wide reform program to communicate and co-ordinate with others in their situation (e.g. colleagues) but not necessarily with all the key people in their school (e.g. principal or head of department); and concerned whether those who were to teach the students next would follow-up the program. *Perceived behavioural control* highlighted major obstacles as being lack of time, materials and equipment whilst suggesting that articulation of beliefs may actually bolster teachers' intentions to implement reform.

The TPB attempts to both explain and predict behaviour. However, meta-analysis of TPB research shows that, in its present format, the theory falls short of being a very effective means of identifying the determinants of behaviour or predicting actual behaviour (Sutton, 1998). Two reasons are put forward. Firstly, intentions to act appear to be affected by more than the three existing factors; additional factors of belief salience; past behaviour and habit; self-efficacy; self-identity; moral norms; affective beliefs and situational influences also appear to be involved (Conner and Armitage, 1998). Secondly, stated intentions may change as unforeseen events occur or may only be provisional because further consideration is desired (Sutton, 1998). Yet, despite the apparent need to improve

and extend the existing model, the TPB is worth reviewing in connection with self-directed professional development as it encourages accomplishment of this activity to be considered in relation to the individual's stance toward development, social pressures to perform, and opportunities and resources viewed as important influences on the performance of behaviours.

Summary of Part One

All six of these theories provide an idea of the structure that is perceived in successful development by individuals. The stage models propose that individuals move through phases which reflect *when* particular shifts in attitudes, intentions and behaviours occur and *how* such shifts occur. Each stage is viewed as a platform for progress to the subsequent stage with various activities, experiences and factors characterising the process involved. The non-stage models emphasise the pattern of behaviours people follow to enable development to occur. These patterns involve specific inter-related factors which individuals need to manage in order to develop. All six theories provide useful ways to model development and offer information which can be used to inform how individuals can be encouraged to initiate, sustain and complete the development process.

PART TWO - FACTORS INFLUENCING DEVELOPMENT

Theories of development are attempts to provide an explanation of how effectiveness is intentionally improved, based on a finite number of essential principles. Other literature relevant to development focuses on specific factors that have a major influence on individuals engaging in and coping with the demands and requirements of the development process. These factors can be loosely grouped into intra-, inter- and extra-personal areas and are expanded in the following sections.

Intra-Personal Factors

'Change', claims Fullan (1991), 'is a highly personal experience' (p.127) and, in contemplating development, it is the individual teacher who ultimately determines the level of success. Three different perspectives on how teachers influence development are considered.

Citing Doyle and Ponder's (1977-8) "practicality ethic" of teacher decision making Fullan (1991) explains that each individual decides on the value of any proposed development by asking what personal meaning any change effort or outcome has. This involves considering whether the proposal meets a perceived need (e.g. will students learn?); whether the manner in which it will be implemented is clear (i.e. how will it be implemented?); and whether the perceived incentives outweigh the disincentives (e.g. how will it affect them in terms of time, energy, learning new skills and competencies, interacting with others, interfere with existing priorities?). The exact concerns differ from person to person but, drawing on research from Hall and Hord (1987) and House (1974), Fullan reports that when development efforts fail it is because too frequently the aims are not congruent with a teacher's felt needs; the implementation process lacks clarity; the benefits seem unpredictable and the personal costs high. Therefore, promoting and fostering professional development must attend to the personal meaning that teachers place on their own teaching.

Wallace *et al* (1995) also investigated why teachers chose, or chose not, to participate in development efforts. Although the teachers involved in the project brought with them a variety of backgrounds and views, a number of critical distinctions in experience and motivation were found between teachers who volunteered to participate and those who did not. The themes which emerged concern personal meaning, professional history, ownership, rewards, professional autonomy and gender. Those who became involved in the project did so because the proposed changes were relevant to their own purposes; they had experienced past successes with similar projects; they had been either closely involved in the development of the project materials or publicly supported the need for change;

they perceived personal gain through helping others and professional gain through development; they felt in control of their professional destiny; they were most likely to be male.

Joyce and Showers (1995) suggest the concept of 'state of growth', implying that development is influenced according to the way individuals are oriented towards it. Individuals with strong self-concepts, who believe their interactions with the environment will be productive, are open to new experiences, are able to integrate new information and tolerate alternative views were found to have high levels of development activity. These *Gourmet omnivores* strive to learn all they can about their craft; keep abreast of possibilities for growth; identify suitable events; and work hard to ensure their participation in development activities, seeking professional and informal peer interaction with likeminded individuals. *Passive consumers*, by comparison, are developmentally less active; are characterised by modest self-concepts and a lesser ability to develop new conceptual awareness and structures. They tend to conform to the norms around them, attending the development activities required by the school administration and any compulsory workshops, enjoying them but rarely doing anything with the content. However their levels of involvement increase when in the presence of others who initiate and participate in development activities. Those in the third group, *Reluctant consumers*, display poor self-concept and conceptual development and find their environment threatening. Unable to cope with the unfamiliar they spend their time and energy pushing away opportunities for development. Reluctant to interact positively with their environment they attend only the staff development required of them, expressing their anger at being there, disparaging the content, avoiding follow-up activities and running down colleagues who willingly participate. However, they are not completely unaffected by their social context which, if it is affirming (i.e. suggests that all teachers are capable learners, able to master a variety of techniques and strategies successfully in the classroom) and contains some *omnivores*, can enable them to be carried along in development efforts.

Inter-Personal Factors

The importance of other people in the development process was expressed or alluded to in each of the six theories reviewed in Part One. However, none specified the particular contributions made by different people within the individual's development context. As will be seen below, people in different roles - colleagues, students and change agents - may assist or detract from an individual's development initiatives in different ways.

Colleagues

Collaboration was initially referred to in chapter one when describing action research and was generally perceived as a positive influence on development. This notion of colleagues coming together to work supportively, help one another reflect on their teaching and assist each other to develop appropriately has also been observed in other research.

Hargreaves (1992) advocates collaboration as the key to teacher development and shows that collaborative school cultures are associated with successful implementation of educational change, school improvement, good practices in professional development and positive outcomes in pupil achievement. Such cultures enable teachers to support, learn from and work with each other in order to foster individual and school improvement. Indeed, Holly (1989) in a survey, identified that more than 60% of teachers valued frequent communication and relationships with other colleagues, both informally and formally, in order to gain ideas for and insights into their work. Colleagues were viewed as valuable resources for ideas, techniques, support and inspiration.

Joyce and Showers (1995) promote peer-group coaching. They perceived that when whole faculties were organised into study groups and engaged in peer coaching the proportion of staff who transferred the content of their learning into classroom practice was between 75% and 90%. Belonging to such a group builds a social structure that creates a sense of power and self-efficacy, minimising

isolation and a sense of self-reliance; it provides support which engenders the confidence to view one's abilities differently and to attempt new things; it encourages accommodation of alternative perspectives; it can lead to exploration of professional literature and to making public information about student progression which will further enhance the study of student learning and teachers' responses through development.

Devlin-Scherer *et al* (1997) found that, in terms of incorporating new practices into their normal repertoire of teaching, teachers who worked together in teacher study groups significantly outperformed those who received individual conferences and follow-up from principals or supervisors. Although the reasons for this were not totally clear suggestions were put forward. It was proposed that working and discussing with colleagues similarly engaged in the development process generates more teaching options and ideas on how these can be effectively integrated into classroom practice; provides a ready source of support and encouragement from those in the same situation; and stimulates and promotes a desire to develop within each participant. Alternatively, since the collaborative groups were more labour intensive, it could be that more effective development occurred because these participants spent more time focusing on the issues of development than did the others. Or perhaps the workshops used to train the principals/supervisors in the methodology were not a sufficiently strong enough model to ensure that individual teachers received a measure of support comparable to that in the collaborative study group. Whatever the reasons, it was concluded that permitting teacher colleagues to convene study groups 'appears to be a useful approach to effecting individual change' (p.21).

Yet more evidence for the collaborative approach supporting teacher development comes from Newell (1996). Participants on a course enquiring into the structure of craft knowledge, through collaboration and reflection, displayed an increased awareness of the variety of factors that influence effective teaching as a result of working together with teachers of different races, experience and disciplines, and with different student groups. Newell offers several reasons for the effectiveness of collaboration: it provides a forum in which participants can establish ownership

of their teaching behaviours; it enables them, through discussion, to consider their behaviours, to define more clearly their own perspectives and reasons for them; it allows them to hear differing arguments which can lead to a rethinking and evaluation of the effectiveness of their actions, prompting a more appropriate and confident choice of teaching strategy.

However whilst teachers desire this, and Hargreaves (1992) argues that the institutional context should provide the ideal opportunity for professional sharing and encouragement, this rarely occurs in reality. The culture that tends to prevail is not collaborative or even conducive to collaboration and more is said about this under *extra-personal* factors.

Students

Prior to the late 1970s, early 1980s little was known about what students thought about their learning experiences or the implementation of educational innovations. When research was carried out, it emerged that teachers were often out of step with what their students thought, felt and desired (e.g. Fullan 1991; Parlett *et al.*, 1988). Since the late 1980s there has been an increased emphasis on involving students in the development process by eliciting their views to inform practice and, hopefully, improve it (e.g. Gibbs *et al.*, 1989; Partington, 1993; Bloomer and Hodgkinson, 1997; Martinez and Munday, 1998). The methods used to ascertain their perspectives are varied: discussion and analysis of daily routines; recommendations from pupils' school council; questionnaires and interviews. It is hoped that this feedback - information or data on how teachers operate - will illuminate what is happening and how it is happening, so as to provide a basis for encouraging development. It is anticipated that such information will energise behaviour by arousing and creating forces and interest within an individual that will bring about a motivation to develop. Then, once motivation has been stirred, feedback can direct behaviour by helping to inform individuals of the kinds of actions that will bring about certain outcomes or results (Nadler, 1977). It is believed that, ultimately, student perspectives on teaching can inform the process of development, organisational life, the way educational initiatives are constructed

and implemented, and help determine the outcomes (Fullan, 1991; Craft, 1996). Research suggests this can be the case.

Wisdom (1995) reports how, since 1986, Kingston University have operated consultation exercises with students to create a report which gives teachers details of student perspectives on how their learning has been going on a particular course. Using a third party to initiate and facilitate structured student group discussions, without the presence of the course tutor, a wealth of data has been gathered concerning what makes a successful course, the ideal teaching style and the frequent difficulties students face. Staff are then free to use the information as they wish. Consequently, some have chosen to ignore or rebut the content. Yet, where others have acted on it, it has been used as part of an ongoing discussion about future staff and course development.

Phillips and Stevens (1996) devised a system for collecting student feedback that could be used to inform tutors' reflection on, and development of, how they supported students' learning. Tutors gained feedback directly from their students without any third party involvement, using a questionnaire. Evidence suggested that the responses obtained from the students had led to reflection by the tutors. For instance, tutors found the remarks useful for guiding tutorial planning to meet student needs more accurately; for providing more appropriate help in structuring assignments; and for reassessing approaches to tutorials. Students too found the opportunity beneficial for considering the course, their progress, strengths and weaknesses.

Finally, Murray (1997) reviewed the research evidence from faculty surveys, field experiments and longitudinal comparisons and concluded that under certain circumstances student evaluation contributes significantly to improvement of certain aspects of college and university teaching. These aspects referred to are those areas of teaching which are measured by typical student evaluation forms, such as clarity of explanations, encouragement of student participation and promptness of feedback. The circumstances which he found contribute to

improvement are when student feedback is coupled with expert consultation with instructional development specialists, as distinct from student feedback alone. However it was not possible to say whether perceived improvements are maintained over time. Only 50% of the studies reported long term trends in teaching improvement following the introduction of student evaluations and the conditions under which this occurred are not yet known.

In general the evidence relating to the participation of students in teacher development is positive. Student perspectives can raise teacher awareness, prompt evaluation and subsequent planning and action. However on occasions student feedback does not lead to teacher development. Wisdom (1995) provides some insights as to why this could be the case. Firstly, in most scenarios which invite student feedback there is no guarantee that any appropriate action will be taken. Students give their opinion but rarely does an opportunity or process exist which allows them to help determine how the information is subsequently used and acted upon. The unequal power relationship between teacher and students allows the teacher to do (or not) as they wish with the results. Secondly, students sometimes lack the abilities to articulate their views or to make best use of the opportunities they do have to share their concerns and provoke action. This limits the availability of important information, almost making the whole process worthless since teachers are unlikely to be reflecting on feedback that really goes to the heart of students' concerns. Lastly, on occasions, the amount of feedback collected is so great that it is difficult for teachers to know where to begin to translate it into action. Overall it seems that student feedback alone is insufficient to bring about change and, therefore, perhaps should not be the sole source of information about teaching in development decisions (Murray, 1997).

Change Agents

Sometimes an individual is appointed and charged specifically with the task of assisting a teacher's development process. This role of change agent can be perceived in a number of terms - teacher educator, coach, consultant, staff developer or facilitator.

Diamond (1982) tells how facilitation and support within an experimental atmosphere helped teachers 'to step outside and go beyond the safe and familiar routines' of their teaching (p.165). By following Kelly's fixed-role programme teachers agreed to teach and interpret lessons in the manner of a fictitious but acceptable and likeable teacher whose pedagogical characteristics are different from their own self-characterisation. During this period individual teachers met with Diamond, a teacher educator, to discuss and reflect on the experience and to tackle constraints and threats. At the end of the programme teachers had been prompted to examine in detail the pedagogy of an imaginary teacher; became less centred on their own teaching role; and realised that a teacher can be self-inventing, not necessarily constrained by their usual thought or behaviour patterns. The assistance of the teacher educator guided teachers in their self-exploration and extended their range of choices. The opportunity to play at 'make-believe' enabled participants to search for new approaches to their teaching.

Coaching as a method of facilitation was shown to be effective by Roelofs *et al* (1991). A staff development programme dealing with mixed-age classes was undertaken by twenty-eight teachers - eighteen coached and ten uncoached - and their implementation of the new knowledge and skills was compared with fourteen control group teachers. Coaching consisted of the provision of companionship; the giving of technical feedback; the analysis of application; assisting with adaptation to the students; and personal facilitation. Results showed that teachers who received coaching made bigger improvements than the uncoached. Feedback from the teachers indicated that this was due to the coaches enabling the programme to be more practical and tailored to their needs.

Similarly Murray (1997), reviewing the impact of student feedback on staff development, found evidence that expert consultation can turn something apparently vague and unspecific into more clearly defined indications of what requires improvement. In this instance, feedback from students which was supplemented by a consultation with a development specialist produced much larger gains in teaching than student feedback alone. The benefits of the expert

consultation were seen as aiding interpretation of the findings; providing motivational support; and offering specific ideas for development. Research by Piccinin (1999) confirms Murray's findings and adds that consultation increases self-confidence, feelings of competence and teaching satisfaction.

However the involvement of a change agent is not equally successful with everyone. Roelofs *et al* (1991) observed that some of those who received coaching performed less well than others. In part this may have been due to the programme contents not corresponding with a teacher's beliefs and opinions about teaching. In part this also could be attributed to a lack of consistency in the way the coaching was performed - compared with those who showed large gains, those who performed less well considered their coaches to have given fewer ideas and suggestions and to have provided feedback that was less useful for planning purposes.

Clearly the quality of the change agent can influence the development outcome. Rogers and Shoemaker (1971) assert that a successful change agent has to put effort in to encouraging and supporting his clients; should be well disposed towards those he is assisting; has to enable clients to perceive that a need is being met; must empathise with clients as they tackle change; needs credibility in the eyes of the clients and should be aiming to increase the clients' abilities to evaluate the change effort for themselves. Calderhead and Gates (1993) state that the characteristics required by a change agent are an ability to use a public language to describe the practice and learning of their clients; a capacity to partake in a constructive dialogue with their clients about their work; a readiness to help their clients take charge of their own development; and a willingness to appropriately withdraw their support to enable clients to develop their own independence. Beaty (1996) suggests that change agents need to offer time and space for learning and practising new skills; encouragement and reassurance; listen and empathise; build confidence; acknowledge progress; and, where possible, provide resources and structures to assist development. If they come from the same institution and are active in teaching and support roles their credibility and acceptability increases. Exhibiting such characteristics will not

guarantee success but does go some way towards supporting and encouraging participation in development.

Principals (Leaders or Heads of Institutions)

Principals - considered here in the sense of leaders or heads of institutions - influence both involvement in and the outcomes of educational development efforts. Where they are active, strong and persistent in the area of project and staff development, professional development is encouraged and supported. This is because a principal's actions carry a message as to whether change is to be taken seriously or not (Fullan, 1991 citing Berman and McLaughlin, 1977).

Studies into the role of principals in the implementation of change have identified the performance of a number of functions which contribute effectively to development. These functions consist of aspects of leadership (mission; direction; and inspiration) and management (designing and implementing plans; achieving objectives; and working effectively with other people; Fullan, 1991). Consequently, principals who are effective in promoting and facilitating the development of their staff are a visible presence; person and task oriented; good communicators who listen as well as control; involve staff in decision-making processes; value staff contributions; initiate and develop a culture in which teachers work together and support each other in improvement and change; endorse the development of their staff through attendance at training sessions and development activities; are interested in long term development and not quick fixes; and exhibit a willingness to free up and fight for time and resources to facilitate development opportunities (Eraut, 1977, 2000; Eraut *et al.* 1998; Little, 1984; Loucks-Horsley *et al.*, 1998; Creamer *et al.*, 1991; Fullan, 1991). Perhaps, most importantly, the effective principal acts in collaboration with other change agents within their institution, developing a team approach, an understanding of the institution's needs and being actively involved in the institution's work. In this way, the role of a principal is not that of implementing innovations but in transforming the culture of the institution so that individuals within the organisation seek and adopt development initiatives (Fullan, 1991).

However, whilst principals can have a positive impact on professional development, teachers' development does occur without either their involvement or the exhibition of the qualities which would support change (Fullan, 1991). Development regardless of a principal's influence is often the norm as research evidence shows that a principal's workday and responsibilities diminish their opportunities or abilities to be effective at encouraging staff development. Fullan (1991) cites studies which highlight the demands on, and activities of, principals. These include: one-to-one personal encounters, meetings and telephone calls (Wolcott, 1973); student disciplinary control, keeping outside influences under control and satisfied, keeping staff conflicts at bay, keeping the institution supplied with adequate materials and staffing (Crowson and Porter-Gehrie, 1980); constant interruptions, attending to those situations most current and pressing, undertaking little reflective planning (Martin and Willower, 1981); administrative housekeeping matters and maintaining order (Sarason, 1982); parent and community interactions, trustee requests and board initiatives, dealing with staff and student services, and with social services (Edu-con, 1984). Consequently, with an average of around 150 tasks (Martin and Willower, 1981) and 2,000 interactions (Duke, 1988) each day, a principal's time is characterised by brevity, variety and fragmentation, with most activities aimed at maintaining stability. Thus, teacher development is denied the encouragement and support of principals that other research suggests is helpful to accomplishment.

Extra-Personal Factors

The context in which a teacher works and attempts development was briefly mentioned in connection with collegiality and is given fuller consideration here. Hargreaves and Fullan (1992) state that the process and success of teacher development depends on the environment in which it takes place. Eraut (1977) considers that the school context has far more effect on teacher development than any external agency. Joyce and Showers (1995) confirm that the structures of educational organisations affect teachers' behaviour and their ability to grow in a way that is beneficial to student achievement. From these and other articles, three

major contextual factors emerge which influence development - the culture of teaching, staff development, and technical blockages.

Culture

Hargreaves (1992) considers institutional culture as one of the main regulators of a teacher's development. In particular, it is the relationships with, and outlook and orientations of, colleagues with whom they work that are significant to the day to day life and work of a teacher. When considering the impact of interpersonal factors on teacher development, collegiality and collaboration with interested others were seen as positive influences. Consequently, the existence of a collaborative institutional culture in which teachers are united in terms of routine, support and openness on a moment-by-moment, day-to-day basis; share and discuss ideas, resources, successes and failures; and allow others such as students and change agents to contribute to the reflective process, are perceived to be encouraging and supportive of development (e.g. Fullan, 1991; Hargreaves, 1992; Palmer, 1993; Shulman, 1993).

However, Hargreaves (1992) notes that the patterns of relationships that exist for many teachers within their institution are such that collegiality and collaboration are far from being the norm, resulting in most teachers being either individualised (working alone in isolated and insulated environments) or balkanised (associating in closed groups, reinforcing division rather than unity). There are two reasons for this.

Firstly, environmental impositions outside a teacher's control inhibit professional growth through interpersonal relationships. These include timetables that prohibit diverse or sustained collegiality; administrative demands which divert attention from development issues; mandated curricula which leave little to collaborate about and bureaucratic and technocratic controls via tests and accountability systems. All of these issues are perceived to detract from a teacher's professionalism and sense of empowerment in what they achieve or might want to achieve (Apple and Jungck, 1992). Add to these the fact that the most pervasive

characteristic of teaching for a teacher is that of classroom isolation for a large proportion of the day, and the opportunities for shared experiences and support in relation to professional development aimed at improving teaching and learning are few and far between even where they are desired.

Secondly, the development of a collaborative culture is deliberately resisted by some teachers as their norms, values, beliefs and practices are supported by the prevailing environment. In such situations, Hargreaves (1988) infers, a collaborative culture would mean undermining the transmission mode of teaching embedded in the existing environment which assists control of students; helps teachers to achieve measurable objectives through examination within limited situational constraints; and maintains a teacher's sense of identity through the exercise of their subject and skill-based expertise by which teacher achievement is accomplished. Promoting collegiality and collaboration aimed at developing teaching and learning is seen as a threat by some teachers to their sense of security, competence and confidence as it would mean re-examining the power relations between teacher and student within classroom interaction, giving students more control over their learning; could lead to the loss of a public reassurance of a teacher's capability; and result in a more social and relational form of teaching for which a teacher feels ill-equipped. Consequently, for these teachers development through collaboration is a challenge that is avoided.

The prevailing non-collaborative culture is both a restriction on and protection from professional development, depending on a teacher's viewpoint. Those wishing to engage in discussion and generation of ideas for improving teaching and learning are denied the valuable resource perceived in interaction with colleagues. Those whose sense of purpose and meaning are identified with the existing environment use the contextual conditions to support their approach to teaching and preclude the need for professional development. However, if the former are to be enabled to develop and the latter are to be encouraged to engage in critical reflection, the research evidence concerning inter-personal factors in professional development suggest that the social arrangements of educational institutions need to be collaborative so that teachers work supportively together,

reflect on their teaching and help one another to make sensible changes (Hargreaves, 1992; Joyce and Showers, 1995).

Staff Development

Staff development concerns the provision made by institutions of activities which extend the knowledge, skills and attitudes of its staff (Brew, 1995). It is variously described as 'helping people to grow within the organisations in which they are employed' (Brew, 1995, p.15); a way to 'facilitate and support staff so they can serve fully their own and their institution's needs' (Webb, 1996, p.1); being concerned with the competence of the individual, the health of the system or organisation and the needs of the community which it serves (Main, 1985); and providing teaching that will lead to 'instructional improvement' (Sparks, 1983, p.65). It is also considered 'central to consolidate, extend, enhance and remedy teaching and to prepare for innovation and changes in learning and teaching' (Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom, 1994, p.3). Consequently, staff development provision is considered to have a major role in teacher development. This role is most likely to be accomplished when certain characteristics relating to ethos, institution, and program design and delivery are fulfilled.

Joyce and Showers (1995), and Webb (1996) advocate that the ethos of staff development should make human relationships central to development rather than knowledge and skills. This means creating a system that invests in people; dialogues with people; desires to come to a better understanding of the people involved in the teaching and learning process; and offers instruction and support to the people in the areas they are seeking to develop. This involves allowing individuals across an institution the scope to mould staff development and to have an input into the agenda (Beaty, 1995). It requires that when aspects of staff development are compulsory, for instance appraisals and observations, these are used primarily to help improve practice by analysing the development needs of the individual and assisting them to identify priorities and targets for future action as distinct from satisfying external demands for information and accountability

purposes (Craft, 1996). It means that the role of staff developer is that of a change agent, predominantly committed to empowering staff to consider and actuate development (Castling, 1996). When the system is oriented in these ways towards teachers staff are encouraged to grow and adapt because it allows them to identify their own needs and direct their own development.

A second characteristic required for effective staff development provision is that it takes place within the context of an organisation oriented towards learning (Craft, 1996). Since individuals find it hard to develop in institutions that are themselves static, the organisation needs to be oriented towards improving its overall effectiveness and committed to the collective development of all of its staff and students (Holly and Southworth, 1989; Fullan, 1991; Veenman *et al.*, 1994). To establish this climate of learning the organisation needs to encourage collegiality and collaboration; allow sufficient and appropriate time for development; provide clear and sustained leadership and administrative support for development opportunities; formally acknowledge the place and importance of professional development within the organisational structure; and offer appropriate incentives and rewards (Loucks-Horsley *et al.* 1987). In these circumstances, staff development activities are more likely to positively impact teacher development since seeking improvements will be a natural part of their experience and understanding of their organisational environment and objectives.

The third set of characteristics related to successful staff development provision concerns the features of any program designed and delivered to help teachers in their development. These features need to attend to the type of activities used; a teacher's perceptions; the relevance of the program; and commitment to development.

Sparks (1983), in a review of staff development delivery systems, proposed a list of five potential activities which would be effective in training and development. These were diagnosing and prescribing a remedy for teacher behaviour; giving information and demonstrating how a new skill, concept or technique works;

discussing the application of a skill, concept or technique with others; and coaching. These activities are seen to raise awareness and provide a focus for development; help visualise how a new idea will work in practice; generate new possibilities, answer problems and encourage having-a-go; provide extra data for further adjustments to behaviour; and offer companionship and insight into the progress of a development effort.

Pehkonen and Törner (1999) researched key change factors for teachers and found that breakthroughs in development were achieved when teachers perceived themselves as learners instead of in their role as teachers. Consequently Pehkonen and Törner suggest staff development programs should contain two strategies to be effective. One is that teachers should be encouraged to change their role by identifying themselves with learners, perhaps in a simulation group, in order to observe themselves from the outside and raise awareness. The other is that teachers should avail themselves of a different viewpoint of their subject by interviewing some of their students in depth in order to try and understand different conceptions of their subject and consider altering their practice accordingly.

Veenman *et al.* (1994) in a wide ranging review of the impact of in-service training on the behaviour of primary school teachers found that, to be effective, such training had to be of relevance to teachers. This required the content to be geared to the professional spheres of influence of the participants; the goals to be clearly explained in advance; the subject matter to be relevant to the job; the demonstration of any requisite practical skills; and participants to be actively involved in the activities.

Lastly, research by Devlin-Scherer *et al.* (1985) found that three-quarters of those who made verbal public commitments to change at staff development workshops actually implemented the changes in their classroom teaching. By applying the concept of expressed commitment to the training program participants were assisted in creating an understanding of the requirements and feasibility of the

proposed development. This occurred as they obtained sufficient information on which to base their decision; entered into discussion about the implications of implementing the new behaviour; and generated ideas about how to accomplish the change. Therefore, the conclusion is that the effectiveness of training programmes is enhanced where participants are encouraged to make public commitments to change.

These features of the design and delivery of a staff development program provide a general framework which can be tailored to meet the different levels of expertise, learning styles, and interests of teachers and the objectives of the institution. In this way too, the ethos of human relationships and the learning organisation can be brought together, in a coherent and supportive approach to facilitating teacher development.

Technical Blockages

One final factor which has a major influence on teachers' participation in, and accomplishment of, professional development is that of technical blockages in the form of time, finance and resources.

Time is considered to be a necessity for successful development (Loucks-Horsley *et al.*, 1987, 1998; Veenman *et al.*, 1994; Joyce and Showers, 1995). It is required to enable reflection on current practice; enquiry into alternatives and new ideas; planning of changes; implementation of changes; and consolidation of development actions. Yet it has already been noted in chapter one (pp.16-17) that time is rarely officially set aside for reflection and development activities. This lack of time during the working day is something which hinders teacher development. Demands on their full-time work commitments and private lives leave teachers with insufficient time for opportunities to share with and learn from colleagues; to participate in development activities; and engage in in-depth study (Holly, 1989). Stenhouse (1981) cited by Holly (1989) states that 'The most serious impediment to the development of teachers as researchers - and as artists in teaching - is quite simply shortage of time. In this country teachers teach too

much.' Consequently, many of those who decide to undertake professional development do so in their own time, receiving no reduction in their work commitments from their employers (Tall *et al.*, 1997).

An adequate financial budget is one of the key conditions Creamer *et al.* (1991) identified for successful implementation of intentional development initiatives. However, whilst colleges and universities are expected to encourage their staff to update and develop professionally, the funds these institutions make available for this are only a small fraction of their overall budget (between 0.15% and 2% in FE colleges; FEFC, 1999b). This impacts on teachers' professional development in several ways. Firstly, priority is given to training and development that supports the institution's strategic objectives and restricts a teacher's own choice within the budgetary confinements (FEFC, 1999b). Secondly, it reduces the possibility of staff cover so that teachers can take time out to attend to their development. Thirdly, it forces those keen to develop their own capabilities to do so at their own or their family's expense (Tall *et al.*, 1997). Consequently, opportunities for development are limited.

A lack of access to adequate resources - people, materials and equipment - similarly hinders development and is also connected with the issues of time and finance. Teachers view colleagues as valuable resources for ideas, techniques, support and inspiration. However, lack of time denies them the opportunity to meet and avail themselves of this interaction (Holly, 1989; FEFC, 1999b). Managers are often key to enabling professional development to be undertaken or ideas to be implemented. Yet this support is not always forthcoming, resulting in development being delayed or curtailed (Crawley and Salyer, 1995). Materials and equipment necessary for implementing development ideas are not always available when needed, either because these can only be requisitioned at a few set points during a year, or because the institution cannot afford them. In these instances teachers sometimes resort to meeting their developmental resource needs out of their own pocket (Crawley and Salyer, 1995). Inadequacies of space, materials and expertise hinder implementation of development activities and experimentation with ideas. The effect of a lack of time and resources is that

opportunities for development within the working environment are curtailed. For some this simply means development coming to a halt. For others this means attending to aspects of development outside of their daily context, possibly in isolation, and in their own time, and at their own expense, which can reduce the effectiveness of the development process and outcomes (Tall *et al*, 1997).

Summary of Part Two

The influences on participation in and accomplishment of professional development can be loosely considered in three groups representing intra-personal; inter-personal and extra-personal factors.

The individual teacher's involvement is influenced by the personal meaning and relevance a development initiative has for them; the degree of ownership and autonomy they can exercise over the initiative; the concerns they have over the development; the rewards they perceive arising from the development; and their desire to develop professionally.

Other people influence an individual's involvement through the degree of support they offer; the ideas they generate; the discussions they engage in and the importance they attach to the individual's professional development aspirations.

Extra-personal factors influence the opportunities an individual has for involvement in professional development and the execution of development ideas.

In terms of this present study, any number of these or other factors could have influenced teachers' participation in, and accomplishment of, self-directed professional development using the CSQ, as well as playing a part in their consideration of professional development in other ways. The CSQ; student

participation; and time have already been noted as possible influences in chapter four.

Conclusion

The purpose of this chapter was to consider, through the literature, how self-directed professional development, aimed at improving teaching and learning, reported by teachers in Phase One may have occurred and how participation in, and accomplishment of, reflective practice aimed at improving teaching and learning may be better facilitated.

The research reviewed here presents contrasting theories which provide a structure within which successful development takes place; and separate, sometimes disconnected components that impact on development. The theories make it clear that intentional development is based on a finite number of essential principles involving a number and variety of processes and actions which, possibly, are accomplished in systematic phases. The components imply that the process of development is facilitated or hindered by a number and variety of factors, both within and outside the control of the individual teacher.

Overall, this review intimates that self-directed professional development is a complex matter which, as Loucks-Horsley *et al* (1998) put it, 'is not available in one size fits all' (p.173). No one scenario probably offers a complete method or maximum encouragement, support and success to everyone who embarks on self-directed professional development. A particular combination of processes and factors might, but that is not obvious from the literature.

The literature provides a wide range of aspects to consider as a basis for investigating the questions posed at the end of chapter one:

- If, following the use of the Communication Styles Questionnaire, teachers developed aspects of their interpersonal communication, how had such self-directed professional development aimed at improving teaching and learning been achieved and influenced during this experience of reflective practice?
- What do these, and other, experiences of self-directed professional development indicate about how best to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings?

The manner in which the investigation proceeded, together with the findings, is explained in chapter six.

CHAPTER SIX

THE PROCESS OF, AND INFLUENCES ON, SELF-DIRECTED IMPROVEMENTS IN TEACHING AND LEARNING

Introduction

In chapter four it was shown that Phase One of the study had engaged teachers in an act of reflective practice. By the end of the phase, as a result of their use of the CSQ, four teachers reported the self-directed development of their communication style aimed at improving teaching and learning. However, at that point in the study it was not possible to determine how this development had been prompted or achieved, nor what could be learned from these or other experiences of self-directed professional development about how best to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings.

The reviews of the action research literature in chapter one and of other literature in chapter five indicate that successful development is a complex issue. Theories of development suggest that it is a structured activity based on a finite number of essential principles which involve processes and actions which, possibly, are accomplished in systematic stages. Specific individual factors - intra-, inter-, and extra-personal - are perceived to have a major influence on individuals' engaging in and coping with the demands and requirements of the development process. This literature provided a wide range of issues as a basis for investigating the process of self-directed professional development achieved in Phase One, and for identifying the influences on teachers' participation in, and accomplishment of, this activity.

This chapter describes how Phase Two of the study investigated and identified the process of, and influences on, self-directed improvements in teaching and learning in response to the two questions posed at the end of chapter one:

- If, following the use of the Communication Styles Questionnaire, teachers developed aspects of their interpersonal communication, how had such self-directed professional development aimed at improving teaching and learning been achieved and influenced during this experience of reflective practice?
- What do these, and other, experiences of self-directed professional development indicate about how best to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings?

The following sections explain the selection of the case studies; outline the research methods, and the procedures of data collection and analysis used; present and interpret the findings; draw out the implications and indicate the final phase of the study.

Design of Phase Two

Case study participants

In addition to case studies (CS) 1 to 9, Phase Two of the investigation was also informed by CS10, CS11 and CS12. By this time, one teacher (T4b) from CS4 had withdrawn due to ill-health. The phase covers the time period from September 1999 to July 2000.

Research Methods

Three methods were used.

Two dissemination sessions with opportunities for teachers to take part in discussions were held. The findings described in chapter four concerning the common communication style patterns arising from the profiles in Phase One were presented for comment and discussion, and the teachers' views sought about their reflective experience using the CSQ. Towards the end of each session teachers were asked to consider what influenced their professional development, as a preliminary to a later, more in-depth, individual interview. It was considered appropriate that the findings were made known to the participants in line with the ethic of collaboration inherent in the action research methodology. Teachers from CS 1 to 9 were invited to these dissemination sessions.

A one-to-one interview between each teacher and the researcher took place to consider in more depth and detail the process and factors involved in the reflective experience using the CSQ, and the implications this may have for promoting and supporting effective self-directed professional development. An interview was considered appropriate for two reasons. Firstly, the subjective meanings of the participants could be explored. Secondly, since the literature on professional development indicates that this is a vast and complex issue it is unlikely that it could be captured adequately through quantitative means, such as a questionnaire. However, in order to keep the investigation manageable, it was decided to make the interview semi-structured with open questions (Appendix 6.1) focusing on what, from the literature, were considered to be five key areas:

- a teacher's motivation for using the CSQ. This would identify a teacher's attitude towards self-directed professional development; the nature of the institution in which they worked and its outlook towards teacher development;
- a teacher's experience of using the CSQ. This considered the nature of the teacher's reflection, including the roles of the CSQ and the people involved (e.g. students; researcher and project director; colleagues; facilitator);
- a teacher's development following their use of the CSQ. This explored how development had taken place by focusing on a teacher's explanation of how they used the CSQ results, when, where, and why;

- a teacher's evaluation of their use of the CSQ. This examined the usefulness of the CSQ, with a particular interest in what facilitated or hindered the experience and whether these factors were general to all undertakings of self-directed professional development;
- a teacher's attitude towards self-directed professional development. This continued to probe a teacher's attitude towards development; their beliefs about what was required to achieve their objectives and how self-directed professional development, aimed at improving teaching and learning, could successfully be encouraged and supported.

Teachers from all the case studies were approached to be interviewed.

A separate semi-structured interview (Appendix 6.2) was held with the two facilitators from CS12 to obtain their views of an institutional approach to the voluntary use of the CSQ as a tool for self-directed professional development. This focused on:

- how the use of the CSQ in the college had come about;
- the impact the college expected from the use of the CSQ;
- how the college was encouraging and supporting the wider use of the CSQ;
- how the CSQ was administered to individual teachers and the results followed up;
- whether any teachers had taken action to develop their communication style in response to their CSQ results;
- how their roles as administrators and facilitators of the CSQ had been received by the participants;
- suggestions they had to improve the experience for others.

The third method employed was a questionnaire which focused a teacher's thoughts on their reflective experience and perceived outcomes arising from their

use of the CSQ. Entitled 'Stages of Change', (Appendix 6.3), this questionnaire was adapted from one developed by Lamb and Sissons Joshi (1996) to identify the stages of change through which people pass when adjusting their intake of dietary fat, according to the Transtheoretical Model of Change (Prochaska and DiClemente, 1982; McConaughy *et al.* 1983; Prochaska and DiClemente, 1992). The objective of the original questionnaire was to correlate the responses with various processes deemed appropriate at different stages of the change cycle. However, this was not the purpose for which it was adapted for this investigation.

The revised 'Stages of Change' questionnaire was not intended as a formal classification but as a primer to the conversation that would follow in the in-depth interview. It was intended to focus a teacher on their experience of reflective practice using the CSQ; to encourage them to articulate what they perceived to be the consequences of their experience; and to explain why they perceived this to be the case. It was considered more appropriate than a direct question since it offered a range of different possibilities to choose from, some of which may not have occurred to the teacher and, consequently, which could stimulate some interesting and useful thoughts.

To these ends the revised 'Stages of Change' questionnaire was constructed using statements relating to the use of the CSQ. Teachers were asked to select the one statement which best reflected their current situation following their experience of using the CSQ and, in addition, to provide a reason why they thought their selection was appropriate. Since the revised questionnaire was designed to capture an individual teacher's perceptions of the impact on their communication style of their experience with the CSQ, piloting was not considered necessary.

Procedure

Dissemination sessions

The remaining eleven teachers from Phase One were invited to participate in one or other of two dissemination sessions which were held in September 1999.

Seven teachers took part. The first session was attended by T1, T4a and T5; the second session by T3a, T3b, T3c and T9. The remaining teachers were unable to attend due to prior engagements. The researcher and project director were present at each session.

The findings describing the common patterns of communication styles observed from the profiles arising from Phase One were presented. The teachers were invited to comment and express their views and a discussion ensued. Towards the end of each session, which lasted about 90 minutes, the teachers were informed that the next phase of the investigation would consider the nature of, and influences on, the process of self-directed professional development. As part of this, they were asked for their views on what facilitated and hindered the self-directed professional development of teachers. Each session, by agreement, was audio-taped and later transcribed. A brief summary of the findings was subsequently forwarded to all of the participants invited to the sessions for their information and any further comments.

Case studies ten, eleven and twelve

In addition to CS1 to CS9, CS10, CS11 and CS12 also informed the investigation from October 1999 onwards. The CSQ was administered to the teachers and their students from CS10 and CS11 in the same way as for the earlier participants, explained in chapter four. A feedback session took place between the researcher and each teacher and the results of the CSQ were disclosed to their respective students for a joint teacher-student discussion to enhance understanding. The researcher was present for the discussion held by T11 and took contemporaneous notes, but was not present during the discussion held by T10.

For teachers forming CS12 (T12a to T12h), the administration of the CSQ was carried out by one or other of the designated facilitators (F12a and F12b) from their institution and the raw data sent to the researcher for processing. The CSQ results were returned directly to the individual teacher to maintain confidentiality. A subsequent feedback session for each teacher was carried out by one or other of

the facilitators. Both facilitators had been trained in the use and interpretation of the CSQ. Seven out of the eight teachers from CS12 disclosed their results to their students and held a joint teacher-student discussion.

One-to-one interviews and Stages of Change questionnaire

Each of the one-to-one interviews took place at one of the following three places: the teachers place of work ; in the teacher's home or at the researcher's place of work. All of the remaining teachers from CS1 to CS10 agreed to be interviewed. T11 was unable to participate at this time. For the purposes of data collection and analysis this was not considered problematic as this setting (i.e. an individual working in HE) was represented by four other case studies. From CS12 it was decided to interview a sub-sample to provide an insight into this unique setting within the investigation (i.e. a whole institute approach to using the CSQ). Two teachers were selected for the contrasts in their experience of using the CSQ. T12h participated with the CSQ in the established manner (chapter four, pp.73-74) with two groups of students. T12g, who taught students with special educational needs, was unable to involve them in the CSQ experience as it was considered that the language of the questionnaire was not suited to their abilities. In total fourteen teachers were interviewed.

At the start of each interview, the researcher clarified to each teacher that the purpose was to explore in greater depth their experience of using the CSQ and issues concerning self-directed professional development and asked if they were willing to continue on that basis. All agreed to proceed. Next, each teacher was asked to complete the Stages of Change questionnaire. The semi-structured interview followed and took around two hours to complete. Each interview, by agreement, was audio-taped and later transcribed.

Analysis and findings of Phase Two

The data collected during this phase of the investigation were qualitative in nature - or 'language in the form of extended text' (Miles and Huberman, p.9, 1994) - arising from discussions, interviews and documents. This information was added to the data collected from Phase One and analysis was guided by Miles and Huberman's approach which defines analysis 'as consisting of three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification' (p.11). During data reduction the data were coded to reflect the key elements perceived in development. Matrices and networks were drawn up to organise and compress the coded information into displays that would describe and explain the data. These displays were then used to formulate conclusions in light of the questions posed at the start of the chapter.

The analysis was divided into two parts.

Part One concerned the nature of the self-directed improvements of teaching and learning arising from the reflective experience using the CSQ, and aimed to answer the question:

If, following the use of the Communication Styles Questionnaire, teachers developed aspects of their interpersonal communication, how had such self-directed professional development aimed at improving teaching and learning been achieved and influenced during this experience of reflective practice?

This analysis focused on:

- (a) The process teachers engaged in when using the CSQ to review their communication style;
- (b) The factors that influenced the process and the nature of the impact of these influences.

Part Two concerned factors that facilitate and hinder self-directed professional development in general and aimed to answer the question:

What do these, and other, experiences of self-directed professional development indicate about how best to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings?

In addition to the two foci in Part One, the analysis considered:

- (c) The factors perceived generally to influence involvement in and accomplishment of self-directed professional development of teaching and learning.

PART ONE - THE NATURE OF ACCOMPLISHING SELF-DIRECTED IMPROVEMENTS IN TEACHING AND LEARNING

Part One is divided into two sections. Section A identifies the process of accomplishing self-directed improvements in teaching and learning through reflective practice as implemented by the teachers using the CSQ to review their communication style. Section B identifies the ways in which this process was influenced.

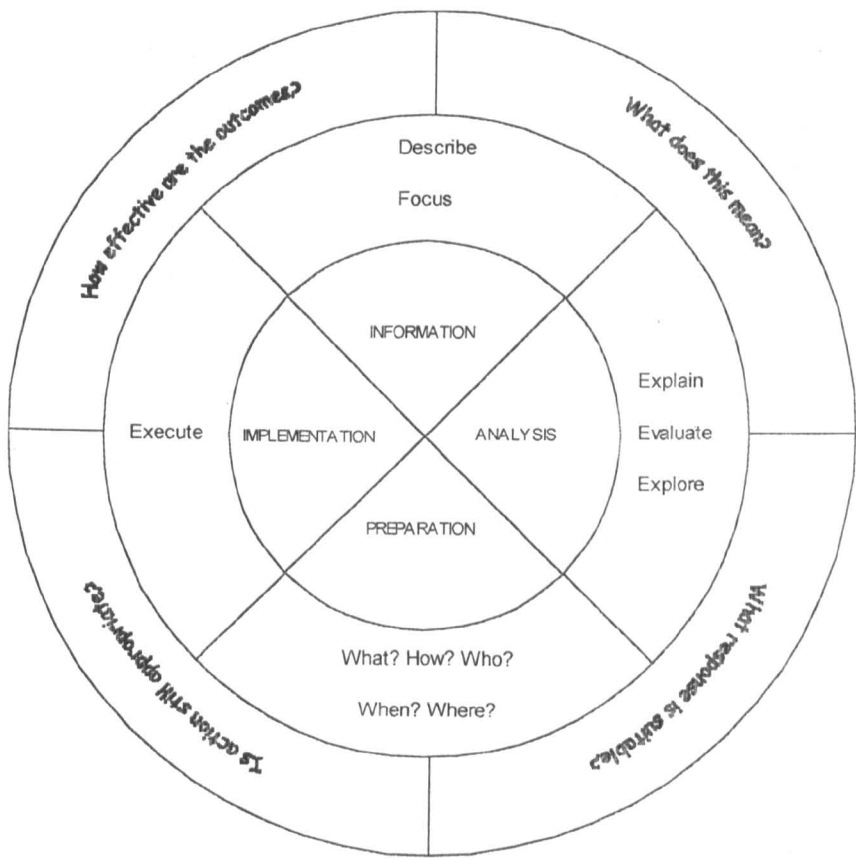
Section A: The process of development engaged in by teachers using the CSQ to review their communication style

Ten of the fourteen teachers interviewed in Phase Two reported having developed some aspect of their communication style subsequent to their use of the CSQ. Two teachers (T3b and T7) determined not to develop any aspect of their communication style whilst a further two (T12g and T12h) intended to develop their communication style but had not done so by the time of the interview. T11,

who was not interviewed during this phase had, during a feedback session, expressed an intention to develop but, at this stage of the analysis, it was not known whether or not this had taken place.

Initial analysis of the data suggested that seven activities were involved in the development of communication styles. Additional analysis indicated that these activities fell into four reasonably distinct stages whereby one set of activities had to be performed in order to provide sufficient detail with which to engage successfully in the next set. Furthermore, movement from one stage to the next appeared to be assisted by a relevant decision-making prompt. This Four Stage Model is shown in Figure 6.1. The routes which enabled development to take place are shown in Figure 6.2.

Figure 6.1 The Four Stage Model of Development showing the stages (in capitals), processes, and prompts (in italics) involved



The model is expanded in the next sections. The four stages and associated activities are described first, followed by the function and nature of the decision-making prompts. Each aspect of the findings is supported by a sample quotation from the data, which provides the clearest evidence of development process.¹

The stages and activities of the Four Stage Model of Development

Stage One - Information

Stage one of the development process concentrated on information gathering - acquiring useful, detailed knowledge of the prevailing and potential classroom interaction to form a basis for determining whether or not development was appropriate. This information was acquired initially through the CSQ and subsequently, in some cases, through teacher-student discussions and video recorded observations of classroom sessions. Two activities were involved in this stage - description and focus.

Description

Firstly, an accurate description of the situation was acquired. This brought clarity to the reflective process:

T6: ‘... it’s [CSQ] sort of formalising a lot of what I was thinking or suspecting but never really been able to put down on paper or put down in words. It’s done it very effectively I think. So I’ve found that aspect very useful. It’s made me aware of the trends that I was actually following as a tutor. And also the trends that the students seem to be following perhaps . . . the high values they want - Leadership, Understanding - things like that.’

Focus

Secondly, in order to make the development process manageable, a focus was defined which pin-pointed specific issues considered appropriate for further consideration:

¹ Underlined text represents the key point about which commentary will be made. Dots with spaces ‘...’ represent editing of irrelevant material.

T6: '... this [the CSQ] gives a lot of powerful information ... on how I communicate with students. ... it's helped me focus on where I should be looking. ... It's bringing out ... issues which I never really thought of.'

These two activities created a deeper awareness of classroom interaction. The information gathered clarified the state of classroom interaction, sometimes by identifying perceptions that were not immediately obvious during everyday interactions and, occasionally, contradicting a teacher's intuitions and expectations. Thus awareness became the foundation of the development process. However, whether the revelations meant that a teacher's communication style should be developed needed further consideration and this was the purpose of *stage two*.

Stage Two - Analysis

In *stage two*, a teacher undertook a conscious, deliberate and critical analysis of their practice, considering the desirability and feasibility of bringing about improvement or transformation based on the information gathered earlier. This stage occurred on various occasions - during feedback sessions with the researcher or facilitator; discussions with students; times of individual contemplation including writing assignments; and discussions with colleagues. It involved three activities - explanation, evaluation and exploration - which were not carried out in any set order. Instead teachers moved back and forth between the three as they gradually interpreted the perceptions of the facts; tested the suitability of suggested areas for development; and determined alternative ways of communicating.

Explanation

Through explanation a teacher offered an account of why the participants perceived the classroom interaction as they did, as T5 - who was given a rating by their students of 2.2 (occasionally) for appearing dissatisfied with them - demonstrates:

T5: “I appear dissatisfied with the students” – I don’t really have a problem with that because I have been dissatisfied with some of them, they haven’t handed work in, the work they’ve handed in I’ve had to refer and we’ve had tutorials where I’ve said “you might not finish the course on time”.’

Evaluation

Through evaluation, areas suggestive of development were appraised for their significance and appropriateness:

T2: ‘But students were looking for more leadership. The question is “what is their perception of more leadership, given the cultural diversity?”’. . . So I’ve been grappling with the question of how to adapt a leadership style to different contexts. When you’re dealing with people, from China, South-east Asia, Latin America, North America, Northern Europe, Southern Europe - that kind of diaspora is - when you ask them what leadership is, they have actually got profoundly different expectations. . . Africans, for example, seem to have an expectation of a fairly directive leadership style. Whereas Americans want a more discursive and exploratory approach. And so in looking to me to lead, they actually have different expectations and it’s not possible for me to score high on all the ratings. Because in getting a high rating from one person I’m getting a low rating from another.’

Exploration

Through exploration, options for suitable alternatives to improve classroom interaction were sought and considered, as T12g, a teacher of students with special educational needs shows:

T12g: ‘There was some positive suggestions [from the facilitator] on how areas I was concerned about could be areas I was more happy about. . . One of the areas was . . . that I would like the students to question more things in class, and to try to give them opportunities to question. In maybe tutorial sessions. By saying things like “Isn’t it good that it’s raining outside” and it’s a really bright sunny day. . . So I think some of those suggestions were quite good. . . We’re about trying to get our students to be more independent. . . It’s a part of their route to independence, that they will be able to question. You know, even if they’re at the station to be able to say “What time is the next train?” It’s very fundamental that skill to be able to ask a question.’

These three activities brought a number of issues, which impacted on the decisions a teacher made about how to provide effective teaching and learning, to the forefront of their thinking. They gained insights into their understanding of the perceptions of their communication style; they clarified the contextual framework of their teaching, highlighting factors that influenced their communication style; they articulated their values behind adopting a particular stance or behaviour; and they identified aspects they would be confronted with when developing a given area of their communication style. The effect of this stage was to challenge a teacher to consider responding to such issues in a manner which could bring about better teaching and learning outcomes. Where this resulted in a teacher deciding that development of a particular area of their communication style was appropriate, they moved onto *stage three*.

Stage Three - Preparation

Planning

Once a teacher had determined in *stage two* to develop one or more specific areas of their communication style, preparations were made to enable their intentions to lead to development. This required drawing up a plan of execution, addressing such details as 'what', 'when', 'how', 'where', and 'who':

T8: 'As soon as I got the questionnaire back and analysed it and thought "Yeah, good, good, good, but I don't like that. Sarcasm, am I sarcastic? . . . I can't remember being sarcastic" And then I looked at the video and, yes, I was sarcastic. That's the thing the students don't like, so I'm going to have to stop doing it.'

T10: 'I can plan to deliver the next topic in a slightly different way.'

T8: 'Although I thought I gave all the feedback the students needed, it seems that they would like a little more. This I will address, by asking more questions in a discussion time.

T6: ' . . . take them on a field course at a weekend . . . '

T3a: 'That they [student group 3] were involved in, obviously, in that discussion [about the CSQ profiles], that I felt they desperately needed to see some action being taken.'

Planning provided a framework which set out the conditions and requirements necessary for the intended development to take place. When these were fulfilled, the plan could be executed in *stage four*.

Stage Four - Implementation

Execution

In order for development to take place, a teacher had to implement the plan prepared in *stage three*. When a teacher deemed it appropriate, execution took place:

T8: 'Well, it's [CSQ] highlighted one particular thing I wasn't happy with. And that was me being sarcastic. . . And the students didn't like it. . . And so I have tried very hard not to be sarcastic any more. . . Um, which wasn't easy. Because instead of me just going with the flow and just letting it all come out, I had to stop, think about what I'm saying - "That's not sarcastic is it?" and then carry on.'

With execution the development of a wider, more flexible communication style began.

The decision-making prompts of the Four Stage Model of Development

The four stages of the process represent the different behavioural dimensions involved in development. The activities within each stage represent key tasks performed to accomplish the purpose of each stage and lead to development. However, movement from one stage to another required the making of an appropriate decision. This involved a prompt in the form of a question, the response to which determined whether the process continued or was concluded. Four such prompts were observed, one for each stage of the process.

Stage One

"What does this information mean?"

Whilst *stage one* deepened awareness of perceptions of actual and desired classroom interaction, the information itself did not constitute a recommendation

to develop or not. It only indicated areas worthwhile considering for development. This consideration had to aid understanding of how or why such perceptions occurred; illuminate the relevance of such perceptions to the process of teaching and learning and possible development; and determine the implications for possible development. Consequently, a teacher needed to ask themselves “What meaning does this information have?” In so doing, it moved them from observing interaction into analysing it and, therefore, into *stage two*. This is illustrated by T4a when discovering the students desired more *leadership*:

T4a: ‘I wonder what they [B group students] mean by that? . . . I wonder if it’s something to do with confidence because there’s not a big difference with the A group, who are a confident group, there’s a much closer correlation there. Whereas that’s [B group students] a first year group, they’re doing a complex subject and are a less confident group as well. . . . it can be a circular thing - it’s not just me having an effect on them, they have an effect on me too. Perhaps their lack of confidence makes me feel I’m not explaining things clearly etc.’

Stage Two

“What response is suitable?”

Analysing the information gathered in *stage one* enabled a teacher to thoroughly and critically review their communication style and to consider alternatives which could bring about improvements in teaching and learning. However, analysis alone did not result in development. In order to move beyond the understandings, ideas, challenges, and implications generated during this stage, a teacher needed to decide “What response is suitable?” This prompt resulted in *stage two* being concluded in one of three ways:

- An intention to develop one or more aspects of communication style:

T3c: ‘Um, when I first looked at it I was quite surprised and pleased. . . I suppose a bit of relief really that I was actually getting it right, um, to a large degree. . . I soaked it up a bit. And reflected on it a bit. And thought “Well, do I need to change this?” And I thought, yes, there are some areas. . . And being more open to negotiation is one of them.’

This decision to develop resulted in a teacher progressing to *stage three*.

- An intention to utilise or obtain additional information on which to make a decision:

T2 (from a field note): 'He felt that this group would probably have welcomed more activity based sessions and thought that this was worth exploring with the students in the discussion next Thursday to understand better how he was coming across and what could be done about it.'

This decision to gather further information resulted in a teacher returning to *stage one*.

- An intention not to develop any aspect of communication style, as evidenced by T7 in response to discussions with his students about his communication style:

T7 (from a field note): 'After the discussions with the 2 'A' level groups, T10 was of the view that he would not target any specific behaviours as a result of his participation in the project. He felt the students were happy with the way he interacted and that the discrepancies between 'Actual' and 'Ideal' were more to do with an abstract model of a teacher which they held rather than any desire for a change from him.'

This decision resulted in the process being terminated.

Stage Three

Is action still appropriate?

Preparing a plan helped a teacher to structure specific ways in which their communication style could be developed with a view to improving teaching and learning. However, development could only occur when the plan was executed. When the time came for execution, a teacher needed to establish that the prevailing conditions were conducive to moving into *stage four*, as anticipated when drawing up the plan. This required teachers to consider "Is action still appropriate?" This prompt resulted in three scenarios being observed in connection with *stage three*:

- A decision to implement execution:

T3c: 'I thought "Well, yeah. This is a time that I can actually change the way I do this thing." And it was at the start, really, of this academic year, September, that I did change some things . . . Um, because, you know, if you suddenly change mid-term, the students, the way you are and the way you interact with them, they could actually think "What's going on here?" So therefore our relationship at that stage had already been developed.'

This resulted in a teacher moving into *stage four*.

- A decision to defer execution:

T12g: 'Having been fairly busy this year - due to difficult students requiring much tutor support - I've felt that it was better to keep the same tried and tested activities and not change things too much. . . . Hopefully next September I might be able to create some of that [time to develop].'

This resulted in a teacher staying within *stage three* and planning a new date for implementation.

- A decision to retract an intention to develop:

T3b: 'I had intentions to change but there has been no time. Not even to reflect... In the next 3 weeks I've got 28.5 hours teaching...I walk into the office, put my stuff down on my desk, get myself a cup of coffee and think "God, that session went really badly" or "That was a good session" and that's the sum total of the reflection I can do. I do not have the time. And much as I was full of good intentions after doing this [CSQ] about changing my teaching style, I have not got the time to reinvent the wheel.'

This resulted in the process being terminated.

Stage Four

How effective are the outcomes?

Executing the plan enabled development to begin. However, execution alone did not guarantee that the action taken brought about the effect desired by the teacher.

To ascertain this a teacher had to enquire “How effective are the outcomes?” This prompted a monitoring of their progress:

T1: ‘I would like to discuss some aspects of the module, in particular, those aspects of the module which relate to the research project for which you've [students] just filled in those questionnaires [CSQ]. . . one of the things I wanted to do in this module is to see students, um, researching for themselves and to a certain extent learning for themselves and also helping each other to learn and contributing to the class discussion and that kind of thing. How have you felt about that in relation to other modules? Do you think it's been more oriented that way or less compared to other modules, in your experience, in accounting?’

This resulted in a teacher engaging again in the activities of *stage one*, providing the opportunity for continued reflection and development of their communication style.

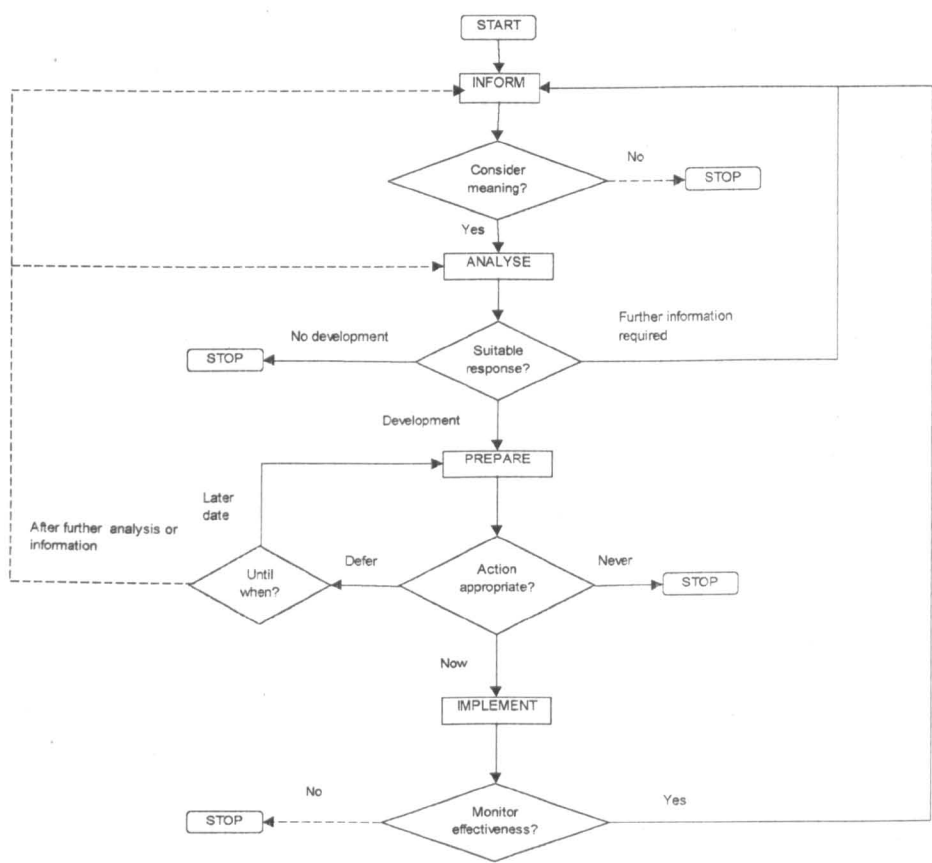
The route to development

The network in Figure 6.2 shows the stages, activities and prompts involved in the development of communication styles as a decision making process. The actual sequences observed by the teachers when considering their communication style with a view to development are indicated by the **bold** lines. Those shown by the **dotted** lines are probable logical options that may exist but were not evident from the analysis.

This network indicates three issues of interest. Firstly, it shows that where development took place, all four stages and specific aspects of each activity were carried out. Development did not occur when these stages and activities were not completed. So, where T7 concluded in *stage two* that development was not appropriate, movement through the next two stages was curtailed and development did not take place. Similarly, for T3b, development was prohibited by their decision in *stage three* to cancel their intention to implement their plan. For T12g whose intentions to implement were delayed, development was still awaited.

The network also shows that the progression to development did not always involve moving sequentially through the stages. In fact, of the ten teachers who executed their plan, only T1 moved consecutively through the four stages. The most common progression was for a teacher to reach the conclusion in *stage two* that additional information was required and, therefore, to repeat, (sometimes more than once), *stages one and two* before moving on to *stages three and four*.

Figure 6.2 The Four Stage Model of Development as a decision making process



Finally the network highlights that once *stage four* was completed, teachers returned to *stage one*. In an effort to monitor their development, teachers collected new information on the effects of their development (*stage one*) and analysed the outcomes, before concluding whether or not further development or

amendment was appropriate (*stage two*). Two teachers - T2 and T1, who had participated longest in the research - concluded that further development was appropriate and continued to move through *stages three* and *four* and back to *stages one* and *two*, for a second and third time respectively. For the remaining eight, at the time of the analysis they were either still engaged in the *analysis* stage or had concluded that no further development was appropriate.

Summary of Section A

The first conclusion to be drawn from this analysis is that development, using the CSQ, was a process involving four stages. In giving deliberate and conscious consideration to development, certain operations were performed in order to attain an informed view of the perceptions of classroom interaction; to focus attention for possible development opportunities; to determine how development objectives could be achieved; to carry out intentions to develop; and to review the effects and suitability of the development.

Secondly, it is clear that this was not a linear process whereby a teacher moved smoothly from one stage to another. Earlier stages were often revisited before a teacher was equipped sufficiently to enable them to engage with subsequent stages. In effect the process consisted of a series of progressive loops, bringing a degree of flexibility to the process to accommodate each individual's circumstances and requirements.

Thirdly, although the development process appeared relatively structured it was not mechanistic. Teachers engaged in activities on both cognitive and affective levels in genuine attempts to seek appropriate improvements to teaching and learning for the benefit of their students.

Fourthly, as the next section of the analysis indicates, this process was not accomplished in isolation from other people nor independently of contextual constraints.

Section B: Influences on the process of development engaged in by teachers using the CSQ to review their communication style

The analysis suggests that two factors - one inter-personal and one extra-personal - most influenced the performance of the activities and the outcome of development. These factors were collaboration (inter-personal) and time (extra-personal). Collaboration with a range of other people was most influential during the stages of *information* and *analysis*. Time became increasingly influential with the stages of *preparation* and *implementation*, and when a teacher desired to assess the effectiveness of their development. The findings are supported by quotations from the data which best illustrate the points made.

Collaboration

Researchers (project director and researcher)

The researchers (project director and researcher) were involved with each teacher (apart from those at 'N' college) throughout their participation, having some measure of contact during all stages engaged in by a teacher. This was more the case for the researcher than the project director. Their influence on a teacher's performance of the activities was that of initiating and keeping the process alive by:

- creating time and space for a teacher to review, talk and think about their practice:

T4a: 'That's what I really valued. . . there was time set aside talking about teaching and otherwise I have no time to talk to anybody. . .'

- providing an opportunity for objective feedback:

T9: 'They're [students] probably more truthful to you [researchers] probably than they would be to a cross college one. Because they do support you. If it's outside of college they're more likely to give you a truthful answer. If it's inside the college the students are more likely to support you because they've got you as their tutor. They're going to have loyalties. So I think you don't get a proper answer from them sometimes.'

- enabling a teacher to understand the perceptions of classroom interaction from the CSQ results:

T5: 'I needed [the researcher] to make that statement for me to get any meaning out of it [CSQ results].'

- providing reassurance about a teacher's 'performance':

T1: '... you get the results back and think "Crikey, I think I'm a better teacher than they do!" And then it's nice to have you [researcher] say "They are respectable results. They don't think you are a bad teacher." And I think that was helpful and useful.'

- inviting reflection through questioning and challenging a teacher on their perceptions and ideas of classroom interaction and about possible improvements:

T10: '... you tend to gloss over differences that don't fit your model of how you think you're working. So I think it's always good to have another pair of eyes [researcher's] to look at how you're interpreting it.'

- catalysing development through follow-up of a teacher's initial intentions:

T9: 'Because there's a follow-up it's made me follow-up. I haven't shelved it, it's made me continue with it. . . and not just put it under the carpet and leave it there.'

- providing support for a teacher's development:

T6: '... you've [researcher] been an endless sort of sounding board . . . and support . . . what matters [to development] is. . . the fact that here is somebody who's prepared to attach importance to this issue.'

The downside of the two researchers' involvement was that they were not involved in sufficient depth or duration in a teacher's context in order to offer adequate suggestions for development for some teachers, consequently hindering the focus and pace of development. (This was particularly true for the researcher, as distinct from the project director, who lacked teaching experience from which ideas could be drawn.) When asked what additional support would have been helpful T2 responded:

'I suppose some . . . hints maybe, in terms of strategies to address certain things. . . But that's very difficult to do because you're not in the context long enough to be able to offer that as a possible way forward.'

Facilitators

The two facilitators who administered the CSQ and conducted the feedback sessions at 'N' college were involved with teachers T12a to T12h in the *information* and *analysis stages*. They also influenced a teacher's performance of the activities by creating time and space; enabling an understanding of the perceptions of their communication style; and inviting reflection:

T12g: 'It [feedback session] was good . . . having to take time out . . . thinking about the things that were important to me.'

T12h: 'Because when I had a tutorial [feedback session] with her [the facilitator] it was her that spotted that it was an organisational issue and not an issue about me or my style. I don't think I would have concluded it on my own.'

In addition to these three contributions, the facilitators were able to make useful suggestions for development. This was possible through their involvement in teacher training and staff development, their personal experiences and their understanding of some of the contextual issues confronting the teachers:

T12g: 'There was some positive suggestions [from facilitator] on how areas I was concerned about could be areas I was more happy about. . . I think there was a sort of commonality there . . . she's [facilitator] doing some work with ASDAN and I work for ASDAN.'

However, by their own admission, the facilitators were unable to keep the process going either by following-up a teacher's intention to develop or supporting any subsequent action:

F2: 'I wish I had had time to follow-up. . . I would like to have been able to write to everybody saying 'Would you like to see how it is at the end of the year with the same group?'

Consequently, whilst teachers at 'N' college identified aspects of their communication style for development, it is not certain whether any plans were prepared and executed, apart from T12g and T12h.

Colleagues

Where colleagues who were also interested in professional development were involved in a teacher's review of their communication style, this was seen as a positive influence, principally as an ally and a sounding board. Collegial contributions, from both users and non-users of the CSQ, were made substantially during the *analysis* stage and were perceived as:

- providing support and encouragement for a teacher's professional development:

T3a: '[When colleagues participate] you don't feel so lonely, somebody else knows what you're talking about. . . there's more of a community and somehow it makes it [development] more acceptable.'

T4a: 'Well, we [T4a and T4b] sort of got excited about it. . . talking about what we needed to do and what things meant.'

- enabling a deeper understanding of the perceptions of a teacher's communication style:

T12h: 'and L's [Head of Section] perspective was interesting at one point too. Because she suggested that maybe I felt more integrated with the Thursday group because I spent 4 hours with them instead of 3.'

- providing a forum to exchange and discuss ideas:

T3b: '[it's been important to have colleagues participating] just because I think that on the times we [T3a, T3b and T3c] have talked about it we've bounced things off each other. Um, and I think that helped.'

For those teachers who worked alone opinions as to the value of collegial involvement in their use of the CSQ were mixed. Some thought that colleagues participating alongside them would have contributed to their development as outlined above. However, three teachers thought collegial involvement could have been detrimental to their development by promoting a motivation to compare results and stifling their desire to develop different ideas from those normally associated with and encouraged by their department:

T5: 'I suspect there would be a motivation to compare. And that could be quite destructive I think. Because what you're providing is quantitative feedback - people tend to compare when they've got quantitative feedback in a way that's not actually useful for this, I don't think. . . once you've set up groups, I know people will be looking at each others and "Oh, you do that. And I do that. Oh I got a 5 for this."'

Students

Students' involvement was an integral part of the process. Their participation, which acted as a reality check, contributed significantly and positively to the *information* stage and also influenced the *analysis* stage by:

- raising a teacher's awareness of how students perceived their communication style:

T6: 'Well, certainly the responses they've [students] given have highlighted within the questionnaire the areas where we do have considerable differences. . . And I think without that I would never have noticed.'

- creating a better understanding of the effect on learning of a teacher's perceived and potential communication style:

T12h: '. . . they [students] made a big contribution. In that 'lenient' which is something I understand often crops up . . . they viewed leniency as a positive thing. Which I thought was quite interesting. My interpretation of leniency is "a bit dodgy, a bit too reasonable". . . But C [student] said "leniency's a

positive thing” because they don’t want to be looked at in an autocratic, authoritarian way and told what to do. That’s how they saw it.’

- highlighting areas and suggesting ideas for development:

T3a (from a field note): ‘Students during the discussion said they wanted more choice of assignments, say 2, to suit their different learning styles.’

- motivating development by providing an element of accountability:

T1: ‘Well, the students were saying they didn’t have enough time within the class time to take it away, to work on it and then present anything meaningful on it. . . . But if that’s what they are saying then that must be the case. . . So I’d like to give them every opportunity to use the material in a way that’s going to be beneficial. I’m just not entirely convinced they’ll take those opportunities. But I suppose one has to give it a try.’

Only occasionally was a teacher sceptical of students’ views and did not fully involve them, consequently depriving them of contributing to a debate which directly affected them and the teacher of the opportunity to gain some possibly surprising and useful insights:

T10: ‘Well I went back and said “All those questionnaires came back and it seems like....” And they [students] go “Oh! Right. Who said that?” And well it was a bit difficult to gauge [their reactions] because to be fair to them I followed it up with “So, we’re going to do this.” . . . One of the difficulties is they’ve only had certain experiences because they’ve come up through the school, and it’s within the confines of their understanding, of what’s going on. And I think that’s a major limitation really. How do they know that it’s good if they’ve not been exposed to anything else?’

Time

Time was the second major factor to influence the performance of the activities and the outcome of development. This was perceived in the availability of time with which to undertake the activities; the duration required to accomplish any changes and the appropriateness of the occasion.

Availability

In order to consider the development of their communication style each teacher had to find time in which to engage in the activities:

T5: '... it's meant taking time out to think about my practice. [using CSQ and following it up].'

Occasionally a teacher was able to utilise time set aside for official development days or as part of their remission from teaching connected with their teacher training programme (e.g. T8; T9). More often a teacher had to make time in their teaching schedule and from their own personal life. Sometimes this was seen as an intrusion:

T4a: 'Filling in forms [CSQ]- takes a big chunk out of a lesson (20 -30 minutes from a 1 ½ hour lesson) when sometimes it's the only time you get with students.'

At other times it was treated as a 'value added' exercise:

T3a: 'No, that's [discussion with students] fine. In fact we can use it - self concept, communication and key skills.'

Often it was a struggle to make the time and at least one teacher failed to take action due to lack of time:

T3b: 'I had intentions to change but there has been no time.'

Duration

It took time for any development to become a fully integrated part of a teacher's communication style repertoire:

T4a: 'And I suppose I was thinking it [using the CSQ] would be a quicker fix. You know, I expected to feel enthused and to be full of ideas and for it to make an immediate change in my style. And it hasn't. . . I've realised that this business of changing your style . . . is a lot longer. It's a longer term project than I thought at the beginning.'

New behaviours were mastered slowly:

T8: 'I had to make a positive effort not to do it [be sarcastic]. Um, which wasn't easy. Because instead of me just going with the flow and just letting it all come out, I had to stop, think, what I'm saying - "That's not sarcastic is it?" and then carry on. So it broke the flow for a while of the way I teach. . . I suppose it took me a couple of months to actually remove the sarcasm.'

The passage of time revealed unforeseen incidents which prompted adjustments in expectations and actions over a number of months or modules:

T1: 'I suppose my expectations kind of changed over time. In the sense that you set an assignment and you imagine how somebody is going to do it well and then as the assignments are set and people come back to you with problems and discussions and requests . . . so your expectations change during that process. . . Some adjustment is needed, and [I] propose to . . .'

The build up of pressure and stress over time sometimes forced a retreat to tried and tested methods as a way of coping with demands:

T2: 'I've been trying to change my style. But what I've been experiencing is that I'm coming under acute pressure and when that stress is on there is a tendency to regress, because it is a coping strategy. . . What has made life very difficult for me this year is the reduction in the teaching year.'

Occasion

There is evidence that timing played an important part in relevant and successful development. Appropriate planning and execution appeared to be influenced by the sense of occasion, which related to changes in circumstance and the time of year.

Changes in circumstance

Teacher's whose circumstances changed whilst they were progressing through the four stages, (e.g. undergoing an inspection; teaching new subjects; curriculum changes; decreased contact hours), found it difficult or impossible to maintain momentum to develop their communication style:

T12g: 'We took on a new personal tutor at the start of September and . . . he was actually snowed under with work so I had to take over some of his tutorial time from him. . . We had quite a few changes of staff. And added to that we had quite a number of students who . . . were extremely difficult. And they were taking a tremendous amount of staff time. . . I have found it easier - due to lack of preparation time - to stay with tried and tested classroom activities.'

As time and effort were already being absorbed by attending to the prevailing changes it was not always an appropriate occasion to be trying to develop their communication style as well:

T12g: '. . . it was easier to stick with things that you've done in the past rather than try to plan to do something differently because of all the knock on effect that has. Because if you try something different you've got to get new resources and so on. So it's often easier when you are feeling under pressure to keep doing the same thing.'

Time of Year

Where teachers had identified an aspect of communication style for development, the time of year at which this occurred was not always appropriate for subsequent planning and implementation with that particular group of students:

T3a: '. . . it was very late in the year for both groups to benefit from the subsequent data findings and my reflection thereon.'

In these situations teachers used the insights to inform their practice and looked for other opportunities to develop their communication style:

T3a: 'I decided that as they had both been very interesting and demanding groups I would use them as trial groups.'

Summary of Section B

The analysis indicates that development, using the CSQ, benefited from collaboration to the extent that this added perspective, options, encouragement, support, motivation and impetus. The various roles of the range of people involved - researchers, facilitators, colleagues, students - contributed different but

important elements to the process. The evidence further shows that, although the influence of other people gradually decreased as a teacher progressed through the stages, some specific input in the latter stages was required by some teachers in order to accomplish development rather than allowing their reflective activities to come to an inconclusive end.

However, tensions in the collaborative context could be seen, with hindsight, which were possibly detrimental to the development process. Conceptual misunderstandings between one teacher and the researcher about expectations from the relationship hindered the teacher's focus and pacing of development (T2, p.157). The exerting of authority by one of the tutors over their students led to unequal power relations and reduced the students' opportunities for contributing significantly to the development of something that intimately affected them (T10, p.160).

Time was crucial to the process both getting started and progressing. Without time being set aside to pursue the consideration and development of a communication style, conscious, deliberate and appropriate development may not have occurred. Without due consideration being given to the timing of development, some attempts to develop a wider repertoire of communication style may, once started, have been submerged under the pressure of previously unexpected events or been badly received by the students.

Time became increasingly a requirement as a teacher moved into the latter stages of the process and the longevity of implementing and monitoring a development plan kicked in. However it was a commodity in short supply for most teachers. It required determination on their part to take time out of an already hectic schedule and was something which they viewed as being a very underrated necessity to their job.

Discussion of Part One

The findings show that self-directed professional development aimed at improving teaching and learning in this study was accomplished via a stage process which was aided by a collaborative setting and dependent on time. The Four Stage Model of Development which emerged from the data and the contextual factors which influenced it share a number of characteristics mentioned in the literature reviews in chapters one and five.

Firstly, the four stages of *information, analysis, preparation and implementation* mirror those of the action research cycle (e.g. Kemmis and McTaggart, 1988; Winter, 1989; Elliott, 1991). The four stages of observation, reflection, planning and action were apparent as perceptions of classroom interaction were described and assessed; potential improvements were drawn up and acted on. As with the action research cycle, the four stages are distinct from each other but all must be completed for development to take place, with each stage forming a platform for progression to the next stage (e.g. Kolb and Fry, 1975; Kolb, 1993).

Secondly, the flexible way in which the stages were performed is in keeping with the Transtheoretical Model of Change (Prochaska *et al.*, 1992) where development is perceived as a spiral process through the various stages. Teachers did not adhere to a strict sequential progression through the stages; instead they repeated earlier stages before moving on. The flexibility of the framework allowed a teacher's focus to emerge; their understanding to mature; and the practicalities of development to be considered and adapted in relation to their objectives and circumstances.

Thirdly, re-cycling through the stages to evaluate the effectiveness of any development is also in keeping with the action research method. This notion of assessing any accomplishment with a view to further improvements is also found in the processes of 'Judging' and 'Feedback', respectively in Self-Managed Learning (Cunningham, 1994) and the Seven-Step Model of Individual Change

(Jackson, 1985). This continuation of the reflective experience is considered essential to ensuring development is appropriate, worthwhile and, possibly, a foundation for further improvements.

Fourthly, the decision-making prompts which assisted a teacher's progression through the stages reflect the Seven-Step Model of Individual Change (Jackson, 1985) which proposes that a series of explicit questions aids the development process. They are also reminiscent of the 'scaffolding' perceived necessary by Bruner (Woods *et al.*, 1976 chapter one, pp.3-4) to enable learners to progress. These prompts are key to ensuring that the development process is kept appropriately alive and that insights gained, and the time and effort spent, during each stage are not lost as the daily routines of teaching subsequently become ever more pressing. This is achieved as the questions, posed by the teacher or co-participants, encourage a teacher to set out a statement of intent in response to the activities they have engaged in during each stage.

Fifthly, the collaborative context which generally facilitated a teacher's progression through the stages is reminiscent of the action research method (chapter one, pp.18-20), Model II Theories in Use (Argyris and Schön, 1974; chapter five, pp.104-107), Self-Managed Learning (Cunningham, 1994; chapter five, pp.107-109) and some aspects of the inter-personal factors influencing development (chapter five, pp.115-122). The researchers and facilitators were always going to be involved with the teachers because the CSQ profiles initially required considerable explanation. However the extent to which teachers embraced the involvement of students and colleagues as co-participants created participative collaborative settings in which meaningful and critical dialogue occurred (McNiff, 1988); the exchange of valid information, shared enquiry and public testing of assumptions took place (Argyris and Schön, 1974); and support was given and received (Cunningham, 1994). Students' views proved to be both insightful and useful (Reid, 1988); colleagues' participation provided reassurance and removed any sense of isolation (Lumby, 1999a); and the involvement of researchers and facilitators encouraged considered development (Garrido *et al.*, 1999). This resulted in perspectives, ideas and experiences being exchanged;

understanding being enhanced; practice being questioned and explored with a view to bringing about improvements (Schön, 1987; McNiff, 1988) and assisted in teachers moving through the stages of development.

However, progression through the stages was not accomplished solely through dialogue arising from the participative collaboration. The nature of the unique roles of the participants also contributed as the literature on inter-personal factors implies. The involvement of students provided a reality check on what was happening in the classroom (Fullan, 1991; Parlett *et al.*, 1988), creating in the process a public commitment and an accountable relationship which ensured teachers gave serious consideration to the improvement of teaching and learning (Devlin-Scherer *et al.*, 1985). Likeminded colleagues fulfilled the role of accessible and supportive sounding boards, providing a relationship of trust and instilling a positive attitude (Holly, 1989; Joyce and Showers, 1995; and Newell, 1996) which underpinned a teacher's sense of security in attempting development. The researcher and facilitators and, to a degree, the project director, acted as change agents, monitoring the development process and encouraging teachers to evaluate the development effort (Rogers and Shoemaker, 1971). Thus each participant, through their unique contribution, encouraged a teacher to maintain momentum in the development process.

Lastly, the fact that time over-shadowed the whole development process is consistent with the comment about the 'press' of the working day which crowds out development efforts requiring long term perspectives; meaningful interactions with colleagues; and opportunities to explore and experiment in teaching and learning (Huberman, 1983, cited in Fullan, 1991, p.33). The availability of time is crucial if all four stages are to be performed critically and not mechanistically, and the effectiveness of any development is to be assessed. It is also crucial for consolidating development. Selection of the right occasion is also important to enable those who want to develop to do so and to allow those who could benefit from such development to receive it.

Glimpses of other research into professional development mentioned in chapter five could be seen in the data but insufficiently to support their inclusion as a major part of the development process. Teachers did attend to self concerns (e.g. what development would involve for them); task concerns (e.g. how development could be managed); and impact concerns (e.g. how students would be affected) as the Efficacy-Based Change Model (Ohlhausen *et al.*, 1992) suggests but it was not possible to distinguish how these impacted on each stage of the process. In addition, there was no evidence which established whether self-efficacy and attributions affected development. This is likely to be a result of the design of the study and the data collection methods which did not allow sufficiently for contemporaneous access to a teacher's thoughts, feelings and perceptions during the development process.

Many of the processes involved in the Transtheoretical Model of Change (Prochaska *et al.*, 1992) could be seen in the data, as could the attitudes, subjective norms and perceived behavioural controls of the Theory of Planned Behaviour (Ajzen, 1991). However, in both cases, the retrospective nature of the data collection in this stage of the study made it difficult to determine at what points in the development process these impacted on a teacher's reflective activity; how they impacted; and the importance and relevance of any impact to the reflective experience. This made explaining the development process in these terms problematic.

The consideration of better outcomes (Awareness); planning workable alternatives (Understanding); viewing development as achievable (Belief) and the willingness to try things out (Effort) were found in the way teachers engaged with the reflective experience. However, the other aspects of the Seven-Step Model of Individual Change - institutional Reward or Feedback, and System Accommodation - seemed to have no part in a teacher's development (Jackson, 1985). Any reward a teacher received was intrinsic; any feedback was initiated through their own actions; little interest in how others could benefit from their experience was observed.

The stages of the Transtheoretical Model of Change (Prochaska *et al.*, 1992) and the Efficacy-Based Change Model (Ohlhausen *et al.*, 1992) could have been used to explain the development process but, in doing so, much of the detail would have been lost. With the Transtheoretical Model, 'Contemplation' could account for *information*; 'Preparation' for *analysis* and *preparation*; and 'Action' for *implementation*. However, this study indicates that the planning activity can be distinguished from the activities of *analysis*, and therefore, it seems more appropriate to treat it as a distinct stage. In addition, whilst 'Maintenance' accounts for the idea that taking action requires monitoring, seeking to consolidate a behaviour is not the same as evaluating the effectiveness of the behaviour, which is achieved by re-cycling through the stages. Similar difficulties are observed with the EBCM. *Information* could be considered as 'Initiation'; *analysis, preparation* and *implementation* as 'Implementation'; and re-cycling through the stages as 'Refinement'. Yet again, in doing this, how teachers acted in order to develop is not clearly defined.

In concluding Part One of this phase of the study, the accomplishment of self-directed professional development aimed at improving teaching and learning, in response to using the use of the CSQ, has been identified. Although different aspects of the observed process of development have been related to a number of theories, by modifying and extending one of the theories it is possible to consolidate them. This could provide a useful model to aid participation in, and accomplishment of, reflective practice aimed at improving teaching and learning in post-compulsory education settings. The theory under consideration is that of action research.

Action research already satisfies the framework required to accommodate the collaborative benefits, the four stages and the re-cycling element of the development process. A more flexible use of the cycle could be employed, as some commentators have argued (Elliott, 1991; McKen, 1996), so that the stages become guidelines for what needs to be performed at some point for critically considered development to occur. The decision-making prompts could be included as an explicit dimension of the relevant stage so that participants can

encourage each other to appropriately consider the outcomes of their activities. To maximise the benefit of collaboration, a recommendation concerning the composition of the co-participants could be made so that a teacher considers involving one or more persons:

- to provide first-hand feedback;
- to critique and challenge perspectives, assumptions and intentions.
- to evaluate and generate ideas;
- to whom they feel accountable;
- to invite and follow-up progress;
- to encourage and support.

To assist in making the reflective experience appropriate, and consequent development manageable and achievable, a recommendation concerning the time-related issues could be made so that a teacher consider the impact on the process of:

- the appropriateness of the occasion;
- the amount of time that is available;
- the likely duration of the process.

Amending the model in these ways could assist teachers to participate in reflective practice with the kind of collaborative support that is most valuable; to accomplish development with the help of useful guidelines; and to tailor their attempts to the practicalities of the daily demands of teaching.

However, whether this is the most appropriate manner in which to attempt reflective practice aimed at improving teaching and learning is difficult to say. Firstly, the possibility for creating tension seems inherent in collaboration. A teacher's sense of vulnerability and fear of being judged in front of others (Elliott, 1991) was perceived, as were conceptual misunderstandings (Garrido *et al.*, 1997)

and unequal power relations (Elliott, 1991). Although development was not deterred in these instances, clearly collaboration has the potential for hindering or inhibiting development through such situations.

Secondly, three explanations for the emergence of various characteristics of the action research model can be found. One, a certain degree of collaboration was inherent in the study - the nature of the CSQ required a teacher to have considerable involvement with either the researcher or facilitator and some involvement from students. Two, an awareness of the action research cycle on the part of the researcher and project director could have led them to prompt teachers into this pattern of reflective activity, albeit unconsciously. Three, at least ten of the teachers interviewed had been trained in the use of the Kolb Experiential Cycle (which is similar to that of the action research cycle) as an aid to reflective practice which they could have employed during this experience (Clow, 2001; Jenkins, 2001).

Yet, despite these provisos, the fact that the process led to self-directed professional development aimed at improvement in teaching and learning as a result of reflective activity suggests that the action research model, with some amendments, is an appropriate way to enable reflective practice.

PART TWO - FACTORS INFLUENCING SELF-DIRECTED PROFESSIONAL DEVELOPMENT AIMED AT IMPROVING TEACHING AND LEARNING

Part Two of the analysis concerned identifying ways in which teachers' could be encouraged to participate in, and enabled to accomplish, self-directed professional development aimed at improving teaching and learning. To this end, the data were analysed to identify those factors which are perceived generally to both facilitate and hinder this activity.

Factors perceived generally to influence self-directed professional development aimed at improving teaching and learning

A range of factors influence teachers' desires and abilities to direct their own professional development. These are grouped into intra-, inter- and extra-personal factors as in chapter five. Most of the quotations used to support the analysis identify factors in relation to these teachers' experiences of self-directed professional development other than that of using the CSQ. However, some quotations identify influencing factors which were perceived as a direct consequence of a teacher's use of the CSQ, as they realised the value this experience had for other development initiatives and opportunities.

Intra-personal factors

The teachers in this study had engaged in a wide range of self-directed professional development during the preceding two to three years. Instances mentioned were attending conferences, seminars and workshops (e.g. on Learning Support Assistants; communication with the elderly; the use of music in teaching and learning; the introduction of new GNVQs); academic courses (e.g. MA and BA degrees); undertaking official and personal research projects (e.g. the professionalism of FE teachers; the management of student behaviour); reading journals; exploring personality theories; investigating learning styles; developing practical (e.g. first aid) and technical (e.g. IT) skills; networking with colleagues, ex-colleagues and peers to exchange ideas and suggestions. Such participation and accomplishment appears to be associated with intra-personal factors in two ways. A teacher's initial involvement seems to be related to their disposition towards development, whilst actual development appears related to their perceptions of the costs and benefits associated with it.

Teacher Dispositions

Concerning disposition, teachers differ in their orientation towards and efforts to develop professionally. On the basis of their development activity during the two to three years prior to the final interviews, teachers in this research were either

frequently or occasionally active. From hearsay evidence concerning these teachers' colleagues it can be surmised that some others are, probably, rarely active. This gives a potential taxonomy for teachers' development orientation, on a scale of decreasing activity, of 'Perpetuals', 'Intermittents' and 'Dormants'.

The evidence suggests that the extent to which a teacher engages in professional development is associated with the degree of commitment to six concepts (quotes are from teachers deemed to be 'Perpetuals'):

- professionalism - desire to be an effective teacher:

T8: 'Although I consider myself to be a good teacher and feel that I have all the qualities a good teacher should have, I have always wondered - am I facilitating learning in my students? . . . So this [CSQ] was a form or a way of telling me "Am I doing things properly or not?"'

- openness - willingness to receive constructive criticism:

T3c: 'I've got a fairly open nature really, regarding working with the students. So I wasn't afraid, if you like, of being told "You're not doing this right" or "It's coming out that there's certain things you're not doing". Some people feel vulnerable about that but I don't. I always feel that unless you're open you can't change.'

- goal setting - active identification of areas for development:

T9: 'I've just done a colouring course. And I'm going to a cutting one with a top stylist in April, the first week of the holidays. . . Then I shall go in for doing a bit more IT.'

- initiative - proactively seeking development resources and opportunities, and implementing their development plan:

T5: 'Now one of the things I do is actually go into FE colleges to update myself. So I might go to S [college], meet my old colleagues, they all come and meet me and we have lunch and I literally pick their brains and their desks. I come away with copies of everything they think I should have. But if I didn't have that - for instance, at the moment there's a new entry level qualification which is big in FE - but without that contact I wouldn't know about that. So I would be really out of date. So I do that.'

- experimentation - willingness to try something new or take a risk:

T3a: 'Um, when we went on the residential last summer, there was a point when there wasn't any surf. So the instructors couldn't take them surfing. . . And, um, possibly wouldn't have tried it before, but I suggested they get into groups and have a sand construction competition. Yeah? Now these are sort of 16-19 year olds, on the beach, disaffected youngsters, and they got completely into it. . . But it was a potentially risky thing to suggest. . . they could have all told me to 'F off'. You know, "We're not going to go playing in the sand." They were there to do outdoor pursuit activities.'

- personal cost - willingness to invest their own time and/ or money in development:

T12h: 'And I thought "I'd really like to go on a course on beadwork" because it relates to other things that I teach. . . And my first instinct is "Well if I want to do a beadwork course I'll look at West Dean and things like that and I'll see if I can fit it in and I'll go off and do it. At my own time and at my own expense."'

From the interview data, those teachers who could be classed as 'Perpetuals', (all except T3b, T4a, T6 and T7), displayed a solid commitment to all six concepts listed, in particular to openness, professionalism and personal cost. By comparison, those classed as 'Intermittents' (T3b, T4a, T6 and T7) showed a strong commitment to openness, but moderate or less commitment to the remaining concepts; in particular they were reluctant to use their own time or finances with which to engage in development. 'Dormants', it is suggested, are likely to have little or no commitment to most of the concepts. The following descriptions are cameos of each type:

'Perpetual'

T11: 'After you've been teaching for a while, you've got no guidelines to decide if what you're doing is right. Am I a good teacher? Am I not a good teacher? So this [CSQ] was a form or a way of telling me "Am I doing things properly or not?" You know, it would highlight things that I'm doing wrong and it would highlight things that I'm doing right. . . So I do actually ask them [students] at the end of the session, you know, "How do you feel about that then? Was that good? Was that bad? Was that boring?" They've got used to me now and they'll say what they feel. . . But my aims are to sort of to move. I will move on. I think probably 3 or 4 years time down the line, I'll be looking to think "Right, I've done what

I wanted to accomplish here. I want to go somewhere else now and do something different". . . I mean, I'm doing the BA now. And that'll take me up to next year I suppose, to do. Um, I'm looking at doing D35 to be an external verifier. I want to do that next as well. And, um, I don't know what I'm going to do then. I need to do some more. Perhaps an MA. Or perhaps a BA in something different than teaching. Perhaps something different. . . The only thing they [college] wanted me to do, to start with, was the 730 and the D32, 33. Because I assess quite a lot of the time then I needed that. And then it was my choice to do the D34. It was my choice to do the PGCE. It was my choice to do the BA. . . Um, [I'm] unconventional. Experimental. You come up, you find a teaching style or teaching idea and think "Oh, I can adapt that" and try it. If it works, you keep it. If it doesn't work, you throw it away and try another one. . . I mean it's difficult because I want to do it all. To get it all in something had to give. And something that had to give was, well, I don't need 7 hours, I don't need 8 hours, I only need 4 hours sleep. So that's the time that's allocated to other things. In the middle of the night that's when I do my research and do my essays. You know, because that's the only time I've got available. The wife'll go to bed and around 11 or 12 o'clock I'll start work. And I'll work to 2, 3, 4 o'clock in the morning. And then go to bed.'

'Intermittent'

T6: '. . . apart from this [CSQ] I don't do anything that is not directly related to teaching and learning of my students. Um, I will go to course meetings. I will not go to college wide meetings. I will avoid section meetings. I will say "No" to every other obligation so that I only do my lesson planning, my teaching, my marking, you know. I don't get involved in other things. . . And that there's a lot to be learned from having other people around. So I suppose I sort of assume that good things will come of sharing teaching or sharing observation with your colleagues. I would like it to become sort of normal for you to, fairly regularly, have a colleague either sharing the teaching with you - so you're team teaching - or for them to come and observe a group with whom your having a difficulty communicating. . . You've got to decide where it is you want to develop to, where you want to be in a year's time, what you want to have improved. I think that's my problem at the moment. I can see lots of things that I could do but I realistically haven't got time to do them all so, choosing realistic goals. Well, we've usually pinpointed something I'd like to do. But then it was a question of whether I was keen enough to do it really. That's what I'm struggling with. It's something to do with my motivation and how much energy I've got left over for things, as if I've got some finite amount and it's all got taken up. I think I'm feeling a bit defeated at the moment by the time factor as well. It's something at the moment that's making me feel I can't actually be bothered. . . Oh yes, the course I went on recently . . . was on reminiscence work, with older people. Um and, er, they do a lot of work with objects and other stimuli, and creative work - music and so on. And I thought "This is a good way

to kind of expand my mind a bit about, not just ways of working with client groups, but possibly ideas and ways of working with students as well." . . . I'm interested in where you can start taking risks really. Having the confidence to let students go off and direct their own learning, is quite a risky business. So, um, I think that [student views] helped to give me the confidence to go on doing that and saying at times "Stuff the curriculum. It's more important that these students have control over what they're learning."

'Dormant'

From observations made by T3c and T8 about the attitudes of some colleagues to professional development:

'My colleagues? Some don't [get involved in professional development]. The older ones don't. The younger ones do. But I suppose the older ones have been set in their ways for the last 20 years and they're certainly not going to change now. And that's it. Full stop. There's no need for, or no requirement for them to develop personally. I mean they're on their way to retirement and just don't want to. They want an easy life. . . . But other people are quite happy in the status quo. They're quite happy to go along. I had cause to talk to a member of staff about a particular student and the way they were managing their behaviour in a lesson. And it came straight back "I've been doing this job for 10 years. I don't need to change. Blah, blah, blah." And it looked as if I was making a criticism. And what I was trying to do was discuss it with them. So you're working with people like that as well. I mean that's only one person. But there are a number of people like that who see themselves in a slot. They come here to teach a subject. And as far as they're concerned they teach that subject well. And that's fine until you get problems with students. Other staff do not see themselves as a problem with that. They see it wholly as a problem with the students - "They're not able enough, they're not good enough, they don't behave, they're bad students or whatever", they're the comments that come out. And therefore this self-directed thing [development] is very important to people like that but they can't see that. . . . And some people aren't open. Some people are comfortable with what they've got. They're not open. They don't want to open any doors. They're frightened of what they might find. They've got a didactic teaching style or controlling or whatever. And they feel comfortable with that. Um, and they tend not to understand the need to change. I mean, you can go into some classrooms and it's all teacher led from the front of the classroom. The kids get the results, they do the things, so why should they change?'

Cost-benefit perceptions

Potential development was assessed by teachers in terms of the costs and benefits associated with the actions and outcomes. Those who developed an aspect of

their communication style perceived the action to be potentially desirable, feasible and the cost-benefit aspect to be acceptable. This example is from a teacher who devised a way to decrease their use of sarcasm in class:

T5: 'I think about that [sarcasm] a lot. . . I think what is my belief - years ago reading stuff on student centred learning, it's sort of stayed with me - is that I just really shouldn't do it, it's not professional and it will always inadvertently maybe hurt somebody and that's a bad thing to do. And for years I've desperately tried not to but every so often I do. . . And I've shared that with my students this year and that I was really trying not to be sarcastic and would they pull me up if I was. And they are doing that. . . If I was just the person that I am, I would still be . . . sarcastic. So in terms of my professionalism, of when I'm operating with a group of students, I have to change my natural approach. So I do have to be different. There's a book by Robert Leemson - I think I may have recommended that before - and he talks about the teacher being a performer. OK? And he says actually there's nothing wrong with this because our real self might be very boring or have other things that really, you know - the performance is actually better. And we can perform with our students and we're doing that. We're getting rid of things that perhaps would be barriers to the learning.'

Where a teacher perceived an action to be undesirable, or unfeasible or too costly to pursue, then development did not take place. Just as T5 considered reducing their use of sarcasm in class so, too, did T7 but resulting in the decision to take no action:

T7: 'During the group interviews the feedback from the students was that I generally used sarcasm in a positive way, for jokes and attracting attention. I didn't use it to put them down or embarrass them . . . One student did mention that my sarcasm was once a bit close to home for her, even though she realised it was not meant so. Had there been more examples of this it might have concerned me more. However, I am aware that it is inherent within human communication that signals and messages are frequently misinterpreted. A good tutor should try to minimise this, but can never completely eradicate it. I feel that to alter my use of sarcasm because of one incident would not be appropriate; it is too entrenched in not just my style of teaching, but my personality . . . I can't make a conscious decision about the way I interact with people. I can only make conscious decisions about teaching and the way I teach. But in terms of interpersonal interaction that's an enormous thing to do. 'Cos that's not just changing me here. It's changing me everywhere. I don't think I'd want to do that. Because it's taken me 31 years to get here. . . there is a fundamental part, perhaps it's the chassis - the main body of the car - that fundamental area is there and that's you. You're not going to make somebody who's boring, interesting. . . You can mess around and change the colour of the car and put a radio in or something like that. But that fundamental bit is there, unfortunately. And I

think it's dangerous to tinker around too much. Too much, 'cos otherwise you tinker around too much and lose other things as well without realising it. You know? And I don't really want to experiment with that.'

Inter-personal factors

Key inter-personal factors in facilitating or hindering participation in, and accomplishment of, self-directed professional development were perceived to be colleagues, students and leaders.

Colleagues

Teachers working together, helping each other to reflect on their teaching and assist each other to make sensible change was a common theme:

T10: 'Ah, well, the thing is if you don't involve others at some point as a reference point, you're in danger of losing perspective of what you're doing. I think. You need to have some benchmarks on which to measure what you're doing. Or advice of those who've gone before who can see the path or can ease the path. Or whatever. So it's a mixture. . . You can do that by reading but you also need, in a way, to bounce ideas off people and to have them challenged by those who don't think exactly the same way you do.'

Colleagues in the form of mentors or coaches were viewed as helpful guides:

T3c: 'So a little bit of direction, a little bit of support would help me. Well, a form of mentor. Somebody you can turn to for, a bit like as assessor, really, somebody you can turn to and say "I'm doing X, what do I need to do now? Will you give me some advice or whatever."'

Peer groups or study groups were also considered important to maintaining impetus for development:

T5: 'So then I was thinking about learning and identifying things I wanted to develop and for me, there always has to be a group that I do it with. I'm doing a doctorate at the moment and sometimes it's dire, it's just awful at times, and we all turn up there and it's quite irrelevant which huge name is coming to talk to us, usually about schools today, because we like going out to the pub at lunch time. And at lunch time we do talk about our studies and our ideas and what we're doing and that's really stimulating.'

Students

Student involvement in the development of teaching and learning was considered by every teacher to be a constructive contribution. Feedback from students enabled teachers to gauge how well they were doing and whether any changes were needed:

T3a: 'Well, you can't do it [development] without them. Otherwise you're in a total vacuum. . . . Um, I mean they're the ones who are telling you if you're getting it right or not. If you're not doing what you think you're doing, then you're completely on the wrong track and they will tell you.'

This feedback formally happened in course reviews, course meetings and tutorials, but with mixed success and, sometimes, with inadequate depth and frequency:

T6: 'Because certainly every term we do an evaluation of the courses any way, which I must admit I don't think I'm particularly happy with the structure of those evaluations, I don't think they work, I don't think they bring out the things I want to really come out. . . I think the evaluations we run really assess the course. . . I'd like to focus on how the students see me as the course leader.'

T5: 'For me that is what tutorials are for. . . when I say "how is, is the level right?" And last year 2 or 3 said "I don't think I can do it, it's too difficult" . . . I didn't know they didn't understand. It's only that they had a half hour tutorial with me where I said "How's it going for you?" that that came back again.'

T3b: 'I think maybe we should have a mid course evaluation. That maybe we should be asking students about what they think about now. "Is it what you expected it to be? How can we change it?" I mean, certainly on 1st Year Advanced we've had a very big drop-out rate already. . . So I think, um, you know, maybe, it makes you sort of wonder why they left. . . It would be nice to get the opportunity to say to them "Do you think there are parts of the course that aren't enjoyable? Do you think there are ways we can change it? How would you like us to change it?" And for us to take that on board.'

It was more useful to have focused discussions with students which provided pointers as to what could be developed:

T3a: 'I think it's [discussion] been very useful and very necessary. And it's a confidence boost too. In the fact that you start to see that when you do open the doors of communication with them it's not always as you

think it is. And as long as you can stay open and hear what's being said and try and act on that, then you begin to see that things can be done slightly differently.'

These discussions not only allowed students to express their views but encouraged teachers to experiment and develop:

T3a: 'Um, and when you hear that's what they want and then you try doing it and you feel "Yeah. That actually worked. Not for everybody. But it worked for a great number of them." Then you want to try it again. . But until it's actually verbalised and until those people have actually said it, it doesn't perhaps force you to take action on it.'

Leaders

Leadership was perceived at two levels - institutional and departmental - and its influence on professional development was varied. Overall leaders of institutions (college principals and university vice-chancellors) were mostly invisible to the teachers with only one institutional head being perceived as interested in and positively influencing professional development:

T3c: 'And there is an expectation that you will develop yourself in what area you want to do. And I have to say that the college has always been strong on staff development. In the 8 years I've been here, I've done lots and lots of things. . . It's always been a process of enabling rather than disabling. . . And the principal himself is very, very strong on staff development. He does have a personal attachment. And he'll be quite open about that and say he has very strong views on staff development and the need to enable the staff to gain more qualifications and be better at their jobs. Because the quality of the college provision goes up. And that's not just teaching staff, that's support staff as well.'

In general, those in overall leadership were not seen to be overly interested in how a teacher developed professionally. This was reflected in teachers' views of their institutions as a whole which were considered to contribute minimally to their professional development:

T4a: 'There's been a lot of rhetoric and not very much active encouragement, I think. There's been a sort of expectation that it [professional development] was something you could do on top of whatever you were doing. And not something for which you needed

encouragement, you needed space to be made, and some cash to be put up, and resources.'

T2: 'But I think it [institution] has a narrow definition of what constitutes development. And I don't see any coherence in it's policy or strategy towards development. . . And I think staff as individuals at all levels are favourably disposed towards encouraging personal development. But when it comes to the trade-off between that and delivery, delivery wins every time. Personal development is very much in practice a secondary consideration. Not because people want it to be but because that is the nature of the [management] system that's been created.'

What was more important to a teacher's motivation and opportunity for professional development was the personal contact with and stance of their immediate line manager who could hinder or facilitate such development:

T8: 'Well, the only support I would get, and it's because my line manager understands, is that if I need to do something and I am not teaching, he'll let me do it. So he gives me a free reign. If I need to do something and it's not to do with my teaching, but it's to do with my personal development, then he'll let me get on and do it. Other line managers are not necessarily as good as that. And I know that some other people - like coming to Brookes [university] on a Thursday for instance, you have to be here at 5. I'm teaching until 5 but what I do is let the students go half an hour early. I know what I've got to teach them and in that time scale I can teach them that and I leave half hour early. The students go a half hour early. And my line manager will let me do that. The electrician teacher, who's also doing the BA here and is also teaching to 5 o'clock and his line manager says "You finish at 5 and you'll be late". And that's the difference.'

Extra-personal factors

Culture, staff development, time, resources and the syllabus were the most frequently mentioned extra-personal factors to influence participation in, and accomplishment of, self-directed professional development.

Culture

All teachers agreed that much could be learned from meeting with colleagues and talking about teaching and learning issues. Yet less than half experienced a culture where this took place. Only seven teachers routinely shared and discussed matters of teaching and learning with colleagues, either through informal day to

day contact or by pre-arranged get-togethers. These episodes were seen to encourage development:

T12g: 'We have regular team meetings where information is shared from staff development. But not just staff development. My own team meets monthly and we regularly discuss all the students in turn on the course and to look at their learning programs. . . I think it comes from we're just constantly looking to improve what we're doing.'

T10: 'But I mean the big plus is that we have a departmental room which we sit in at break time and very often the discussion is about "Have you tried this? How did you do it?" That sort of thing. So we don't have to create an artificial forum. That comes naturally.'

For the other teachers the culture within their department or institution was not one in which collegiality was the norm:

T4a: '. . . our breaks are all at different times, our lunch times are all different and that sense of all being together and being able to share the experience... The idea now of coming back from a lesson and saying "That went really well", "Oh what happened?" and talking about just seems absurd. It's scramble back, deal with a problem make a couple of phone calls, and pick up your notes for the next one - if you've had time to make any.'

T8: 'They [colleagues] see and they take the mickey out of me for preparing all these weird and wonderful lessons. You know, which they don't. . . there's only 3 lecturers out of 20 you could really talk to about teaching styles, the way you teach. The others are just set in their ways, wouldn't want to know.'

T1: 'I think teachers teach as individuals in this place anyway. There's less kind of sharing of teaching, teaching activity, I'd say, than in many places. So people expect you to go off and get on with it really, so I've been doing that since I've been here.'

For some teachers, this kind of culture curtailed their development activity:

T3c: 'I mean I'm always willing to take on new things. Always willing to, um, to get myself going. You know, I get enthusiastic about things . . . and the only thing that prevents me is time. Or other people [colleagues] sometimes. People's apathy. You know, when people are around you, or people not coming up with the goods. You want to do something and you know it's going to work and people around you are not so keen.'

Staff Development

Staff Development Structure

The impact of staff development on a teacher's ability to direct their own professional development varied according to the kind of provision available at each institution. 'O' College had both a staff development unit and compulsory Employee Development Days which enabled both teachers T8 and T9 to further their own development interests:

T9: 'If you identify that you need help with it, they [staff development] will help you. They are very, very good.'

T8: 'We have a choice where we have a development day where you can just pick a subject where you feel you're weak at and spend the day in a class doing a particular area. . . Um, you have to opt for one or come up with another idea, an alternative. And that happens once a term.'

A similar set-up at 'N' college was viewed as supportive of development by T12g, a full time member of staff, but as it was unknown to T12h, a part-timer, it had no impact on their development:

T12g: 'Certainly staff development are very accessible. You can go up to them and say "I need to do this" and if they feel it's a suitable course then you will get on it. And certainly my view of Human Resources is that if you make a realistic application and you fill in the aims and objectives and they fit in the area that you're working in, I haven't had anything come back that's been denied. Which is good.'

T12h: 'I know very little about staff development in the college. This is the second time this has come up for me in a week. Staff development - and I know nothing about it.'

At 'A' and 'B' Colleges, and 'H' School, instead of a staff development unit, an individual was appointed to oversee staff development, promoting development days and arranging occasional development events. Generally this structure had little effect on a teacher's professional development:

T3b: 'Because, it sounds a bit of a terrible thing to say but, the Staff Development Days that we have, I mean, sometimes I think "Why are we wasting our time at these? Why don't they provide something that's more interesting?" . . . Because it's not always appropriate or relevant.'

T7: 'We're mostly left to get on with ourselves really. There are the formal systems that are supposed to work but they don't necessarily filter

down. So lots of people haven't used these professional development days because they don't really know what they're about.'

At 'P' University a mixture of the two structures existed. A central staff development unit ('X') offered courses and advice to staff on a university-wide basis, whilst an individual member of staff was designated responsible for staff development within a School or Department. The provision of the central staff development unit was considered to be useful:

T5: 'X, which is the university's staff development unit, they publish a list of courses every year. And I've actually signed up to several of those this year. And I've enjoyed them actually. They've been good. . . they offer you a menu that you choose from. And they'll come and do stuff that's specific if you want them to. . . It's really quite far reaching.'

Provision at School or Departmental level was poor:

T5: 'Cos everyone's just flapping around. There's no co-ordination [within the department]. There's no cascading when people go away on courses. There's no feedback to the rest of us. There just isn't a system. . . There is a person with responsibility for staff development within the School. In my opinion they have about as much influence as a fly in staff development. Um, if I give you an example of where I think the approach is totally unprofessional - the person in charge of staff development is always on holiday when new staff start in September and doesn't come back until everyone's been here a month. And she's supposed to be in charge of induction. So that's the level of importance it has within the department.'

The result was an approach that lacked co-ordination, integration and commitment, and failed to effectively facilitate a teacher's development aspirations:

T6: 'I think the facilities are there. I think you've got the whole centre for staff and learning development. Which is, potentially, should be fairly effective. There are things like Computer Services. There all the different areas to look at. So I think all the places are there. And I think probably a lot of them run the sort of courses or the types of tuition or development that I would be interested in. It's simply that there doesn't seem to be somebody that's co-ordinating that. . . There seems to be very little coherence in what's being put forward. . . I think, to be honest, I don't think it's very good. I don't think 'P' first of all has tried to identify what my aims are in terms of professional development. And because they've

not really identified them they've not been able to get me the support to help me develop them at all.'

Appraisals and Observations

Appraisals were expected, as part of staff development policy, by all except one teacher, and observations were the norm in three institutions. However, policy did not guarantee practice and five teachers had not received their annual appraisal during the previous two years, due to illness, lack of time or oversight.

In one instance a teacher resorted to remedying the situation themselves:

T6: 'It should really be every year. . . But in practice it just doesn't seem to happen. Er, and certainly I know this year I actually requested one in January because I've just never spoken to my Head of School about my status. And it got to the point when I was thinking "Well, what am I doing in this place?"'

When appraisals and observations were seen to be part of a system that was politically motivated, aimed at monitoring and justifying the quality, output and performance of teachers, then these activities did not encourage teachers in their professional development:

T7: 'There's been a lot of centralisation in the service of controls over curriculum, control through OFSTED, control through quality performance indicators - and all those three things, - teachers are deeply suspicious about. . . There's the appraisal system. But again there's the balance between the thing about quality and professional development. It's linked so closely with monitoring, that it's so associated with it. So it very much depends on who your line manager is and how well your appraisal goes. You know, I personally am incredibly careful about what I say in appraisal.'

T8: 'I mean you have observations, fine, but I mean the observation's for political reasons rather than for any other reasons. So if you're doing it wrong it's not necessarily highlighted, only the good things are picked up. And a slight, maybe a small thing is picked up for you to alter but nothing drastic because that's not the object of the exercise.'

Where such opportunities were offered as a means to further a teacher's own development interests, they were perceived as more beneficial, often because they provided another perspective for consideration:

T3a: 'We have this appraisal system within the college. . . and within that format you can discuss during that time, what staff development needs you have. What you feel is required or needed. And that is then recorded and is addressed.'

T2: 'One of the ways I might want to prioritise is to use the information generated by the CSQ to give a colleague the focus and the remit to address that area and observe those particular areas. And if I'm trying to change them that feedback would be very valuable. So that's in fact how I've tried to use it.'

However, without any follow-up or feedback on development arising from appraisals or observations, teachers lost the impetus to continue:

T4a: 'Um, I think that's the bit where I've, I have to be honest, I haven't really done much about that [development]. This is where it starts to crumble I think. This is where you need ongoing, continuing support and reviewing I think to change matters.'

Diagnostic Tools

Instruments, such as questionnaires identifying learning styles (Andrews, 1997), course evaluations and learning logs which elicited or recorded information that could pinpoint specific issues to consider for professional development were perceived as useful and influenced both the need for and direction of development:

T8: 'So when they first come . . . I give them the Teaching [learning] Styles questionnaire to find out what sort of learners they are. And the majority of the time they're always, um, pictures, doing, learners. They're not the academic learners who just use their brain and numbers. So, you just find out how they learn by doing this. And that gives me some idea so that, "OK, they are visual learners", so all my lessons will be related to visual, doing, touchy, feely lessons.'

Development Costs

Nearly all of the teachers were facilitated in their professional development by the costs of many or all of their development activities being met by their institution. Although developmental budgets differed between institutions and from year to year, within reason money was available to those who wanted to study for a

further degree, take a course, attend seminars or conferences, provided the activity could be justified:

T10: 'I mean the school has kindly paid for . . . the two year course.'

T4a: 'Up til now it's not really been a problem providing you could, you know, reasonably justify it. The college would pay. I've not had anything I've applied for turned down. And, er, recently went on quite an expensive course.'

T6: 'Just as one example: I qualified as a registered first aider. And the university were prepared to pay for that course. So that was good. But unfortunately I had to go through the School and persuade the School to fund me to do it and justify it to them.'

However for one teacher costs were a hindrance to their ability to attend development activities of their choice, because the annual contribution made by their institution was inadequate for their needs:

T5: 'But there are things coming up now that are really quite important for my professional development and there's no obvious way I'm going to get to them unless I pay for them myself. . . And I find that quite problematic.'

Time

Time was consistently mentioned as the main drawback to development. Lack of time, especially within the working day, restricted opportunities to review their practice, to engage in professional development activities or discussion and to implement desired changes:

T3c: ' . . . you don't have the time to stop and think about your own development. Because all the time you're on this roller coaster of, um, teaching and it's administrative aspects. A good example of that is that I started the MA and I had to give it up and put it on hold last year. Purely because of work. I just couldn't cope.'

T2: 'You know I've attended this [development] session this week. There's lots of interesting stuff in it. But how am I going to find the time to reflect and experiment is the question I'm asking myself. And increasingly it's just an encroachment into my holidays.'

T10: 'So there's no time to invest in exploring in different ways of doing something . . . Simply because we all have much more work to do. Our teaching loads went up and our class sizes went up. And the cover situation is quite busy. And we have more public exams to prepare for -

the Key Stage 3 SATS. And we have modular GCSE and we have the A level.'

Only occasionally did a teacher think that the amount of time needed for developing some aspects of classroom interaction was not great:

T3a: 'Some of the self-directed, as I said earlier, professional development, isn't time consuming. Some of it can be very successful, very straightforward and just involve you in being honest and open with yourself. Um, and allowing you 5-10 minutes to think about perhaps doing something slightly differently, or taking a risk, experimenting with doing something slightly differently.'

Resources

Resources for teaching and learning were generally viewed as adequate. However this was not the case when a teacher was involved with a subject that was heavily resource based (e.g. plumbing, gas engineering, textiles) or wanted to move away from the traditional 'chalk and talk' lesson to utilise materials or space (e.g. texts, computers or appropriate classroom size) not normally associated with their subject. Four teachers (T1, T8, T11 and T12h) in these circumstances, found a lack of resources restricted the scope of what could be achieved:

T1: 'But I think also in terms of resources again, there was a kind of problem. I think students sort of approached it by saying, "Alright I need to find the sort of area I'm going to work on" and then when they thought of an area, they went to the library and found that there was few resources . . . I think many people found they had to suit their topic to what was available in the library.'

T8: 'Um, resources is another thing [that hinders development]. We've got to teach with no resources. . . I was supposed to have a brand new Industrial workshop built in September. . . he's told me that they are being built, starting to be built on Monday [February]. But then he said "We haven't got any money to put anything in it." So you're going to have a workshop that will be completely empty. And not much use to me. Apart from I've grovelled and managed to scrounge quite a lot of things from manufacturers and local big companies and things like that.'

Syllabus

Teachers perceived the nature of the courses they taught to be too prescriptive to encourage development - particularly mentioning the content, performance criteria and assessment:

T8: 'I do want to give them more autonomy but the course just doesn't allow for this. There is the time constraint and the criteria and assignment set by the CITB, the awarding body, which have to be met. . . And you haven't got the option of "Let's do this and let's not do that". Um, it's got to be all covered. And so the option isn't there to chose what you want to learn.'

T10: '. . . in my mind I have a timetable that says I really want to get through this by this, to put them in a strong position because the nature of the exam that they do is 1 1/2 hours and it's almost a test of speed. It's actually to some extent a very poor exam, and the nature of the assessment is, as always, driving the approach in the classroom. And there is with our students a little element of "What do we need this for?" They basically just get into this mind set of "If this is not on the exam, then I don't want to know about it".'

T1: '. . . we have a module description which lists the learning outcomes and says that these learning outcomes will be examined, so that anything that's in there has to be examined, which is kind of crazy really. You're not allowed to say "These may be examined and a selection of them will come out in the exam or the assignment or whatever". Um... and therefore, you can't during the course of a module say "Well, you're already interested in this, let's follow that interest" for example.'

Summary of Part Two

The analysis shows that many factors influence teachers' aspirations and attempts to develop. As in Part One of this analysis, inter-personal factors were seen to facilitate development whilst time, along with other extra-personal factors such as culture, resources (where didactic teaching was not the norm), and the syllabus were considered to hinder development. The effect of staff development provision was mixed - it helped some teachers to achieve their aims whilst others believed it had no impact at all. Institutional leaders were usually perceived to be uninterested, inconsistent or disorganised with regard to promoting staff development, whereas departmental leaders varied in their encouragement of staff

development with only some actively promoting and enabling staff to implement their development objectives.

In view of the general lack of factors that appear to positively encourage teachers to direct their own professional development, perhaps the most interesting aspect is that these teachers were keen to participate in a review of their classroom interaction and most of them consequently developed some area of their communication style. This may indicate that the most important factor in facilitating self-directed professional development, aimed at improving teaching and learning, is the teacher themselves and their disposition towards development at any given time.

Discussion of Part Two

Most of the factors uncovered in Part Two of the study as influences on participation in, and accomplishment of, self-directed professional development are those identified in the literature. Few of these factors were experienced favourably by the teachers in this study. Yet the majority of teachers were active in their development undertakings and often found some worthwhile learning in even the most unpromising or unexpected of reflective experiences. This indicates that intra-personal factors are key to considering the implications of this research for promoting and supporting reflective practice in post-compulsory education settings. The idea of teacher dispositions, 'Perpetuals', 'Intermittents' and 'Dormants', similar to Joyce and Showers' (1995) 'state of growth' categories, suggests that the more a teacher favours the six concepts, the more likely they are to undertake professional development. The consideration of the advantages and disadvantages of the development experience, which mirrors the 'practicality ethic' (Doyle and Ponder, 1977-8) and the 'cost-benefit' model (Fullan, 1991), confirm that, where a teacher finds personal meaning and value in a development initiative, action is likely to follow. Consequently, this study indicates that teachers who favour these intra-personal characteristics will find a

substitute for, or work around, other factors which hinder rather than facilitate development. This is illustrated in the following paragraphs.

Working closely with colleagues was seen to contribute positively to reflective experiences (e.g. Hargreaves, 1992). However, ongoing and systematic development through collaboration with colleagues in their daily teaching context was not the norm because the culture was not conducive to this. Most teachers found themselves forced to work as individuals, isolated from each other by a lack of time for interaction, inadequate common rooms, restrictive timetabling, and status whereby part-timers were often excluded from or unaware of any professional development opportunities that existed. Yet collaborative enterprises occurred outside the institutional boundaries, of which this study is one example. Teachers would use their own time - days off, weekends, evenings and holidays - to participate with others in development ventures that interested them.

Student involvement in developing teaching and learning was welcomed and where official opportunities existed for students to contribute, teachers used student feedback to inform their practice (e.g. Fullan 1991). However, sometimes these opportunities were unsatisfactory - the timing was too late to address issues; or the focus was too general; or they lacked dialogue that would open up a discussion. In response, some teachers introduced their own ways of obtaining information from students that could enhance learning. Informal feedback sessions in class; individual and group tutorials; and the use of diagnostic questionnaires all enabled students to provide additional details to support planning and future action.

Most institutional leaders were perceived to be out of touch with a teacher's needs and priorities for development and most departmental/ line managers were uninterested in the development aspirations of their staff. Although some affirmation of the importance of professional development would have provided encouragement, as Fullan (1991) and other commentators suggest, teachers pursued their ambitions regardless of the attitude of the leadership, sometimes to

the extent of making contingency plans for alternative employment if things did not work out as desired.

Where the official provision for staff development was well promoted, accessible, relevant and supportive of a teacher's own aims, teachers took advantage of it (e.g. Webb, 1996; Craft, 1996). However for half of the teachers, the system in place to encourage professional development was not always adhered to or failed to meet their needs. In these instances particularly, teachers sought to fulfil their objectives either by pressing for appropriate actions to be taken within the system (e.g. requesting their appraisal), or by making their own arrangements to further their development (e.g. using the CSQ or personally paying for development activities).

Lack of time during the working day was a major limitation to teachers achieving all they desired in the way of professional development (van Lier, 1996). For most teachers in this study time for development was not a mandatory feature built into their contract and, consequently, once such things as contact hours, preparation, administration, meetings, tutorials, curricula changes, inspections, and course length were taken into consideration most had to juggle with both their professional and personal lives in order to engage in professional development. Consequently, the only way teachers accomplished some of their aims was to devote their own time to this purpose.

Resources were generally perceived as adequate for a teacher's development aspirations. However, where resources hindered the development of good or preferred ways of teaching, a teacher would sometimes buy what they needed themselves or scrounge it from a source other than their institution.

More restrictive of development opportunities than resources was the syllabus. Where course criteria were perceived to constrain the development of alternative learning experiences, teachers sometimes took risks to allow students to have

opportunities to learn in other ways. This was not always possible but within the restrictions teachers tried to be creative.

These last seven paragraphs typify the approach to professional development of the majority of teachers interviewed during Stage Two of the study. It can be seen that, whilst often frustrated with their circumstances they were, essentially, self-motivated people and, therefore, accomplished much in the way of their development objectives by being pro-active and doggedly determined. Their commitment to and experiences of using the CSQ reflect this. Thus, in relation to self-directed professional development aimed at improving teaching and learning, these findings give rise to three conclusions:

- In the current educational climate few factors appear to be supportive of self-directed improvements in teaching and learning in post-compulsory education settings;
- If this current educational climate prevails, self-directed professional development is likely to be dominated by teachers who display 'Perpetual' characteristics. 'Dormants' and, possibly, 'Intermittents' may be too overwhelmed by their circumstances to engage.
- It is not clear whether the presence or absence of certain factors more than others might encourage participation in, and enable accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings.

Conclusion

Two issues were investigated during this stage of the study. One concerned the manner in which self-directed improvements of teaching and learning were accomplished, as perceived in the development of a teacher's communication style following the use of the CSQ. The other concerned the factors perceived generally to facilitate and hinder involvement in self-directed professional development. It was anticipated that the findings would indicate how best to

encourage teachers' participation in, and support their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings. However, the outcomes are not conclusive.

The manner in which development of a teacher's communication style occurred, without the application of any particular model to facilitate the activity, was identified. It was accomplished via a flexible stage process, facilitated by a collaborative setting and dependent on time. This could be likened to a modified and extended version of the action research model. The four stages with their attendant activities and prompts highlight the actions necessary to achieving critical reflection. Interaction with interested others enables a critical stance to be taken and encourages movement through each stage. The strategic choice of fellow participants could ensure that the reflective experience has depth; is serious; realistic; creative; supported and encouraged. Consideration of the time issues could assist in making the reflective experience appropriate, and consequent development manageable and achievable. Therefore, it is suggested that this revised action research model could be used to provide a framework suitable for guiding teachers through the reflective experience and enable them to perform the activities necessary to accomplish self-directed professional development.

With regard to the factors that generally influence teachers' participation in, and accomplishment of self-directed professional development, the analysis is unclear. Interaction with colleagues, student feedback and line management support are welcomed but rarely experienced. Time, the syllabus and, to an extent, resources minimise what could be achieved. Yet, despite the unsupportive climate, improvements in teaching and learning are deliberately and consciously made. Teachers who want to do a good job and desire feedback on their performance will set objectives, initiate opportunities for reflection and engage in experimentation, often at the expense of their own time and finances, in order to accomplish development. Therefore, where a teacher is disposed toward development in these ways, other factors appear to have a limited impact on their desire and attempts to improve teaching and learning. Consequently, the role of

teachers' dispositions in involvement in self-directed professional development aimed at improving teaching and learning obscured an understanding of whether any factors are perceived to facilitate reflective practice more than others.

In consequence of this last point, drawing a conclusion about how best to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings was not considered appropriate at this stage of the research. Instead, the investigation entered a third phase aimed at determining the factors teachers perceived as essential to achieving the improvements they desired in teaching and learning. Chapter seven describes how this took place and with what outcomes.

CHAPTER SEVEN

FACILITATING SELF-DIRECTED PROFESSIONAL DEVELOPMENT

Introduction

In chapter six it was shown that when reflective practice aimed at improving teaching and learning is engaged in without the application of any particular model to facilitate the activity, development is achieved via a flexible stage process, facilitated by a collaborative setting and dependent on time. By revising the action research model, a framework could be provided that is suitable for guiding teachers through the experience and enabling them to perform the activities necessary to accomplish development.

However, the analysis was inconclusive with regard to individual factors that could facilitate teachers' participation in, and accomplishment of this activity. Whilst teacher disposition might ultimately determine who is most likely to engage in reflective practice, the presence or absence of particular factors might make participation more appealing or desired outcomes easier to accomplish. Therefore, in concluding Phase Two, it seemed important to investigate these factors further.

The main aim of this phase of the research was to determine which factors teachers perceived as essential to achieving the improvements they desired in teaching and learning. A secondary objective was to ascertain whether teachers sharing particular characteristics, (e.g. teacher disposition; educational establishment; subject etc.), held similar views. This information could clarify ways of encouraging participation in, and supporting accomplishment of reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings.

The chapter begins with a description of how, through three pilot studies, an instrument was developed to investigate teachers' perceptions of the importance of influencing factors in relation to their self-directed professional development. This is followed by details of the main study, the dissemination process and a conclusion. This phase of the study took place between February and October 2000.

PILOT STUDY ONE - THE REPERTORY GRID TECHNIQUE (1)

Design of Pilot Study One

Case study participant

The repertory grid (see *Research method*) devised for Pilot Study One was piloted by one teacher - T11. The participation of this teacher was requested because of his excellent knowledge and experience of Personal Construct Theory and the Repertory Grid Technique. It was anticipated that his insights could help to refine the instrument.

Research method

It was decided to use the Repertory Grid Technique, originally developed by Kelly (1955) for his Personal Construct Theory.

In Kelly's theory of the person, each person is seen to behave as a scientist, attempting to predict and control phenomena by developing ways of construing or interpreting the world which are useful in anticipating events (Bannister and Fransella, 1986). By interacting with the world individuals construct their own knowledge and understanding of reality; create a network of personal interpretations (or constructs); and place meanings on different phenomena (or elements - e.g. people; objects; events) of life which they then use to direct their daily activities and interactions.

Each individual develops a personal system of constructs that is convenient for them. Each person perceives, interprets, judges, and makes sense of events, people, situations and life in general differently from others, although there may be some common features of construing amongst some people. Consequently, certain things that are very important for some are not relevant for others.

Kelly proposed that the constructs which make up an individual's personal framework or system are bi-polar in nature, being defined in terms of similarity-difference dimensions. Furthermore, he believed that each person's construct system consists of a limited number of constructs which they use to evaluate the various elements in their life. By devising the repertory grid technique it became possible to identify the constructs an individual customarily uses in interpreting and predicting particular phenomena and to establish relationships between these constructs. In this way a repertory grid can illuminate the individual's current understanding of the issue in question and, possibly, identify a limited number of latent, overarching (or superordinate) constructs which suggest how other constructs are related or subsumed.

Consequently, it was thought that the repertory grid technique would allow this study to consider the importance of influencing factors on self-directed professional development from the teachers' viewpoints. In addition it would allow comparisons to be made between teachers, to see if any observable patterns existed that might be useful for drawing out implications for the promotion and accomplishment of self-directed professional development.

The repertory grid technique is a flexible and adaptable tool (Cohen and Manion, 1980; Fransella and Bannister, 1977; Tindall, 1994). Constructs and elements can either be elicited directly from a person or provided for them by another. Sometimes both poles of a construct are used and, at other times, only the emergent pole is used. There is also a variety of methods for identifying the relationship between the constructs and elements - ranking, rating and laddering being the most common. From this array of possibilities a repertory grid that

would suit the purposes of this study was put together, with its final structure being based on that devised by Munby (1982).

Materials

Pilot Study One used a rating grid which would enable the statistical technique of Factor Analysis to be used to identify major underlying dimensions of a teacher's personality. The constructs were provided for T11 by the researcher. These were selected from the data collected from all teachers in Phases One and Two of the study and consisted of nineteen factors (or issues) that teachers believed influenced their professional development. The elements were also provided for T11 and consisted of the four stages of the action research cycle. The stages of the cycle were chosen as it was thought that different aspects of the development process might be differentially influenced by the factors. A rating method - a five point Likert scale (Strongly Agree to Strongly Disagree) - was used to allot the elements to the constructs. The grid, with instructions, was presented in two formats - 'actual' and 'ideal' (Appendices 7.1 and 7.3). In the 'actual' format the teacher was asked to rate each element in respect of their present situation. In the 'ideal' format, the teacher was asked to rate each element according to their desired situation. In this way it was hoped to understand how issues influencing a teacher's self-directed professional development differed between their everyday experience and their view of how they would like it to be. It was also anticipated that, by giving each teacher in the study the same repertory grid to complete, comparisons across teachers and different settings could also be made.

Procedure

The forms which comprised the repertory grid were posted to T11 together with instructions for completion. The instructions requested that the teacher rate each construct against each element on a five-point Likert scale (Strongly Agree to Strongly Disagree). The completed forms, which took approximately 30 minutes to fill in, were returned by post to the researcher for analysis.

A follow-up interview was held with T11 to discuss the experience and appropriateness of the grids.

Analysis of Pilot Study One

The data from the repertory grid were subjected to Factor Analysis, Principal Components with VARIMAX rotation using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 9.0.0.

Factor Analysis (Simonite, 1994) is a statistical technique which can be used when a data set contains a number of correlated variables. By analysing the correlation matrix patterns of relationships between the variables can be identified, which allow suggestions to be made about the underlying characteristics or variables on which the patterns depend.

Factor Analysis (Howitt and Cramer, 1997) works by taking the original matrix of correlations and generating a smaller set of 'supervariables' or Factors which each contain all of the original variables. Factor loadings are calculated to determine the extent to which each original variable is associated or correlated with each Factor that has been created. These Factors can then be used to detect possible trends in the data.

To interpret the meaning of a Factor the original variables which correlate best with a Factor are identified. This is achieved by considering the Factor loadings and selecting the original variables with the highest values. These selected variables are used to define the Factor by determining the latent characteristic they have in common. Thus this interpretation of commonality provides the identification of the underlying, unobservable trend in the data.

A high level of mathematics is involved in Factor Analysis. However, despite this, it must be noted that the interpretation of Factor Analysis is subjective, relying more on a researcher's background knowledge of the area under investigation than on their mathematical ability (Simonite, 1994).

A repertory grid is a data set which contains a number of correlated variables. When the repertory grid involves using a rating scale Factor Analysis is the standard procedure employed to interpret the data (Fransella and Bannister, 1977). The most common method used is Principal Components Analysis with VARIMAX rotation (Howitt and Cramer, 1997). This is for three reasons:

- it allows each of the factors to explain the maximum amount of variance (variability or spread in the data) that it possibly can;
- the factors are extracted in order of magnitude from the largest to the smallest in terms of the amount of variance explained by the factor;
- it enables an easily interpreted factor structure to be obtained.

Usually there are three data considerations for using Factor Analysis. Firstly, the variables should be quantitative at the interval or ratio level (SPSS for Windows, Version 9.0.0). Secondly, the data should be approximately normally distributed (Johnson and Wichern, 1998, p.557). Thirdly, if Factor Analysis is being used to analyse sample data, there is a 'rule of thumb' which states that the ratio of cases to variables should be at least 2:1 (Kline, 1994); this is in order to minimise the margin of error when generalising the results to the population (Gorsuch, 1983).

The data arising from the repertory grid in this pilot study fulfilled the criteria for level and normality. It did not need to fulfil the third criterion since the results were not being used to make inferences about the wider population of teachers - indeed, the individual teacher concerned was 'the population'. This is because Personal Construct Theory (Kelly, 1955) and the associated repertory grid are intended to be used to 'explore the person' (Bannister and Fransella, 1986) and their unique understanding of the world, rather than for any results to be

generalised to the wider population. Consequently, Factor Analysis could be applied regardless of the number of elements and constructs which form the data.

Findings from Pilot Study One

The Factor Analysis carried out for both the 'actual' and 'ideal' Repertory Grids in this first pilot study showed that two constructs in each grid lacked variability or, in statistical terms, had zero variance. This had arisen because each of these constructs were given the same rating across all four elements (Table 7.1). The statistical implications of this are explained later in this section but, at this point, these ratings are of interest in terms of how T11 construed the issues considered to influence a teacher's self-directed professional development.

Table 7.1 Constructs with zero variance in the Repertory Grid, Pilot Study One, analysis. Ratings shown (numeric).

'Actual' Grid	Ratings (numeric)
Is frustrated by insufficient time provided at work to fit it in	Strongly Agree (5)
Is supported by the existence of a well-structured system for staff development	Disagree (2)
'Ideal' Grid	
Would be guided by having a mentor as a sounding board	Neither Agree nor Disagree (3)
Would not be restricted if university made funds available	Agree (4)

Firstly, it can be interpreted that T11 construed seventeen out of the nineteen issues to have different degrees of influence on his self-directed professional development depending on the stage of the action research cycle. For example, T11 'Strongly Agreed' that 'evaluation of myself (observation)' was 'prevented by the prescriptive nature of the courses I teach' but 'Disagreed' that 'reflection' was 'prevented by the prescriptive nature of the courses I teach'. This confirmed the earlier supposition that different stages of the development process might be

construed to be differentially influenced by the issues and, therefore, certain issues might be more of a help or a hindrance at different times. These issues may, or may not, be the same for each teacher.

Secondly, it can be interpreted that T11 construed the remaining two issues in each grid to have the same influence on his self-directed professional development regardless of the stage of the action research cycle. For example, T11 'Neither Agreed nor Disagreed' that his self-directed professional development 'would be guided by having a mentor to act as a sounding board' at any stage of the process. This suggests that certain issues are being construed as having consistently more relevance or irrelevance than others.

At this point interpretation of the data was curtailed. The lack of variability (zero variance) in the constructs given the same ratings across all four elements was problematic for further analysis. Variance is essential to the calculation of the correlations on which Factor Analysis is dependent. When a variable has zero variance the correlation coefficients cannot be computed. Consequently, for this pilot study, the requisite statistical computations for Factor Analysis could not be carried out in order to extract any common Factors. It was, therefore, not possible to determine how the teacher perceived the constructs and elements to be related to each other; nor whether any latent superordinate constructs might explain any relationships that might exist, within the 'actual' and 'ideal' scenarios; nor whether any such relationships might differ between the two scenarios.

Discussion of Pilot Study One

Overall, the repertory grid technique used in this pilot study had weaknesses. The most obvious was that, as the Factor Analysis could not be computed, it was not possible to gain insights into the relationships between the constructs and elements for this teacher and, consequently, draw any conclusions about facilitating self-directed improvements in teaching and learning. The lack of

variance arose because two constructs in each grid were rated in the same manner across the four elements. Consequently, each of these four constructs were perceived to affect each element in the same way. This might have been avoided through the use of a wider rating scale which would allow for even finer discriminations.

Two further issues identifying the lack of appropriateness of this particular repertory grid emerged from the discussion with T11 following the experience of completing the forms.

Firstly, T11 did not find all of the constructs relevant to each element. Thus rating them became a contrived activity. One of the corollaries of personal construct theory states that no single construct covers everything that happens in a person's experience. A construct will have a focus of convenience - that is a set of phenomena for which it works particularly well - but, ultimately, it has a range of convenience which is finite in the number of events etc. with which it can be associated. This situation could have been dealt with by removing completely any unsuitable constructs from the grid. However, this would have had a major detrimental effect. As these constructs were not unsuitable for every element, the interpretation and understanding of those elements which worked well with a construct otherwise deemed unsuitable would be minimised.

Secondly, T11 did not find it easy to relate to the elements. The descriptions of activities from the action research cycle were not directly associated with how this teacher approached self-directed professional development. This highlighted two issues. Firstly, it confirmed the obvious, but overlooked, fact that not all self-directed professional development takes place within the action research cycle. Secondly, it served as a reminder that, even when the action research cycle is used, self-directed professional development does not usually follow the four stages smoothly. Consequently, perhaps other elements needed to be used for the repertory grid.

In response to these three issues, a different approach to the repertory grid was taken in the second pilot study.

PILOT STUDY TWO - THE REPERTORY GRID TECHNIQUE (2)

Design of Pilot Study Two

Case study participant

As the repertory grid technique was also utilised for this second pilot study (see *Research method and materials*) the participation of T11 was again requested. He agreed to continue his involvement and to allow his knowledge and expertise to be drawn upon.

Research method and materials

The repertory grid technique was retained for this second pilot study, together with the intention to assess teachers' views in relation to their 'actual' and their 'ideal' experiences. However, several changes were made to the grid in light of what had been learned from Pilot Study One and T11 was more involved in the process than previously.

Firstly, self-directed professional development was given a context. Based on his CSQ results, T11 intended to increase *learner autonomy* within a psychology module by introducing more student choice and encouraging more student interaction when psychological investigations were required. This concrete example would help the teacher to identify more personally with the elements and constructs in the repertory grid when considering the influences on development.

Secondly, to make the grid more meaningful to the teacher, the factors (issues) that influenced development were selected as the elements. These had been the constructs in the first repertory grid. The ways in which these issues influenced development were chosen as the constructs. Both the elements and the constructs

were derived from comments made by T11 during the CSQ feedback sessions. This meant that the items selected were personally relevant to the teacher.

Thirdly, the constructs were made bi-polar and a seven-point rating scale was introduced for the allocation of the elements. This would allow for wider discriminations when rating and, hopefully, avoid the problem of zero variance encountered in the first pilot study.

Thus the grid became a more 'traditional' repertory grid.

Lastly, to overcome the problem concerning the range of convenience, it was decided that, ultimately, two grids would have to be created to cover separate categories of elements. Hopefully this would ensure that constructs worked well with those elements for which they had been selected. It was anticipated that the categories of elements would be 'people perceived to influence development' (e.g. colleagues, students, manager etc.) and 'practical aspects perceived to influence development' (e.g. time, resources, syllabuses etc.). However, initially, to test this new approach, only the 'people' grid was prepared, in the 'actual' format (Appendix 8.1).

It was still anticipated that the same grid could be completed by all participants in the study to enable comparisons between individuals and across settings.

Procedure

The elements (people perceived to influence development) and constructs (the ways in which people were perceived to influence development) were presented in the typical format of a repertory grid and given to T11 with instructions for completion. The completed form, which took around 20 minutes to fill in, was returned by post to the researcher for analysis.

A follow-up interview was held with the teacher to discuss the experience and appropriateness of the grids, lasting an hour.

Analysis and findings of Pilot Study Two

The data was subjected to Factor Analysis (Fransella and Bannister, 1977) using SPSS for Windows, Version 9.0.0. Two major Factors were extracted, accounting for 91% of the total variance (variability within the data). The Factor loadings of the nine constructs are shown in Table 7.2

Table 7.2: Factor loadings of the nine constructs on the two Factors extracted from the Repertory Grid, Pilot Study Two, analysis (variance)

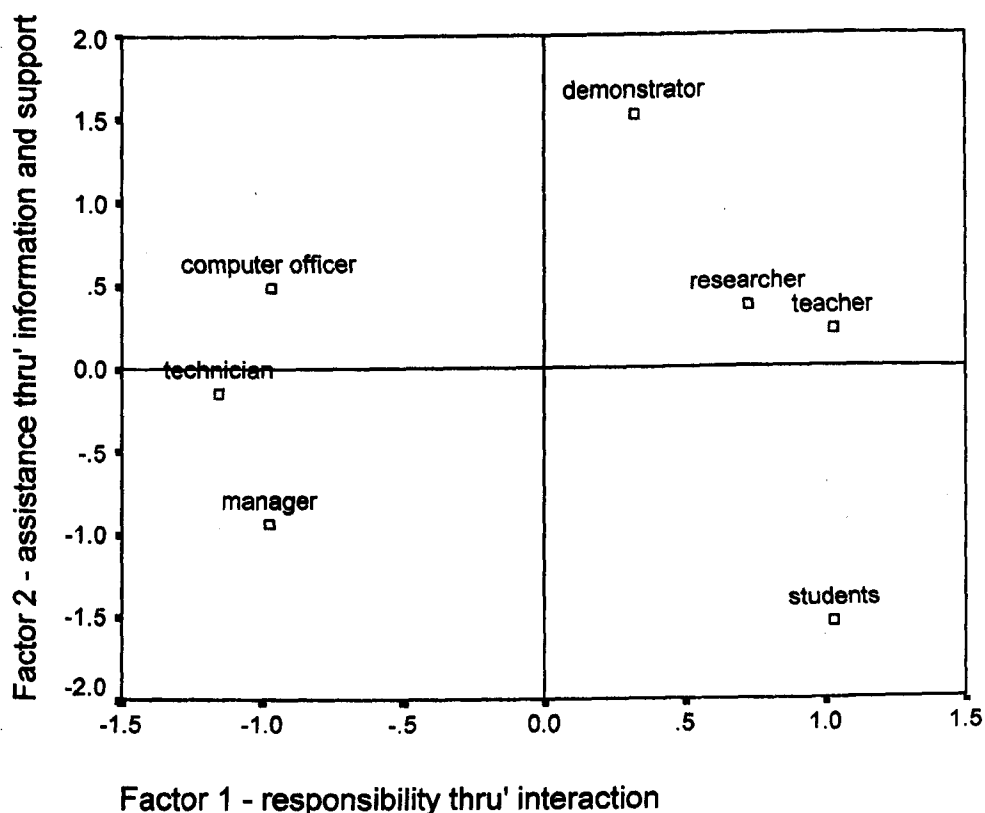
Construct	Factor Loadings	
	1 (56%)	2 (35%)
Can encourage students to participate in question and answer sessions	.991	.000
Can suggest choices for practical workshops	.965	.200
Can help to outline the key points of sessions or topics	.947	.280
Can encourage more explanations	.945	.243
Will support students in their group work	.743	.452
Is able to set up additional information on the psychology website	-.036	.971
Will assist students with their data collection and analysis	.311	.923
Will give in advance plan of lecture and practical	.556	.719
Can contribute to the preparation of more detailed handouts	.647	.661

Interpreting the Factors shown in Table 7.2, by considering the constructs which load most highly on each, indicates how T11 perceived the proposed development of *learner autonomy* to be influenced. Factor 1 concerns the extent individuals exercise personal responsibility for directing learning through interaction whilst

Factor 2 is concerned with the extent individuals assist learning through the provision of information and support.

The relationship of each element to each Factor is shown Figure 7.1. This plot shows how T11 perceived 'influential individuals' would contribute to the desired development of *learner autonomy*. The teacher himself and the students were those viewed as most able to ensure increased interaction and appropriate choice, whilst the demonstrator was considered key in providing assistance through the requisite information and support. The manager was viewed as making no contribution to the intended outcome.

Figure 7.1 Elements plotted on Factors 1 and 2



Discussion of Pilot Study Two

This repertory grid was more successful and useful than that devised for Pilot Study One. The teacher, being more involved in creating the grid, identified with the elements and found the constructs more relevant. Also, since T11 had a first class understanding of repertory grids, the teacher found the personal insights gained most interesting. This concerned the perceptions the teacher held of who was most likely to enable the proposed development to proceed. Consequently, this particular repertory grid format and orientation worked well with this individual teacher. However, as the process progressed it became apparent that this method still presented drawbacks.

Firstly, it became clear that placing the repertory grid in a specific context of intended development would not work for every teacher in the study. By the time Pilot Study Two had been concluded, two teachers had decided not to develop any aspect of their communication style whilst, of the remainder, all except two had taken action. Therefore, for the repertory grid technique to accommodate all teachers on a 'like for like' basis to enable comparisons and contrasts to be made, it seemed it would be necessary to consider the influences on self-directed professional development in more general, rather than, specific contextual terms.

Secondly, some elements and constructs selected by T11 would not be relevant to the contexts or personal views of the other teachers in the study. In addition elements and constructs not included in this grid could be appropriate for the grids of other participants. Therefore, for the repertory grid to make sense to everyone, each one would need to be different to take account of each teacher's context and perceptions. This would be ideal for considering the views of each teacher separately but would make comparisons more difficult.

Lastly, there was the issue of time, specifically how much more teachers would be prepared to commit to the study. It was already becoming difficult to maintain contact with and the enthusiasm of some participants. Overall, completing the

repertory grids and holding a discussion about the analysis would require a further two hours from each teacher.

Ultimately it seemed that the repertory grid technique would not readily suit the purposes of Phase Two which was to consider the importance of influencing factors on self-directed professional development across settings. It would be ideal for considering the perceptions of individual teachers, focused on a specific incidence of their self-directed professional development within their particular context. However using composite grids for several individuals, in different settings with differing elements and constructs was problematic. Consequently, the repertory grid technique was rejected and another approach - the Q-sort technique - was considered.

PILOT STUDY THREE - THE Q-SORT TECHNIQUE

Design of Pilot Study Three

Case study participant

T11 was interested in continuing to develop an instrument that could be used to identify factors important to the facilitation of self-directed professional development. Consequently, he agreed to pilot the Q-sort instrument used in this third pilot study.

Research method

Q methodology (Brown, 1980) is a method of analysis which investigates an individual's viewpoint from their perspective rather than that of the researcher. It considers similarities and differences between people on the basis of the subjective value they place on one variable compared with another variable. This differs from the traditional approach which perceives individual differences as objectively observable, with similarities and differences being determined by the amount of a variable an individual possesses compared with another individual.

Q methodology concerns the whole person. It takes into account psychological and contextual aspects, allowing both the meaning of an individuals' statements of opinion and their significance to be realised. It assumes that, when considering both inter- and intra-personal differences, these are the result of differences in the amount of importance individuals have placed on the issue under investigation.

For the purposes of this study, the rationale of Q methodology was appropriate. It would allow individual teacher's perceptions of the importance of factors (issues) influencing self-directed professional development to be elicited in relation to their context and personal opinion. It would allow an analysis of the participants as a group to be carried out to determine whether any generalisations could be inferred across cases or within groups of cases e.g. according to teacher disposition, type of educational establishment, subject etc. Consequently the Q-sort technique was adopted for Pilot Study Three.

The Q-sort technique involves a set of statements relating to a particular issue being ranked by individuals in order of importance. The ranking procedure, which conforms to a pre-determined distribution of normality, is followed by an interview to allow individuals to expound their reasoning for ranking the statements in their unique way. Factor Analysis is then employed to analyse the extent to which individuals resemble each other on the basis of the rankings given to the various statements. Consequently, individuals ranking approximately equally on the same statements are placed in the same group. Ultimately, Factors consist of groups of individuals, instead of variables, who share an underlying characteristic (Tacq, 1997).

Materials

For Pilot Study Three the set of statements required to perform the Q-sort was derived from the issues influencing involvement in and accomplishment of self-directed professional development, identified during Phases One and Two. Twenty eight statements, each one on a 5" by 3" record card, formed the set (Appendix 9.1). The statements were to be ranked according to how essential

each individual considered a statement to be in relation to their self-directed professional development aimed at improving teaching and learning.

Procedure

It was explained to T11 that, during this study, 28 factors which help teachers direct their own improvements in teaching and learning had been identified. T11 was asked to read through each card to obtain a broad impression of the overall content before initially sorting the statements into three roughly equal groupings. These groupings were statements that the teacher considered, in an ideal situation, 'most essential', 'least essential' and 'in between' in relation to their self-directed professional development aimed at improving teaching and learning (Appendix 9.2). Next, T11 was asked to sort the statements progressively into finer discriminations, according to a normal distribution using a range from -4 to +4 (Appendix 9.3). This would establish an order for those statements the teacher considered to be least essential through to most essential. The distribution of the statements was recorded on a chart, using the reference letter allocated to each statement (Appendix 9.4). Those statements which had formed a teacher's Initial Sort were recorded in bold script. After reviewing the results of the sorting procedure, the teacher was asked to explain his reasoning for ranking the statements in this particular way. The whole procedure took forty five minutes to complete.

Analysis and findings of Pilot Study Three

Since there was only one set of data, Factor Analysis could not be computed. However, since the sorting arrangements did not allow a teacher to allocate the same rank to every statement, not trialing the Factor Analysis for the pilot of this instrument was unlikely to prove problematic, as had been the case in Pilot Study One with certain statements having zero variance.

Instead a simple ‘eye-balling’ of the most and least essential statements (Table 7.3), together with T11’s comments revealed those issues which would most facilitate this teacher’s self-directed professional development aimed at improving teaching and learning.

Table 7.3 Top (most essential) and Bottom (least essential) statements ranked during the Q-sort, Pilot Study Three

Top 5 - most essential first
Freedom to determine the areas I want to develop
Sharing with colleagues experiences and ideas about teaching and learning
Discussions with students about their learning experience to increase my awareness of their views and needs
Feedback from students on how I am doing from their perspectives
Feedback, other than from students, on my professional activities
Bottom 5 - least essential first
Regular appraisals to explore options for my professional development
Personal or video observations of my classroom interaction with students
Encouragement and support from those above my immediate line manager
A diagnostic tool to pinpoint specific issues to consider for professional development
A mentor to act as a sounding board

T11’s ranking of the statements placed intra- and inter-personal factors at the ‘most essential’ end and institutional factors at the ‘least essential’ end of the spectrum. To accomplish self-directed improvements in teaching and learning it was most essential that T11 was free to choose areas for development for himself rather than having a focus imposed by ‘some form of authority’. Next, collaboration with those directly involved in the teaching and learning process was important, for providing ‘suggestions and support’ (colleagues), and pointing out what was ‘going well and what was wrong’ (students). Anyone (management, mentors) or anything (appraisals, observations, diagnostic tools) connected to

accountability issues within the institution were considered least essential. Those not directly involved in the everyday running of courses (management, staff development department) were perceived to have 'vested interests' and were, therefore, unlikely to be 'impartial' in promoting development whilst the institution's personal development process for staff was perceived to promote a 'hierarchical and competitive', rather than co-operative, environment.

Discussion of Pilot Study Three

The Q-sort technique worked well with this sole teacher, allowing interesting insights into how T11 perceived influences upon self-directed professional development, aimed at improving teaching and learning, to be influenced. This was despite Factor Analysis not being employed.

All aspects of the technique appeared suitable for the purposes of the study. The teacher identified with the statements used to prioritise the factors in relation to the accomplishment of self-directed professional development. Any statement considered to be irrelevant or inappropriate to the teacher's context could validly be classed as 'least essential' in the Initial Sort and expanded upon during the discussion. The ranking operation for the Progressive Sort was not difficult to perform. The follow-up discussion gave insights into how and why certain factors were considered more important than others. The exercise could be carried out in one meeting. The time required to complete both the ranking and the subsequent discussion was approximately forty-five minutes and, therefore, not excessive. The ranking system would ensure that there would be variation in the scores so that Factor Analysis could be used to analyse the results of more than one teacher. Overall, it was considered that the Q-Sort technique would overcome the limitations of the Repertory Grid Technique, especially those concerning the use of one instrument for all teachers who were willing to take part.

Only one matter required attention before the technique could be used more widely. Five of the statements referred to 'time' in slightly different ways (statements d, e, f, g and h). T11 found these discriminations too fine for making any meaningful distinction between them, so it was suggested that they be combined into one or two more general statements.

On the basis of this third pilot study, it was considered that the Q-sort technique would be appropriate for identifying those factors teachers viewed as most important to their accomplishment of self-directed professional development, aimed at improving teaching and learning. After revising the statements in response to T11's comments, other teachers who had used the CSQ were approached for their views through the use of the Q-sort technique.

MAIN STUDY

Design of the main study

Case study participants

Twelve of the fourteen teachers who participated in Phase Two agreed to participate in this phase of the study. Those who did not were T12g, who was unable to spare the time, and T7, who did not respond to any attempts to make contact.

Procedure

A revised set of statements was used in response to comments made by T11. Statements e, f and h were dropped and statements d and g were altered. Thus the sorting procedure now contained twenty five statements (Appendix 10.1). This also led to a revision of the normal distribution used for the progressive ranking, with a range of -5 to +5.

The procedure for sorting the statements and the subsequent discussion of how and why a teacher made their selection followed that established with T11 Pilot Study Three. The minor changes to the normal distribution were taken into account with the instructions (Appendices 10.2 and 10.3) and recording chart amended accordingly (Appendix 10.4).

Analysis and findings of the main study

Descriptive statistics and Factor Analysis, Principal Components with VARIMAX rotation were employed to analyse the quantitative data (Tacq, 1997). The computer software package used was SPSS 9.0. The qualitative data was analysed for themes and variations, using Microsoft Word 97.

Before presenting the results it is necessary to state that the quantitative findings are probably somewhat distorted by the difficulty that some teachers (e.g. T4a, T8 and T12h) had in keeping to the instructions to rank the statements according to their ideal. This only emerged with the subsequent explanation of the outcome of their progressive sort. Reasons for this difficulty with the procedure differed. Sometimes it was due to their belief that changes in their current circumstances were unlikely; therefore, statements representing issues that would otherwise have been beneficial were ranked according to their present impact. At other times, statements representing issues already contributing beneficially to their self-directed professional development were ignored as the remaining statements were ranked first, in accordance with what the teacher thought would be useful to next have in place. Consequently, whilst the quantitative data is interesting, the qualitative analysis is likely to be more reliable. The comments are supported by quotations from the interviews following the progressive sort.

Initial Sort

Statements most frequently categorised as 'most essential'

During the Initial Sort teachers placed the statements into three broad categories of 'most essential', 'least essential' and 'in between'. Seven statements were categorised by two-thirds or more of the teachers as being 'most essential' (Table 7.4).

Table 7.4 Initial Sort: Statements categorised as 'most essential' by two-thirds or more of the teachers (% teachers shown; N = 12)

Feedback from students on how I'm doing from their perspectives	92%
Sharing with colleagues experiences and ideas about teaching and learning	75%
Discussions with students to increase my awareness of their views and needs	67%
Freedom to determine the areas I want to develop	67%
Regular evaluations of the courses I teach	67%
Someone within the college/school/university to talk to about my professional activities and development	67%
Time during work hours to consider (i.e. reflect on, plan for, execute, review) the development of my professional activities	67%

Reasons for the categorisation of these seven statements were generally consistent across those teachers who had selected them as 'most essential' to their self-directed professional development.

Feedback from, and discussions with students

Teachers needed student involvement in developing teaching and learning to gauge how students were engaged in the learning process; whether their needs were being considered and what could be improved:

T3a: The students' views and needs are becoming more detached from mine. If the communication channels are not open I will not be in tune with the students . . . I won't have an understanding of the use of drugs as

select their own areas of interest; to satisfy their creativity and to maintain motivation:

T10: 'The key issue for me in professional development is a desire to develop. Therefore freedom to determine areas I want to develop becomes very important because what interests me motivates me.'

Regular course evaluations

Regular evaluations from a number of sources - teacher, colleagues, students, management - were considered most essential, providing they were constructive.

These were perceived useful for teachers through encouraging critical reflection:

T5: 'These [regular course evaluations] are essential. And I've taken this to encompass all sorts - self-evaluation, students' feedback, team members feedback. If you don't want evaluation then you're working in a vacuum. . . But they must include positives as well as negatives. If it is only negative then it doesn't motivate. Evaluations are inviting criticism for improvement. They work for me by encouraging a filtering process. I question myself and make decisions within the bounds of the qualification. . . . And I have to be prepared because each group is different.'

They were perceived useful for the institution by encouraging awareness and hopefully prompting appropriate action:

T8: 'This [regular course evaluations] would be nice. . . I would like an evaluation that, as well as teaching, looks at environmental and resource materials. I could teach better if I had more resources. If these evaluations were compiled throughout the college we might get increased resources. It would have to be someone from at least middle management level - to open their eyes to what's going on.'

Only two teachers (T4a and T10) perceived regular evaluations to be least essential to their self-directed professional development. T10, teaching under the constraints of the National Curriculum, thought evaluations were unproductive since teachers in their situation had no power to change anything. T4a, who experienced evaluations as a mechanism for the course team to feed back information to the management, perceived them to be unhelpful, occurring as they did at the end of the year when it was too late to restructure anything for the benefit of the current students.

a social thing or any idea of their moral views, or what they want to achieve or what their immediate needs are.'

Feedback by way of comment sheets, questioning and individual tutorials helped to identify whether students were enjoying the experience and finding it useful; open discussions, both formal and informal, with the student group as a whole brought enlightenment to what might need to be changed or improved. Overall, more student input was required, more frequently and better timed:

T1: 'We don't seek feedback from students often enough or at the right time. We leave it to the end of a course and then it's too late for those students.'

Sharing with colleagues

Sharing with colleagues gave rise to enthusiasm and ideas:

T5: 'Sharing with colleagues gives me more of a buzz and gets me to try things out when I hear their ideas and ask them how they do things.'

This collegiality provided exposure to different styles and opinions on teaching and learning and ensured day to day practical advice and support:

T4a: 'We sit together, work together, see what's working for others, talk about our sessions.'

It happened informally during coffee and lunch breaks, sometimes at the end of the day, but never happened enough. The 'system' and lack of time was seen to be detrimental to both sharing and experimenting, instead encouraging teaching to be carried out in the simplest, easiest, quickest and cheapest way:

T10: 'But we have ideas but no resources to implement them and no time to discuss them.'

Freedom

Whilst acknowledging that parameters exist (e.g. needs of the students; course criteria; institutional needs and agenda), teachers needed choice within these to

Someone within the institution to talk to about professional development

It was considered most essential to have someone in the teacher's institution, other than an immediate colleague, to talk to about professional activities and development because of the support and encouragement they could give:

T10: 'It's good to have a kindred spirit. . . It's not necessarily someone in management but rather someone who understands the way you think and the beliefs you have about teaching and learning.'

Time during work hours to consider professional development

Having time during working hours was most essential to being able to reflect on teaching and learning:

T3c: 'This [time during work] is important but we're losing it. We are becoming much more administrative and bureaucratic and have little time to teach. We're just running from one thing to another and have no time to really consider what we're doing, to stand back and take a look at what's happening.'

It was also a key factor to accomplishing self-directed professional development:

T6: 'I need it [time during work] to develop the things I want to do - how I actually teach. . . I want to update my courses, to make them more interactive. And this needs time for writing them, involving more IT based assessments.'

It was also considered necessary to part-timers as well as full-timers:

T12h: 'As a part-timer anything I do is done in my own time. I want staff development and professional development within the college to work for all of us not just the full-timers.'

Yet being a reflective practitioner during working hours was perceived by all bar one teacher (T3a) as an ideal that was unlikely to be achieved. Consequently teachers saw it as their responsibility to ensure they developed professionally and did so in their own time.

Statements least frequently categorised as ‘most essential’

From the Initial Sort of the statements, seven statements were ranked as ‘most essential’ by one-third or less of the participants (Table 7.5).

Table 7.5 Initial Sort: Statements categorised as ‘most essential’ by one-third or less of the teachers (% teachers shown; N = 12)

Someone outside the institution to talk to about my professional activities and development	8%
An improvement in the provision of resources and facilities (e.g. rooms/ equipment/ library/ materials/ IT etc.) to facilitate better teaching and learning	17%
The courses I teach having a less prescriptive nature (e.g. syllabus/ assessment criteria/ outcomes/ length etc.)	17%
A staff development department that actively seeks out suitable development opportunities on my behalf	25%
Follow-up on my professional development	25%
Costs for any development activities to be met by the institution rather than myself	33%
Observations (teaching or video) of my classroom interaction with the students	33%

Someone outside the institution to talk to about professional development

Only one teacher (T6) thought having someone outside the institution to talk to about professional activities and development was most essential, perceiving this person’s value to lie in bringing a different perspective from another organisation or institution. The remaining teachers viewed such a person as useful only if there was no opportunity within their own institution to discuss such issues with others. Generally it was thought impractical for someone to be in such a position:

T10: ‘It would be remarkable to find someone who understands my position in school, who can guide me. I don’t need someone who will just listen to me. I need someone who has more expertise and is also working within the same framework that I am.’

In addition, such a person was unlikely to be in the right place, at the right time and such a relationship would take up too much time.

Improved resources and facilities

All except three teachers (T6, T8 and T12h) viewed improved resources as a least essential factor. Although additional resources would have been welcomed, where more traditional 'chalk and talk' methods were employed or would suffice teachers tailored the development of teaching and learning to what was available:

T3b: 'I will assess the situation here [re resources] and go with it. It's not under my control and I'm not going to waste time and energy trying to change it.'

However, this was different for teachers who taught vocational or more technologically oriented subjects (T8, T12h and T6) - extra resources were essential to providing their students with up to date, professional standards of teaching and learning:

T8: 'I need funds to do things my way rather than just lecturing. I spend my own money on providing the things I need in a lesson. . . It's difficult to get resources. . . The college is happy for you to bring the money in but not for you to have some of it to spend on development. I've spent loads of time scrounging things from companies to kit out new workshops.'

Courses having a less prescriptive nature

Teachers realised that there were always boundaries to what they could do, whether self-imposed or set by others. In general, those working in colleges of further education and the university saw prescriptive courses as making their job more straight forward and less time consuming:

T9: 'The courses I teach are set up for me and follow tight criteria but I don't find them restrictive. It just means it's easier to deliver them and you have to spend less time thinking about them.'

Within the constraints there was reasonable scope for development and less prescription was less essential than other factors. However, for T10 teaching in a school sixth form, the National Curriculum was perceived to leave no opportunity to explore other areas students might be interested in and less prescription was perceived by this teacher as a most essential factor in engaging students' interest and furthering development of teaching and learning.

A staff development department actively seeking suitable development opportunities on a teacher's behalf

Teachers generally thought that a staff development department that actively sought suitable development opportunities on their behalf was useful but not most essential:

T6: 'I don't see it as a resource for ideas I might want to develop although I do believe it should be a drop-in shop for help.'

By some it was perceived to impinge on their freedom to determine their own agenda (T5) and, by others, to be a waste of resources (T10). However, most believed that ensuring their professional development was solely their responsibility; they were the ones who knew their needs; put time aside to meet them; found their own solutions:

T2: 'I feel I should take responsibility for my own professional development. Having identified my own needs then I should take responsibility for identifying the solution.'

Only three teachers considered it most essential to their self-directed professional development. This was because either they had been helped in the past by such action (T3c and T4a) or they felt such a need in their present situation to assist their future progress (T12h).

Follow-up on professional development

Teachers in general were neutral about the provision of follow-up on their self-directed professional development. For some, the day to day support of colleagues for their efforts was sufficient to encourage persistence and progression:

T3c: 'I took it [follow-up] to mean what I feel I get from other people when I'm involved in development - like support from colleagues. So it's already built in for me.'

For others (e.g. T12h) the lack of interest from their institution in their development discouraged, not self-directed professional development, but loyalty to maintaining their position at, and future contribution to, that institution:

T12h: 'There is no follow-up for me. . . This is a danger for the college as I may move on and they won't know what I'm thinking about and why. They've paid for me to do the course [Cert. Ed.] and they're not looking after their investment.'

Costs for development being met by the institution

The majority of teachers were neutral on the matter of how costs for self-directed professional development were met, since they would pay for something themselves if their institution could or would not do so. Such action was also perceived as a reason to ensure that the development initiative worked:

T8: 'If you want to develop professionally . . . you need to put the effort in - and if you are financially doing this then you will make it work.'

Motivation and ideas for development were considered more essential than costs being met by the institution, although one teacher (T12h) perceived this issue, for others rather than themselves, as having implications for equal opportunities - those who could not afford to support their own professional development missed out.

However, four teachers, (T4a, T5, T6 and T9), did view the institution's contribution towards the cost of self-directed professional development as most essential. Without such provision they would be unable or less willing to keep themselves updated, attend courses and conferences, gain further professional qualifications.

Observations of classroom interaction

Teaching observations drew a mixed response from teachers, with many perceiving this as a factor linked to an accountability system:

T9: 'We're all observed because of QA and also when inspection comes. Everyone lays such an emphasis on it that it's become like sitting an exam. . . . We don't look upon observations as a development process for us.'

Where teachers were able to use observations for their own agenda, to provide details of teaching technique, or to gain the perspective of someone with a different viewpoint, these were considered useful:

T3c: 'You can be lulled into a false sense of everything is going OK. And I think you need something objective [observation] to check how everything is doing.'

Progressive Sort

In the Progressive Sort teachers rank-ordered the statements according to the importance each had for them personally. When compared with the results from the Initial Sort, three things were noted.

Firstly, 'A diagnostic tool to pinpoint specific issues to consider for professional development' became one of the most highly ranked statements in the 'most essential' placings (Table 7.6). Teachers favouring this considered tools such as the CSQ to offer them an objective means of focusing their attention:

T8: 'You never know if you're going down the right path. Students give you feedback but it depends - they tell you what they think you want to hear and not the truth. Because I'm assessing them they might think it will affect their assessment. I need something more independent [such as the CSQ].'

Those not ranking this statement so highly still considered diagnostic tools to be valuable but mainly in the sense of being a stimulus to more important student discussions. By themselves, these tools were perceived to have limited relevance:

T2: 'I found the CSQ catalysed dialogue which wouldn't otherwise have taken place. Students don't have the courage to criticise the tutor in front of other students in a constructive way. There is a need for a mechanism to legitimise it in an unthreatening way. I liked the idea of a measurement [CSQ] but in the end I got more out of the dialogue with the students.'

A second difference from the Initial Sort concerned the frequent placing of ‘a mentor’ at the ‘least essential’ end of the scale (Table 7.7). There were those who thought a mentor, if it were a colleague, was useful:

T6...’ Having somebody within the department that you can chat to. It’s useful for official advice, they can see where you’re coming from, put alternatives to you, be a sounding board. They can help control your professional development by looking out for you and informing you of opportunities that they see might be appropriate.’

However, generally, this role was only considered important when facing something new or challenging:

T3c: ‘I’ve been doing the job a while now [teaching] and I feel that a mentor is needed only if you are doing something challenging. Someone who will listen to you; empathise; bounce ideas off; put an alternative view.’

Thirdly, the Progressive Sort shows less agreement between teachers about which statements are most or least essential to self-directed professional development. When asked to be specific about the importance of statements, only one was ranked by two-thirds or more of teachers in either the top (most essential) or bottom (least essential) four placings - ‘Someone outside the institution to talk to about my professional activities and development’ (Tables 7.6 and 7.7). This implies that essential requirements for facilitating self-directed professional development aimed at improving teaching and learning differ across teachers.

Table 7.6 Statements most frequently ranked in top four (most essential) placings (% teachers shown; N = 12)

Feedback from students on how I’m doing from their perspectives	50%
Discussions with students to increase my awareness of their views and needs	42%
A diagnostic tool to pinpoint specific issues to consider for professional development	42%
Freedom to determine the areas I want to develop	33%
Sharing with colleagues experiences and ideas about teaching and learning	33%

Table 7.7 Statements most frequently ranked in bottom four (least essential) placings (% teachers shown; N = 12)

Someone outside the institution to talk to about my professional activities and development	67%
A staff development department that actively seeks out suitable development opportunities on my behalf	50%
The courses I teach having a less prescriptive nature (e.g. syllabus/ assessment criteria/ outcomes/ length etc.)	42%
A mentor	33%

Yet, despite the diversity, further statistical analysis revealed that these teachers could be grouped according to statements considered essential to self-directed professional development.

The identification of these groupings, and the underlying characteristics shared by the teachers within each group, was achieved by subjecting the data to Factor Analysis, Principal Components with VARIMAX rotation (Tacq, 1997) using SPSS for Windows, Version 9.0.0. As groupings of teachers as distinct from statements were required, the teachers were treated as variables and the statements as cases in this analysis. The data fulfilled the criteria for level and normality mentioned earlier and as before, there was no need to fulfil the third criterion since the results were not being used to make inferences about the wider population of teachers (p.201). Instead, trends within this particular group of teachers were to be identified which could form the basis of further investigation.

Four Factors were extracted from the analysis, accounting for 67% of the variance (variability within the data). The Factor loadings of the twelve teachers are shown in Table 7.8, with those loading most highly on a Factor highlighted in bold. The relationship of each statement to each of the Factors is shown Figures 7.2 and 7.3.

Table 7.8 Factor loadings of the twelve teachers on the four Factors extracted from the Q-sort, Main Study, analysis (variance)

Teacher	Factor Loadings			
	1 (28%)	2 (17%)	3 (12%)	4 (10%)
T4a	0.842	0.007	-0.105	-0.103
T3b	0.771	0.409	0.087	-0.189
T10	0.688	-0.233	-0.062	0.393
T2	0.493	0.371	0.265	0.259
T9	0.196	0.788	-0.096	0.336
T3c	-0.301	0.702	0.129	-0.004
T1	0.227	0.605	0.309	-0.269
T5	0.357	0.490	0.201	0.229
T12h	0.010	0.087	0.894	-0.073
T8	-0.088	0.170	0.779	0.227
T6	-0.114	0.168	0.019	0.817
T3a	0.295	-0.002	0.454	0.599

Interpreting this analysis was complicated, as the results were not as clear cut as could be hoped. Whilst it was obvious (from the Factor loadings) with which Factor each teacher associated best, this was not so concerning the statements. As Figures 7.2 and 7.3 show, there was a degree of overlap with some statements being rated highly on more than one Factor. However, by considering these results in conjunction with the average values of the statements rated most highly by individual teachers during the Progressive Sort (Tables 7.9 to 7.12) and the interview data collected during the course of this study, the nature of the latent characteristics common to all teachers grouped within a Factor was deduced. The four underlying characteristics have been termed ‘teacher autonomy’; ‘learner autonomy’; ‘vocational professionalism’; and ‘pragmatic development’. These are explained further in the paragraphs following Figures 7.2 and 7.3.

Figure 7.2 Statements plotted on Factors 1 and 2

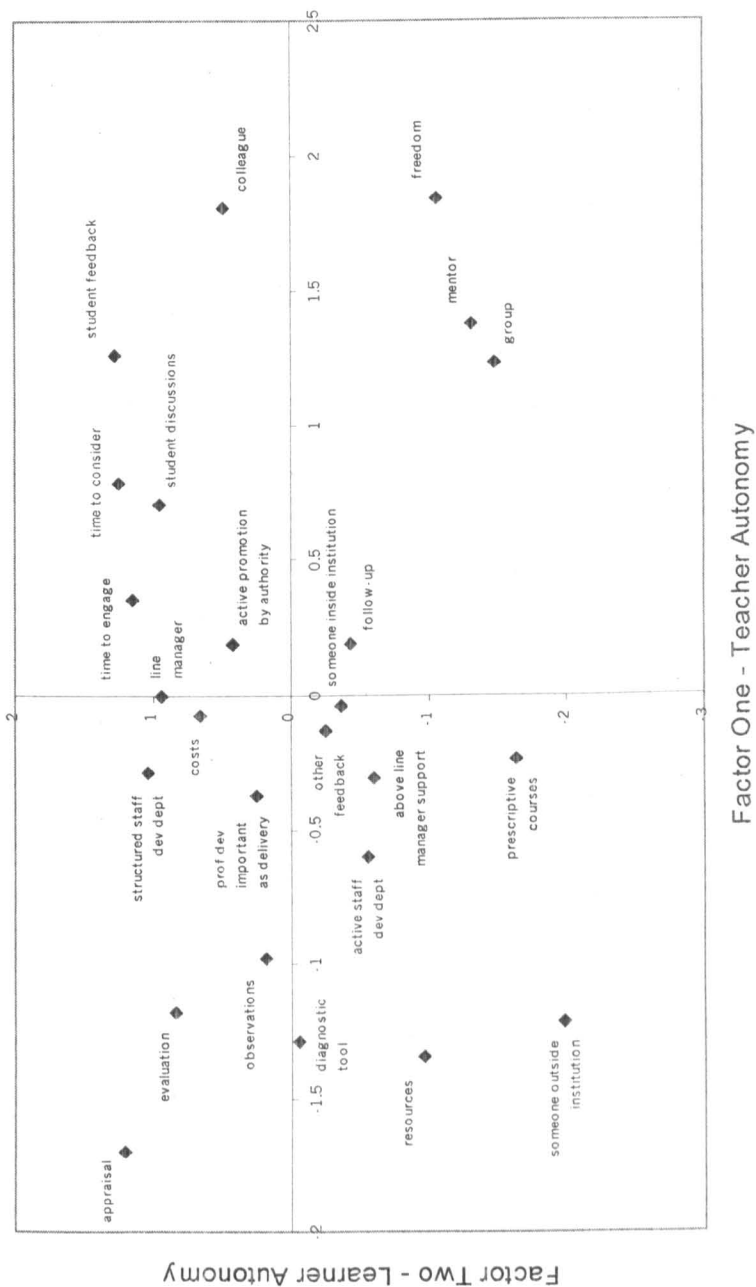
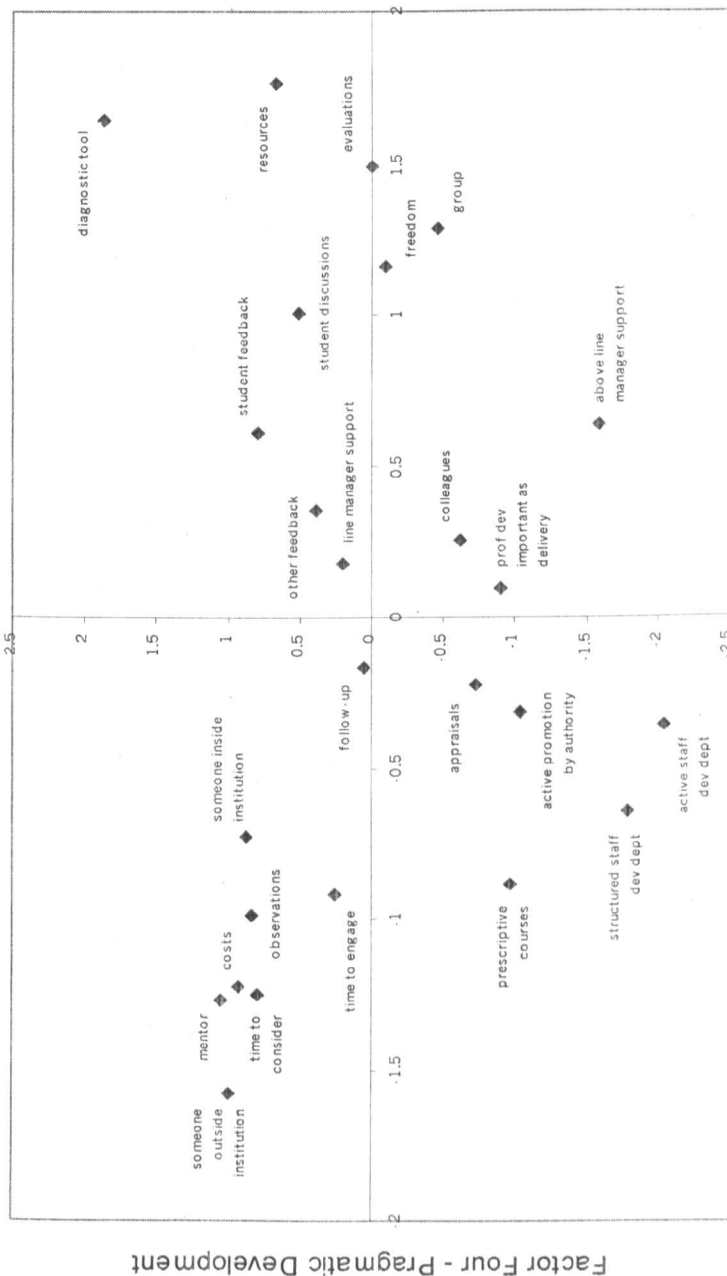


Figure 7.3 Statements plotted on Factors 3 and 4



Factor One - Teacher Autonomy

Factor One consisted of T4a, T3b, T10 and T2 who considered ‘freedom to determine the areas I want to develop’ and ‘feedback from students on how I am doing from their perspectives’ as ‘most essential’ in relation to their self-directed professional development (Table 7.9). However, throughout the study, these teachers emphasised that their involvement in professional development was motivated by their own interests and agenda. Hence ‘teacher autonomy’ was a major issue for them and is the characteristic that describes this group:

T2: ‘My observation of the role of the tutor is that it is being Taylorised. The professional autonomy is being eroded by an agenda which is being set ‘out there’. . . Freedom is important to me because of my personality. I am interested in creativity and like to explore.’

Table 7.9 The most highly rated statements (average scores) in Factor One

Freedom to determine the areas I want to develop	3.0
Feedback from students on how I am doing from their perspectives	3.0

Factor Two - Learner Autonomy

Factor Two consisted of T9, T3c, T1 and T5. The statement most highly rated overall by these teachers was ‘feedback from students on how I am doing from their perspectives’ (Table 7.10). Obtaining students’ views and how things were for them was one of the best ways of determining what was happening in the teaching and learning context and what might be improved. Hence ‘learner autonomy’ first and foremost characterised this group:

T3c: ‘This [student feedback] is really paramount. this is crucial for me - asking the students what they want. . . If you don’t get their feedback then you don’t know if what you’re doing is right for them.’

Table 7.10 The most highly rated statement (average score) in Factor Two

Feedback from students on how I am doing from their perspectives	2.5
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Factor Three - Vocational Professionalism

Teachers T8 and T12h formed Factor Three and primarily thought ‘an improvement in the provision of resources and facilities’ was most essential to improving teaching and learning (Table 7.11). The aim of these two teachers was to ensure that their students could work to professional standards. Thus ‘vocational professionalism’ characterised this group:

T12h: ‘If someone only has a 20 year old sewing machine with just backwards and forwards they won’t be able to do the work to a high standard, to a professional standard; to do a job in a professional way.’

Table 7.11 The most highly rated statement (average score) in Factor Three

An improvement in the provision of resources and facilities	4.0
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Factor Four - Pragmatic Development

T6 and T3a formed Factor Four and considered ‘a diagnostic tool’ as most essential to improving teaching and learning (Table 7.12). Both teachers desired to develop professionally but wanted help to focus their time and energy in order to develop what was most needed or appropriate. Therefore ‘pragmatic development’ could be said to characterise this group:

T6: ‘Something like the CSQ is essential to focus my thoughts, especially as a time saving exercise. It points clearly to areas I need to consider. And we need to focus our thoughts immediately in this climate, especially with teaching being modularised and terms being shortened.’

Table 7.12 The most highly rated statement (average score) in Factor Four

A diagnostic tool to pinpoint specific issues to consider for professional development	4.0
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Summary and preliminary discussion of the main study

The Q-sort method worked well enough to identify those statements representing factors that these teachers perceived more useful than others in facilitating self-

directed professional development aimed at improving teaching and learning. Overall, input from those directly affected by their actions (students and team members) and those with insight into their everyday context (colleagues) were most essential, along with time to consider their development agenda and retaining autonomy over it. Statements connected to some kind of authority over which teachers had little or no control - e.g. observations, staff development departments, courses, resources - were considered to be least essential.

Individual teachers differed in expressing their personal preferences for 'most essential' statements, although four separate groups around four different statements were seen. The common theme which linked teachers within a cluster seemed to be related to an issue that motivated their engagement in self-directed professional development. These issues could be termed 'teacher autonomy', 'learner autonomy', 'vocational professionalism' and 'pragmatic development'.

Whilst the Q-sort method was straightforward to administer and appeared relatively easy for teachers to follow, changes to some aspects might have made it more insightful. Firstly, by reducing the number of statements relating to student involvement and time to one for each topic, these issues may have been even more prominent. During the interview following the progressive sort it became evident that some teachers found it difficult to distinguish between the importance of the two statements for each of these topics; in their minds the statements were inter-related. This resulted in a forced choice for the ranking process. Consequently, the final positions of the statements, probably, did not fully reflect the value teachers placed on these issues.

A second matter, which undoubtedly influenced the ranking process, concerned a teacher's ability to consider the statements in light of their ideal as distinct from their reality. It was clear from the interviews following the progressive sort that certain statements (e.g. observations), which had been ranked as least essential, would have been viewed more favourably had they taken a form other than that

presently experienced by the teacher. Perhaps different or additional instructions for the procedure could have prevented this occurrence.

DISSEMINATION PROCESS

Design of the dissemination process

Before drawing any conclusions about the implications of this research for promoting and accomplishing self-directed professional development aimed at improving teaching and learning in post-compulsory settings, the findings to date from Phases Two and Three were disseminated to the participants. Their views were sought concerning the validity of the notion of teacher dispositions and ways in which factors that influence self-directed professional development could be dealt with in order to facilitate participation and accomplishment. One seminar was held, which only three participants (T1, T10 and F2) were able to attend as arrangements ultimately coincided with the fuel crisis in September 2000. However, details were also mailed to participants, together with a questionnaire (Appendix 11.1) requesting feedback on the following:

- The validity of the notion of teacher dispositions ('Perpetuals', 'Intermittents', 'Dormants');
- The proportion of each type of teacher disposition perceived to be represented within their institutional department;
- The implications of teacher dispositions for engaging more people in self-directed professional development;
- How factors that hinder self-directed professional development could be dealt with;
- How factors that facilitate self-directed professional development could be supported or initiated;
- The validity of the contributions ascribed to the researchers, colleagues and students in the Communication Styles development process;
- What assisted their reflection and development when using the CSQ.

Analysis and findings of the dissemination process

Teacher disposition

Nine teachers and the two facilitators responded to the dissemination process. All eleven respondents thought that the three types of teacher disposition - ‘Perpetual’, ‘Intermittent’ and ‘Dormant’, described in chapter six (pp.172-176) - were appropriate descriptions of their own and their colleagues’ attitudes and actions towards self-directed professional development. With one exception, the respondents estimated the proportion of each dispositional type perceived to be represented within their institutional department (Table 7.13). Although these figures varied between departments, it is evident that the majority of teachers are perceived to be at least moderately active in self-directed professional development. These figures do not include information from T8 who found it difficult to assess as there was no obvious way of ascertaining what everybody in their department did by way of professional development.

Table 7.13 Estimated percentages of ‘Perpetuals’, ‘Intermittents’ and ‘Dormants’ perceived by participants to be represented within their institutional departments (N = 10)

Disposition	Average percentage across departments	Range (%)
‘Perpetuals’	28	0 - 60
‘Intermittents’	58	25 - 85
‘Dormants’	14	0 - 40

Four matters of interest in connection with teacher dispositions were noted from the responses.

Firstly, participants expressed the view that these characteristics were not necessarily fixed once and for all time. It was recognised that people moved between categories, in response to past experiences; changes in circumstances; alterations in expectations and demands made of them:

T4a (from a field note): 'But with reference to the types of teachers and their attitudes towards professional development she (T4a) made this observation about herself - that 2 years ago she would have said she was a 'Perpetual'; but then she became an 'Intermittent' and now she felt like becoming a 'Dormant'! Much of this change she put down to the change in her circumstances especially since the start of September. She now has a 0.8 post with more students and another course and a much greater admin load. It is taking up time and energy to get to grips with new systems and what is needed, squeezing out any thoughts of professional development.'

Secondly, while it was noted that too many 'Dormants' could hamper the overall development of a particular team or department, it was considered difficult to prompt them to participate in professional development:

T10: 'I think it's much harder to get the 'Dormants' going or being receptive to what's going on. Partly because so much of professional development that has taken place has been quite fleeting, transitory and they think "Oh, I'll just sit this out" . . . or "I've seen it all before."

Colleagues perceived as falling into this category were those who were coming towards the end of their career; were struggling with the job; were anxious about their situation or were cynical about the expectations from education. Although it was considered that expending effort on trying to engage them in professional development would exhaust everyone involved, it was thought some might be persuaded if a sympathetic approach was taken:

F1: 'I was thinking if you could take the fear of it out and support and enthuse . . . you might get some of the Dormants on board. But you can't just leave them there and criticise them for it. Because if whatever's happening in their institution is frightening them or they're worried about their skills then you need to take that fear away.'

Thirdly, the notion of a 'Perpetual' was not necessarily an ideal that should be aspired to by everyone, for all time. Too many 'Perpetuals' in a department or institution could cause friction; be detrimental to the institutional or departmental plan; and be difficult to oversee:

T10: One wonders how many 'Perpetuals' you would really want. All pulling in different directions. And if you're working in a team towards a common goal then what you're doing in delivering is seeing too many

different beliefs or avenues of development that might not be able to be accommodated. . . . If I had all Perpetuals I'd be quite exhausted trying to keep track of what everybody was doing and where it was going, and what effect it was having on what we did as a team.'

Fourthly, a 'Perpetual's' enthusiasm needed to be managed carefully for everyone's benefit. They were perceived to lead and motivate others by example and had the potential to prompt development:

Unattributed: 'If 'Perpetuals' were encouraged to share their knowledge with the 'Dormants' it could bring outside up-skilling into the department.'

However, at times their activity was detrimental to the development of others, either blocking their participation by monopolising the development resources (time and money) or being perceived as a threat.

Influencing factors

Suggestions for dealing with factors that influence self-directed professional development in order to facilitate participation and accomplishment gave rise to two broad themes - communication and culture.

Communication

Teachers wanted increased opportunities for people to interact, in order to raise enthusiasm; provide support and encouragement; to offer feedback; and to exchange ideas and information. This was suggested at three levels: colleagues, students and management.

Colleagues

Informal and formal improvements in collegiality were valued:

F1: 'To be able to talk to colleagues in the same team and kick ideas around - it's very important to have that sort of time.'

Teachers wanted increased opportunities to share things in informal settings, such as the staff room on a day-to-day basis; or by way of peer observations; or the setting up of interest groups. More formal improvements included the introduction of dissemination meetings (as distinct from written feedback) of development experiences, such as courses and conferences, in which the advantages of participation could be shared and discussed:

T12h: 'Encourage those who participate [in professional development to] report back on the benefits of the training to the rest of the department.'

Arranging people into departmental or course teams was also proposed, to enable the development of all three dispositional types to be reviewed and encouraged within a common framework and objective, and without anyone in particular being singled out or put on the spot.

Students

Teachers expressed a desire for more opportunities and mechanisms for students to take part in communicating their views and needs, and to contribute to the shaping of the teaching and learning process:

T6: 'Increase dialogue between teacher and students - it's good to see their [students'] viewpoints.'

To be useful, increased dialogue required both a specific focus, such as that provided by the CSQ or the 'learning styles' questionnaire (Andrews, 1997); and needed to be carried out regularly, perhaps towards the beginning and end of a module or course.

Management

Greater management involvement in and commitment to promoting self-directed professional development was desired, primarily in relation to cultural issues. However, in relation to communication, departmental managers and upwards needed to improve the dissemination process relating to development opportunities, as follows:

T12h: 'Access to information: - ensure each department has details of training available and that that information explains what the training involves and who is eligible.

Funding: - clear explanations of what funds are/ are not available.'

Culture

An institutional culture more conducive to participation in self-directed professional development was required with improvements suggested in three key areas:

T4a: 'Usually time, resources and support [professional] are the key factors'

Time

Within the context of the day-to-day activities of teaching, time needed to be made available primarily, but not exclusively, to facilitate many of the improvements in communication mentioned in the previous section. An appropriate time-table was crucial for this:

T1: 'This issue of time is interesting. It's not just a matter of saying "Well there are 5 days here in the year when you can step aside and think about development" It's about having time to reflect in the working day. I think I'm in a fortunate position where I work where I do have time to do that. If I don't have anything to teach in a morning or on a particular day I can think about what I did yesterday or what I'm going to do in the afternoon. And I think it does make a difference.'

F1: 'We have a time-tabled break in the morning and afternoons and it does make a difference. A lot of business is done and there's lots of ideas created in the tea break.'

Ultimately incorporating time for development into the working day could lead to reflective practice being the norm:

T12g: 'If the time factor was included within the planning of development . . . this would become standard practice within an organisation. People would be more likely to engage in training etc. if they felt they were not having to do it in addition to work load.'

Resources

Resources needed to be adequate and constantly reviewed:

T12h: '[It's] very important to ensure there are adequate resources when a course starts up and that each year resources are reviewed, and when at all possible improved.'

Quantity, quality and flexibility of resources were issues for a variety of purposes. Increased funding was essential to allow teaching cover when development opportunities arose during the working day:

T1: 'It would involve higher costs. . . motivation is not the limiting factors. Time, therefore, costs of providing cover would have to increase.'

Facilities were required to enable colleagues to meet and interact:

T6: 'Appropriate fora (coffee room) for discussions of approaches [to teaching and learning].'

Equipment needed to be available as and when needed, not subject to advance bookings:

T6: 'Improvement in teaching resources in a lecture room to allow greater flexibility - Powerpoint projector; Image - not OH - projector etc. [to be on hand].'

Management support

Management involvement and commitment to promoting self-directed professional development were perceived as critical to creating a culture of self-directed professional development and to providing impetus to greater participation by teachers. This support was required in tangible ways.

Firstly, management needed to value teachers, as individuals and collectively. Concerning individuals, management needed to acknowledge and reward involvement in self-directed professional development:

T1: 'Recognise achievement and contribution . . . get staff to report on what they have done and the value of the experience . . . recognise expertise by co-opting it on to committees and working parties . . . reporting achievement in newsletters . . . favour known activists in competition for funds for training and development'

Concerning teachers collectively, management needed to perceive that it was advantageous for teachers to spend time together when this interaction is focused on self-directed professional development, and to encourage such collegiality:

T4a: 'Management impetus [is required] to provide - time to meet together.'

This encouragement should take the form of creating time during the daily routine for meeting together, both formally and informally, to enable reflection, discussion, implementation and support of self-directed professional development to take place.

Secondly, management needed to ensure that staff development was planned and made relevant to an individual and their prevailing circumstances:

F1: '[The] annual appraisal meeting with our programme manager [is] quite beneficial when it happens because it's not the line manager and they are usually very good at discussing in a non-threatening way people's needs. And from that interview they can often set up a plan of action and get some development booked and time-tabled. . . it is very valuable.'

This could enable the management and provision of resources to be effective in the longer term. It could also enable teachers' fears associated with professional development generally or doubts about their abilities to be eased in a supportive and encouraging manner.

Management needed to be willing to identify the personal and professional factors hindering participation in self-directed professional development and to address those issues appropriately. Therefore course reviews, appraisals and one-to-one discussions between a teacher and their departmental head relating to self-directed

professional development needed to focus not only on the institution's objectives but also on the needs and aims of the individual:

T12g: 'Professional development needs to be planned to meet the needs of the person and the organisation . . .'

In meeting an individual's needs management had to consider investing in the provision of support (mentor, technical, industrial) for a particular teacher; and to provide time and funding for planning adequate resource provision for a specific course.

Summary and preliminary discussion of the dissemination process

The proposed classification of differences in teachers' attitudes towards professional development in general was acknowledged as appropriate by the participants. However, none of the categories were viewed as being an ideal to which a teacher should aspire in all situations, for all time. There was a sense of paradox in that whilst participation in self-directed professional development was a matter of personal choice, it was not solely about oneself. For the good of their colleagues and institution, a teacher also needed to consider the impact that their stance towards professional development was having on others and whether this was appropriate or not. Inactivity on the part of some teachers could deny others important contributions which would enable them to progress. Constant activity, multiple or inappropriate foci on the part of some teachers could inhibit others, not only in the realm of making progress themselves but also in contributing valuably to the progress of colleagues.

Suggestions concerning the initiation, maintenance or transformation of factors that influence self-directed professional development, in order to facilitate participation and accomplishment, can be thought of broadly in terms of inter- (communication) and extra- (cultural) personal dimensions. Some of the inter-personal propositions could be implemented by teachers themselves. For instance, teachers could originate more informal interaction with colleagues and

students focused on developing teaching and learning and make time available to do so. However, this would require their willingness to take more initiative and invest more of their own time and energy into their self-directed professional development than at present. Most teachers in this study already were doing as much as they felt able in their circumstances.

The main point to arise from the suggestions appears to be that, in order to motivate teachers to engage in self-directed professional development, the culture of an institution needs to change to make it easier and more rewarding for people to participate. To a great extent, this requires the official sanction of those who control the decision-making processes and necessitates their will and effort being applied to bringing about changes in these factors. The provision of time, resources and support for self-directed professional development requires co-ordinating and financing, and only those in positions of authority - such as management and, ultimately, government - can make a substantial difference to the extra-personal factors which could encourage and support involvement in self-directed professional development.

Conclusion

The aim of this phase of the study was to clarify ways of encouraging participation in, and supporting accomplishment of reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings. By identifying the factors which are most important to facilitating self-directed professional development for particular groups of teachers, and considering ways in which these factors can be supported, the findings have provided some interesting and useful insights.

From the first section of the findings the initial Q-sort showed, in broad terms, that for these teachers predominantly inter-personal factors were most essential to self-directed professional development aimed at improving teaching and learning.

Feedback and dialogue with students, focused on teaching and learning, was important to evaluating the effect of the process of teaching and to gauging whether this was appropriate to students' needs. Similarly focused dialogue with colleagues was important for exchanging views and ideas on ways that teaching and learning could be developed. Regular evaluations, by others such as team members and management, of whole course provision (teaching, resource and environmental) were useful for raising awareness and providing an objective view about the adequacy of teaching and learning. However, whilst these teachers welcomed the involvement of others in identifying areas for and suggesting ways of improvement, having the freedom ultimately to determine for themselves what development consequently took place was equally important. So, too, was having the time to consider their self-directed professional development during work hours.

Factors considered least essential to facilitating self-directed professional development aimed at improving teaching and learning were, for the most part, viewed as less essential than others, as distinct from unessential, and formed three categories. Institutional outsiders were considered to lack intimate knowledge and understanding of a teacher's situation and work, and relationships with them were not viewed as advantageous. Improvements in matters that were predominantly outside a teacher's sphere of influence, such as resources and facilities; the nature of courses; and funding for self-directed professional development were welcomed but, on the whole, these teachers were prepared to work within and around the limitations these currently imposed. Factors perceived as allowing others to take a measure of responsibility for their professional development, such as staff development opportunities being pursued on their behalf, others following-up on their development and teaching observations, were seen more as a threat than an aid to these teachers' freedom to determine their own development.

Overall, this first section of the findings identified major themes arising from the factors perceived as most and least essential by a majority of the teachers in this study. Those factors considered most essential predominantly focused on

interaction with others and this fits well with the notion of collaboration which was perceived to be so useful in the development process using the CSQ identified in chapter six.

The second section of the findings from the progressive sort, indicated the importance that different factors had for different teachers. Based on the rankings of the four most essential factors, this importance was perceived as four themes - teacher autonomy; learner autonomy; vocational professionalism; and pragmatism. Teachers more disposed towards engaging in self-directed professional development for personal interest and satisfaction, and on their terms, considered freedom of choice as essential. Teachers more disposed towards encouraging their students to share more responsibility for their learning favoured feedback from and dialogue with students. Teachers more oriented towards ensuring students achieved standards in keeping with that expected from their vocational discipline considered improvements in resources as essential. Teachers seeking to focus their desire to develop professionally viewed a diagnostic instrument as essential.

Two inferences can be drawn from this section. Firstly, a factor viewed by an individual teacher as one of the four most essential may be linked to an issue that is an important motivator for their engagement in self-directed professional development. This motivator could reflect the outcome that a teacher desires from their participation in self-directed professional development.

Secondly, teachers who share a factor considered to be one of the four most essential may also share the same underlying motivational disposition. This suggests that, in addition to a general disposition towards involvement in professional development as evidenced by 'Perpetuals', 'Intermittents' and 'Dormants', teachers may also be characterised by specific motivational dispositions that require differential facilitation.

A knowledge of teachers' specific motivational dispositions could be useful in the promotion of self-directed professional development in two ways. Firstly, an awareness of an individual's desired outcomes could help pinpoint the factor most influential in assisting them to engage in self-directed professional development to those ends. By understanding more about how a particular factor can facilitate development, encouragement to engage in or persevere with self-directed professional development could be given to an individual in ways that might resonate with their goal. For instance, T4a who valued teacher autonomy, had rarely engaged in self-directed professional development during the three years prior to the time of the Q-sort administration as their college expected staff development to be undertaken in a teacher's own time. However, a change in policy which allocated five days to staff development within a teacher's contracted hours, was motivating T4a to become more active in their participation.

Secondly, it is possible that the diversity of teachers' motivational dispositions could be defined by a limited number of categories and facilitated by a limited number of factors. If this were the case then, perhaps, only a limited range of measures need be put in place in support of each factor in order to meet the needs of the majority of teachers.

These inferences raise interesting issues for further research. There is insufficient evidence from this study to provide little more than conjecture about the link between motivational dispositions and factors. This is due partly to the small number of teachers involved which has probably limited the number of motivational dispositions which exist. It is also due to the fact that most teachers displayed 'Perpetual' tendencies and, therefore, the resultant characteristics may only be relevant to this group. It would be useful if it were possible to research this with the involvement of a greater number of teachers covering the range of general dispositions towards self-directed professional development.

The final section of the findings, arising from the dissemination process, concerned teacher dispositions and ways of facilitating factors most essential to

participation in, and accomplishment of reflective practice aimed at self-directed improvements in teaching and learning. The proposition that teachers hold different dispositions towards self-directed professional development was acknowledged as valid, with the breakdown of these categories within departments represented in this study suggesting that most teachers are likely to be 'Intermittents'. Facilitating factors perceived to influence self-directed professional development could encourage wider participation, especially from 'Dormants', but it was deemed unlikely to have much effect on the involvement of 'Perpetuals'. 'Perpetuals' were seen to be self-motivated individuals who would undertake self-directed professional development almost regardless of their circumstances. The main impact that any improvements might have would be on the retention of these teachers within their institution. Overall, participants' views confirmed that teacher disposition is key to determining those most likely to engage in self-directed professional development.

Facilitating involvement in self-directed professional development focused on improving communication and culture. Increasing interaction between colleagues, teachers and students; and teachers and management would enable dialogue focused on issues of development to take place and help to create a culture where self-directed professional development was accepted, supported and expected. This communication would be encouraged by the provision of appropriate resources and the availability of time during working hours. Management recognition of teachers' achievement and contributions would help teachers to perceive that their actions were valued, whilst the provision of a broad and flexible framework for engaging in self-directed professional development would help teachers to feel that their development aspirations were supported. These could lead teachers to recognise that self-directed professional development is worthwhile and provide some impetus for greater involvement.

It is interesting to note that whilst none of the factors with an 'authoritarian' orientation were considered by the teachers in this study to be most essential to self-directed professional development aimed at improving teaching and learning, when it comes to facilitating those factors that are most essential, the actions of

those with authority for making things happen (such as institutional and departmental leaders and managers) were viewed as having a supporting and enabling role. This role requires displaying a delicate balance between being committed to, but not prescriptive about, self-directed professional development. It requires showing genuine interest in and support of teachers' self-directed professional development, and the provision of flexible means for identifying aims, needs and ways of engaging in development. It requires raising the profile of self-directed professional development to above its current level.

In concluding, Phase Three of the study has raised some interesting issues concerning the factors that facilitate self-directed professional development aimed at improving teaching and learning. A small number of mostly interpersonal factors, which were commonly perceived to be most essential in facilitating involvement, may be those most likely to encourage participation and enable accomplishment. However, a number of other, wider ranging factors, which may relate to teachers' motivational dispositions, could ultimately determine the participation of some individual teachers. The development of a culture in which self-directed professional development is encouraged and supported could be assisted through greater dialogue between all of those engaged in teaching and learning, and by specific actions by those in authority.

These conclusions are somewhat tentative. This is due to the dispositions towards self-directed professional development displayed by the teachers in this study. All of the participants desired to consider improving aspects of teaching and learning and the majority of these can be classed as 'Perpetuals'. Consequently, the mix of teacher dispositions perceived to be present in the institutional departments represented in this study is not reflected by these participants. Therefore, the findings may not resonate with those issues that most 'Intermittents' and 'Dormants' would consider important to their involvement in self-directed professional development. Thus, the results are likely to be more pertinent to those in the wider teaching population with 'Perpetual' tendencies than to those with 'Intermittent' and 'Dormant' tendencies.

This phase of the study concluded the investigation. The final chapter brings together the various aspects of the study to highlight ways of encouraging participation in, and enabling accomplishment of reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings.

CHAPTER EIGHT

CONCLUDING DISCUSSIONS

Facilitating improvements in teaching and learning

Interpersonal communication - comprising language, social interaction and affect - was shown in chapter one to be an important component in effective teaching and learning. It is perceived that learning can be promoted by engaging learners in dialogue and allowing them to share responsibility with others for developing their understanding (e.g. Vygotsky, 1962, 1978; Bruner, 1966; Salmon and Claire, 1984); and by attending to their emotional needs through a supportive teacher-learner relationship (e.g. Wubbels *et al.*, 1993; Greenhalgh, 1994; Diero, 1996; Harkin, 1998).

The limited amount of research carried out in post-compulsory education settings suggests that more communicative interaction, as outlined above, is required in teaching and learning (e.g. Ruddock, 1991; Dearing, 1996, 1997; Harkin and Turner, 1997; Yorke, 1999). To this end there is a need to develop teachers to enable them to engage students more fully in the process of learning. Over the years, reflective practice has been proposed as a means of accomplishing professional development (e.g. Dewey, 1933; Schön, 1983, 1987; Carr and Kemmis, 1986) and, in recent models of good practice for teachers in FE and HE, there is a stated expectation that teachers will carry out, adapt and develop teaching and learning within this reflective framework (FENTO, 1999; ILT, 2000).

However, the implementation of reflective practice can encounter practical difficulties. Lack of time during the working day can make it hard for teachers to step back and consider what is going on and why some things are happening (van Lier, 1996). Lack of appropriate form and purpose (or content) can lead simply to

the reaffirmation of existing beliefs and practices rather than encouraging exploration and alternative thinking (Ecclestone, 1996). Consequently, ways of facilitating reflective practice, in order to enable and encourage teachers to critically enquire and appropriately develop, are needed.

This study investigated how improvements in teaching and learning may be facilitated. This involved the investigation of teachers' experiences as they engaged in reflective practice without the application of any particular model to assist the activity, and an enquiry into other instances of self-directed professional development which the participants have previously undertaken. These experiences were examined to determine the manner in which self-directed improvements in teaching and learning may be achieved and influenced, and to consider the factors that facilitate teachers' participation in, and accomplishment of, this activity. As a result, three aspects have been informed. Firstly, the manner in which reflective practice may be accomplished has been identified. Secondly, ways in which participation in this activity is influenced and facilitated have been highlighted. Thirdly, the current state of self-directed professional development in post-compulsory education settings has been illuminated.

These findings suggest the following:

- the notion of reflective practice is likely to be considered favourably by a large proportion of teachers;
- participation in reflective practice may be facilitated primarily by collaboration; time; teacher autonomy; institutional culture change;
- accomplishing reflective practice may involve a flexible stage process.

Consequently, conclusions can be drawn about how best to encourage teachers' participation in, and enable their accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings.

The potential for reflective practice

Information collected throughout this study not only identifies some of the processes of and influences on self-directed professional development in post-compulsory education settings, but also illuminates other aspects relating to involvement in this activity. These aspects cover the level and breadth of participation; the circumstances in which participation is undertaken; and teachers' dispositions towards participation. Overall, the evidence suggests that a large proportion of teachers in post-compulsory education may be engaged, to a greater or lesser extent, in self-directed professional development. This activity can cover a wide variety of development initiatives and has been observed to be carried out under mainly difficult circumstances. The implications are that it may be unnecessary to convince most teachers about the concept or benefits of reflective practice, since many are perceived to be already favourably disposed towards the notion of self-directed professional development, as the following recounts.

Level and breadth of activity

An indication of the possible extent of participation is found in Phase Three (chapter seven). The subjective estimates reported by the participants suggest that a majority of teachers in post-compulsory education engage in self-directed professional development at some time or other. Within the departments surveyed in chapter seven, over half of the teachers were perceived to occasionally participate whilst a little under one-third were estimated to be frequently involved. A minority of teachers appeared rarely or never to engage in self-directed professional development. Whilst the figures are based on the subjective views of a small sample, the findings intimate that a large proportion of teachers probably engage in self-directed professional development on at least an occasional basis. Although it is by no means certain that all of this participation is directed at improving teaching and learning, or that it involves critical reflection, many of the activities could be so directed, as the next paragraph outlines.

Phase Two (chapter six) shows that when teachers participate in self-directed professional development, the range can be wide. Examples of participation show that teachers may seek to update themselves through higher degrees, reading journals, attending conferences and undertaking research; they may inform themselves of concepts that will affect teaching and learning, such as learning styles, personality theories, and communication styles; they may draw ideas from work in areas other than education, such as communication with the elderly; they may initiate new courses to stretch their own and their students learning; they may consider new or alternative teaching strategies such as the use of music; they may update their skills, such as IT competencies; they may revise their subject and curriculum knowledge; they may network with colleagues, ex-colleagues and peers to exchange ideas and suggestions. These findings show that teachers who wish to participate in self-directed professional development can use a variety of opportunities, both formal and informal, from which to draw ideas, skills and knowledge in order to develop teaching and learning.

Prevailing circumstances

Both Phases Two and Three (chapters six and seven) of this research indicate that, for some teachers at least, self-directed professional development occurs under less than ideal or uniform circumstances with regard to opportunity and support.

Opportunity is related to time. Most self-directed professional development undertaken by teachers in this study occurred in a teacher's own time - the use of evenings, weekends, days off and holidays was the norm for this activity. Teachers found it difficult to find time during the course of the working day to reflect on their practice and pursue their interests in developing teaching and learning. This difficulty arose from the sense of being overwhelmed by everyday activities to which they must attend, such as the number of student-contact hours; preparation; administration; meetings; and, in universities, research. Whilst the provision of time for professional development in the form of contractual employee development days was becoming more common within the institutions studied, even where this existed, the execution of this principle within an

institution could be patchy. Staff were sometimes differentially treated, with part-time teachers in particular being either overlooked in its application or expected to participate in these opportunities on days which were not officially part of their contract.

Support, particularly in the form of other people and structures, was seen to vary between and within institutions. Institutional leadership rarely appeared to overtly encourage participation. Line management support was inconsistent. An active staff development department offering advice and training, arranging courses, and bringing development opportunities to teachers' attention was not available or effective at every institution. Appraisals and observations often focused on complying with issues of accountability and central control, instead of encouraging professional development. Resources and syllabuses sometimes restricted the implementation of ideas. Student involvement in developing teaching and learning was sporadic or ineffective, thus depriving many teachers of useful information. A culture of collegiality in which teachers routinely share, discuss and encourage each other in matters of teaching and learning was not uncommon but neither was it something which all teachers, even within the same institution in this study, experienced.

Teacher dispositions

The extent to which teachers engage in self-directed professional development in the current circumstances may be related to their disposition towards development at any given time (chapter six). This study suggests that where a teacher is open to receiving constructive criticism on their practice then the possibility for development arises. Participation in self-directed professional development seems likely when this openness is combined with a degree of commitment to one or more of the following: being an effective teacher; identifying areas for development; seeking to implement development; trying something new, and using their own time. It is probable that teachers who are committed to all six concepts over a period of time are likely to be very active in their self-directed professional development and, consequently, can be termed 'Perpetuals'.

‘Intermittents’, who may be involved in less self-directed professional development activity than ‘Perpetuals’, may have less sustained commitment to the concepts, whilst ‘Dormants’ who rarely or never engage in such activities, possibly have little or no commitment to many or any of the concepts. However, these dispositions, if accurate, do not appear to be fixed. Changes were perceived to occur, often in response to changes in circumstances, which suggests an interplay between a teacher’s desire for professional development and factors that influence participation.

This evidence suggests that many teachers in post-compulsory education settings may perceive reflective practice as a valid option for self-directed professional development. However, encouraging their participation in, and enabling their accomplishment of, this activity under the prevailing working conditions observed in this study will continue to be the uphill struggle noted by commentators such as van Lier (1996) and Ecclestone (1996) in chapter one. Hargreaves and Fullan (1992) state that the process and success of teacher development depends on the environment in which it takes place. Currently, a teacher’s environment would appear to contribute little to the process and success of professional development; instead it tends to stifle and deter involvement. Consequently, as Joyce and Showers (1995) note, much of teachers’ participation and accomplishment seems attributable to their dispositions towards professional development. If reflective practice is to be facilitated then changes to the environment need to take place.

Key factors in facilitating reflective practice

Currently, participation in self-directed professional development occurs despite the circumstances in which some teachers find themselves. Opportunities often have to be created by the teacher themselves whilst support for their endeavours is patchy. However, changes in these circumstances could lead to changes in the extent to which a teacher is willing to engage in self-directed professional development. Consequently, if teachers are to be encouraged to engage regularly in reflective practice, their circumstances need to be conducive to this. The

evidence from chapters six and seven of this study indicates that collaboration, time and teacher autonomy are key factors in facilitating participation in general, although any one of a number of other factors, such as diagnostic tools, may be significant to the involvement of specific individuals. However, in turn, these need to be facilitated by a cultural change led by the institutional authorities (chapter seven).

Collaboration, time and teacher autonomy

Ways of facilitating participation emerged during Phases Two and Three (chapters six and seven). Collaboration was consistently viewed as an important factor. This is something much wider than collegiality. At a minimum it involves not only interaction with colleagues but also with students. It will also involve managers if they are committed to development for development's sake and not as part of an accountability agenda. On occasions it also includes those outside the immediate institutional context with an interest in improving teaching and learning, such as researchers and networks of peers.

Collaboration

Collaboration facilitates development in three ways. Firstly, it allows teachers to take a more integrated approach to development and, thus, by sharing their enquiry, to avoid the unwelcome experience of having to consider and implement self-directed professional development within a vacuum or without reference points. It does this by enabling teachers to obtain objective feedback on their process of teaching and learning in order to undertake an informed evaluation. It provides teachers with an opportunity to exchange and consider alternative perspectives and theories, encouraging an examination of their understanding. It creates the chance to generate and test alternatives and new ideas, providing options for extending their practice. It maintains the development process within the context in which it is to take place, ensuring appropriate choices to be made and actions to be taken.

Secondly, collaboration sustains the process of self-directed professional development. It introduces critical dialogue which provokes teachers to think beyond their immediate reflective reactions by challenging them to examine their assumptions, and the possible consequences of and alternatives to their intentions; to consider decisions that have to be made and to take appropriate actions. It provides an element of public commitment and accountability to the activity, creating a motivation to complete the process. It monitors the situation and, in so doing, offers help, encouragement and reassurance that impels progress.

Thirdly, collaboration stimulates initial involvement in self-directed professional development. When teachers discuss with each other ideas for improving teaching and learning or the benefits of development activities in which they are involved, colleagues can be inspired to consider and develop their own practice in response. The existence of an environment in which professional development is perceived as normal, beneficial and supported helps to remove fear and any sense of isolation surrounding participation. Consequently, self-directed professional development is perceived as something that is satisfying and safe, an activity worthwhile engaging in.

Time

A second key factor to facilitating development is time, of which there are three facets - occasion, availability and duration (chapter six). Attending to these facets is important to the development process being appropriate, getting started and progressing to completion. The appropriateness of development benefits from the selection of an occasion suitable for both considering and implementing development. This occasion needs to coincide with a period of stability and anticipated continuity in teacher-student relationships. This enables a teacher to more ably focus their intentions and energy on the development objectives and process. Thus the timing of any proposed review and development should avoid, where practical, periods of transition (e.g. changes in curriculum or personal situations); circumstances which are out of the ordinary (e.g. inspections) and the final stages of teacher-student relationships (e.g. end of academic year).

Engaging in the process of self-directed professional development often means teachers struggling to accomplish it in their own time. Yet the process could be made easier, both in terms of finding the time to get it started (availability) and having the time to see it through (duration), by the provision of time during the working day to pursue development. This would facilitate the process in five ways. One, teachers would have the opportunity to contemplate development within the immediate culture and context in which teaching and learning is taking place, allowing the benefits of collaboration (mentioned earlier in this section) to be experienced. Two, it would enable development to become both a regular activity within a teacher's routine and an ongoing process. Three, it would provide the long-term perspective needed for mastering new behaviours and accommodating any unforeseen incidents. Four, it would enable reviews of teaching and learning to be more comprehensive, ensuring appropriate development takes place. Five, it could lead to increased involvement in self-directed professional development, possibly encouraging participation by those infrequently disposed towards such activity.

Teacher autonomy

The third key factor to facilitating self-directed professional development is teacher autonomy (chapter seven). This is concerned with teachers' freedom of choice. On the face of it this seems a nonsense - surely, unless a teacher chooses to participate it cannot be termed 'self-directed'. However this factor is not concerned with actual participation. Teachers acknowledge that the notion of charting their own improvement over the years should be the norm and that being a professional carries with it an expectation of development. Therefore, the necessity to engage in professional development is not an issue and where mandatory participation in professional development exists within institutions it appears to have teachers' support.

Instead, the issue concerning teacher autonomy relates to the objectives of participation in professional development. This study shows that involvement in professional development is motivated and facilitated by the opportunity teachers

have to direct their focus of development towards areas of their own choosing. This element of choice over the areas they wish to develop enables teachers to retain a measure of autonomy over, and personal responsibility for, development; to fulfil their sense of purpose; and to satisfy their curiosity and creativity. It is the existence of this freedom that ensures mandatory participation in development receives support. Take this freedom or autonomy away and the motivation to engage successfully in professional development could decrease.

These three factors of collaboration, time and autonomy each contribute something specific to facilitating self-directed professional development. The effect of collaboration is to encourage and support teachers as they undertake the development activities. Time provides teachers with the opportunity to engage in development with a greater degree of satisfaction and likelihood of success. Autonomy allows teachers to choose directions for their development which hold personal value and meaning. Consequently, as far as fostering reflective practice is concerned, the existence of all three components is likely to be sufficient to create a climate conducive to most teachers.

However, different teachers may have different motivations for engaging in self-directed professional development and there is a suggestion that not all motivations may be covered by these three factors (chapter seven). Therefore, to facilitate the involvement of some teachers, the presence of other specific factors, such as increased resources or diagnostic tools, may be required. This suggestion is somewhat conjectural at this point as it is based on the evidence of a very small number of teachers. Thus, it is proposed only as an issue that may be worth bearing in mind and, certainly, as one that requires further investigation.

Cultural change

The three main facilitating factors point to the need for a cultural change within institutions if participation in reflective practice is to be encouraged. The findings indicate that this change must be facilitated by institutional authorities valuing and empowering self-directed professional development (chapter seven).

Valuing self-directed professional development motivates participation, because the activity is perceived as something important and worthwhile. Institutions can express value through commitment to the professional development of their staff by actively and overtly encouraging, recognising and rewarding participation; appreciating the importance of collaboration; acknowledging the time constraints; endorsing the autonomy of the individual; and treating all staff in the same way.

Empowering self-directed professional development enables participation, because the activity becomes more readily accessible than before. This empowerment requires institutions to create a physical space in which teachers can formally and informally gather to collaborate; build development time into teachers' contracts; offer a structured but flexible mechanism for identifying the aims, appraise the needs and support the progress of teachers' development.

If institutions were to value and empower self-directed professional development in these ways, it is more likely to become an integrated and normal part of the organisation's culture. Participation in reflective practice, as a form of self-directed professional development, could become a more attractive, feasible and natural option.

Encouraging collaboration; providing time during the working day; ensuring personal autonomy; and creating an organisational culture conducive to professional development are all factors which the literature identifies as being crucial to encouraging participation in, and enabling accomplishment of self-directed professional development. Hargreaves (1992), along with Apple and Jungck (1992) argue that environmental impositions on teachers, (such as restrictive timetables, administrative demands, and accountability systems), should be eased to allow the notion of self-directed professional development to emerge and permeate the culture. Fullan (1991) cites several studies showing the importance of autonomy, and in both Jackson's (1985) and Cunningham's (1994) theories it is a central concept, allowing individuals to maintain their motivation by ensuring that development could not only work for them but also has some

interest, value and meaning for them. The need for the provision of time to enable reflection, enquiry, planning; implementation and consolidation is attested to by van Lier (1994), Beaty (1996), Joyce and Showers (1995) and Loucks-Horsley *et al.* (1998) to name but a few. Whilst, finally, collaboration is a key aspect of the action research model reviewed in chapter one (e.g. Kemmis and McTaggart, 1988; Elliott, 1991; McNiff, 1993) and is mentioned in some form or other in five out of the six theories of development reviewed in chapter five (McKinney *et al.*, 1999; Prochaska and Di Clemente, 1982; Argyris and Schön, 1974; Cunningham, 1994; Ajzen, 1991), as well as by commentators highlighting important factors in the development process (e.g. Hargreaves, 1992). All perceive it important in enabling teachers to support, learn from and work with others so that individual and institutional improvement are fostered.

Factors not found to be primary facilitators of reflective practice

These findings are also of interest with regard to the factors that were not found to be pre-eminent in facilitating reflective practice. Neither context, nor gender or the CSQ were identified as primary influences.

Firstly, early on in the analysis it became apparent that the major factors mentioned by teachers as facilitating and hindering their attempts to develop teaching and learning were common to all three contexts - school 6th form, FE college and university. These consistencies suggested that further, in-depth comparative analysis on teachers' experiences and perceptions across the different settings, as mentioned in chapter two (p.37), was unlikely to yield any additional and substantially useful information and the matter was not pursued. Instead, in light of the considerable evidence supporting the commonalities, it was concluded that none of the settings in which the participants worked appeared to facilitate reflective practice more than any other. Therefore, although it must be considered that the shortfall in the diversity of case studies (p.37) may account for the lack of evidence in favour of a particular setting, it is suggested that context is not a key factor in facilitating reflective practice.

Secondly, although the research did not set out to bring about a gender perspective (p.38), a point concerning gender is worth noting here. There was no indication either when interviewing the teachers or when subsequently analysing the data that there were any differences in the way male and female teachers carried out reflective practice and any subsequent development. This may seem surprising when one considers that differences exist between male and female approaches to teaching, such as found in the analysis of communication styles (pp. 62-3). Such an observation may be due to fact that participants were volunteers and, therefore, only those with a reflective disposition were drawn to the study. However, the evidence of this research does not point to gender being a facilitating factor.

Thirdly, whilst the research is not concerned with an evaluation of the CSQ (p.xiv), aspects of the data illuminate the role that this and other such instruments can have in reflective practice. In this study the CSQ was used as a methodological tool for prompting reflective practice (pp.45, 69). Teachers used the Questionnaire to identify their communication style and to consider whether they wished to develop any aspect thereof. In the views of all participants who were interviewed during Phase Three (chapter seven) the CSQ was perceived, at the very least, as useful; it definitely was not considered to be one of the least essential factors. Throughout the study participants had referred to the CSQ as an instrument that enabled them to evaluate their contribution to teaching and learning; helped them to identify issues worthy of development consideration; and provided a focus for joint discussions with their students about ways to improve teaching and learning. Yet, in the main, diagnostic tools such as the CSQ were perceived by the participants as secondary in importance to conversing directly with students about matters of teaching and learning. The tools were seen most usefully as catalysts for thinking about and stimulating discussion on classroom interaction and were particularly beneficial when time was at a premium and issues worthy of discussion needed to be highlighted quickly. Consequently, the findings of this study suggest that these types of instruments should be seen as a helpful precursor to the more important factor of direct, discursive engagement with students themselves.

However, it must be borne in mind that the participants on whom these findings are based were favourably disposed towards reflective practice, exhibited good communication styles and were keen to engage their students in face-to-face discussions about teaching and learning. For other teachers who may be less able or willing to interact with students in this manner, it can be surmised that a diagnostic tool may offer a more preferable means for beginning to engage in reflective practice. Such tools could provide a less daunting way of uncovering issues for potential development and extend a bridge between identifying students' perceptions and entering into more illuminating discussions with them. Therefore, whilst diagnostic tools should not be viewed as a panacea for reflective practice, there is room to believe that they may be more important than this research concludes.

Overall, in concluding this section, the main findings from this study concerning the place of collaboration, time, teacher autonomy and institutional culture are not new. They confirm and add weight to what is already known about what is required for facilitating the development process. However, what this study makes clear is that this knowledge can now be applied to encouraging participation in, and accomplishment of, reflective practice aimed at improving teaching and learning in post-compulsory education settings.

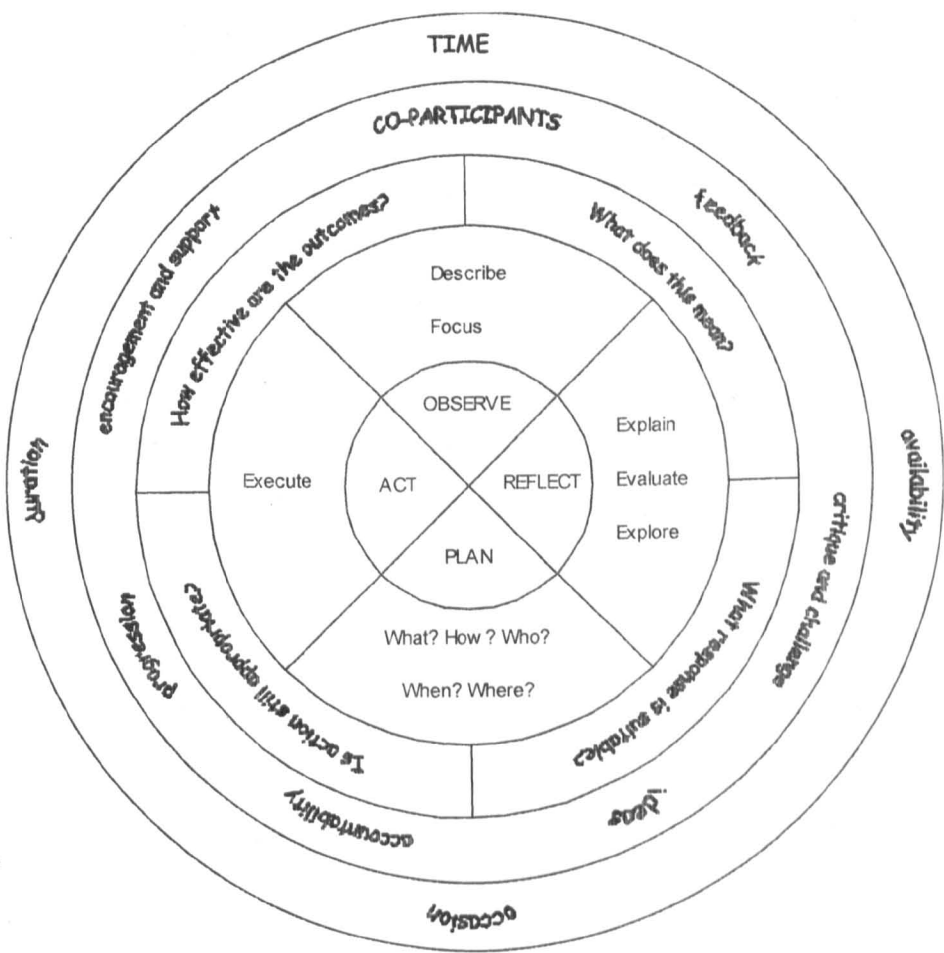
The process of reflective practice

The manner in which self-directed improvements in teaching and learning were accomplished through reflective practice in this study was identified as a flexible, four stage process, facilitated by collaboration and dependent on time (chapter six). The various characteristics can be accommodated by revising the existing action research model (Figure 8.1). By adopting this revision reflective practice could be provided with a framework and guidelines that facilitate the process whilst overcoming some of the concerns held about the original action research model.

This flexible four stage cycle, which could form the basis of critical reflection and appropriate development, comprises observation, reflection, planning and action. The keys to completing the cycle are seven activities, which direct attention to the important elements of the process, and four decision points which encourage movement through the stages to culminate in development.

In the observation stage, describing the teaching and learning situation and then focusing on particular aspects enables accurate information to be collected and awareness to be raised. Considering the meaning of this data encourages reflection and, hence, movement to stage two.

Figure 8.1 The revised action research model



In the reflection stage, explaining, evaluating and exploring the observations and potential for improvement encourages critical analysis of the process of teaching and learning. Determining an appropriate response can result in no further activity or a need for further observation, but it also has the potential to prompt movement to stage three.

In the planning stage, preparation of appropriate action based on the reflections ensures that all that is required for improving teaching and learning is arranged or in hand. When the time for anticipated implementation arrives, ensuring the plan is still suitable will prompt execution; otherwise it will lead to abandonment, delay or a return to one of the earlier stages.

In the action stage, implementing the plan initiates development of an aspect of teaching and learning. Enquiry about the effects of the action prompts a return to the observation stage where the process begins again.

This adaptation of the action research cycle retains the steps necessary for bringing together experience and theories, critical analysis and action. Including decision points overtly encourages movement to the next or a previous stage or, alternatively, brings it to a halt, but in a properly considered manner. It gives impetus to the process by inhibiting a teacher from engaging predominantly with one stage over the others which could limit their progress through the cycle. Building in flexibility accords with teachers' actual use of the model (see Figure 6.2 in chapter six) and allows a teacher to return to previous stages to ensure that an appropriate focus for improvements is selected and that plans are guided by a properly informed decision. This offers a teacher the opportunity to follow-up novel situations and previously unknown aspects, and invites creativity. It makes development a vibrant and active process rather than a mechanistic one, which allows a teacher to begin the process of development at any stage in the cycle, depending on their circumstances, intentions and aspirations.

These activities and decisions can be engaged in by individual teachers alone. However, these may best be accomplished in a collaborative context. The benefits of collaboration have been explained in the previous section but can be further facilitated by a specific consideration. When a number of people in different roles are involved as co-participants, it seems that a range of different contributions are made to the development process. These contributions impact in unique ways which help particularly to sustain and integrate the process. Therefore, when teachers choose to involve others in their development experience co-participants are required who, between them, will provide first-hand feedback; critique and challenge perspectives, assumptions and intentions; generate and evaluate ideas; elicit accountability; invite and monitor progress; and offer encouragement and support. By participating in the various activities within the cycle and prompting decisions, these contributions ensure observations are made; reflection is critical; planning is feasible, action is taken and reviewed, with the result that the process is completed.

The selection of co-participants will be the decision of the individual teacher. Colleagues are an obvious choice but the most beneficial contribution will almost certainly come from learners themselves. A relevant reference point is necessary for critical reflection to be meaningful and students are best placed to describe and discuss the impact of the teaching they receive and the type of classroom interaction that is likely to assist their motivation, interest and learning. Students' views can provide a reality check that no-one else can offer and this is crucial when one considers that the CSQ findings (chapters three and four) show that students' perceptions of classroom interaction frequently differ from those of their teacher. Consequently, the sense of perspective a teacher can gain from involving students as co-participants is likely to enhance the reflective process.

Development is accomplished via the flexible four stage process and facilitated by collaboration but, to an extent, it is dependent on time. Firstly, the right occasion needs to be selected. If a teacher wishes a particular group of students to benefit from their reflective experience then the process needs to begin at an earlier, rather than later, stage of their course. If the process is to be manageable, then it

is probably better to avoid engaging in it when changes in other circumstances are being encountered or anticipated in the near future.

Secondly, development is rarely a quick fix process. Making observations, reflecting on them, planning alternatives and interventions are time consuming activities. Furthermore, when action has been taken, a period of time is often required before a new development is mastered and integrated into a teacher's repertoire of practice. Thus, a teacher needs to be ready to persevere and be prepared for the long haul.

Thirdly, a teacher has to consider the amount of time they have or can make available for the development experience. This may mean utilising official development days or training programmes or being creative about how time set aside for other things can be linked to, and used for, the purpose of improving teaching and learning. Being realistic about the time available can help ensure the process is kept manageable; is not too ambitious and has a chance to be completed.

The findings indicate that, in retaining the key features of the original action research model - participative collaboration and the four stage cycle - the proposed revision confirms that the fundamentals of the action research approach to reflective practice, explained in chapter one, are appropriate (e.g. Hopkins, 1985; Carr and Kemmis, 1986; Elliott, 1991; McNiff, 1993). However, the revision explicates the process which could overcome some of the criticisms levelled at the original and make it more accessible.

The specification and description of the activities and the inclusion of decision points illuminate the process and skills necessary and could make it less daunting (Kember and Gow, 1992). The former provide guidelines (only loosely explained elsewhere e.g. Kemmis, 1988; Elliott, 1991) which could be followed in order to accomplish each stage, whilst the latter (which reflect Jackson's theory, 1985),

indicate the type of conclusion to be drawn from each stage which could ensure a firm foundation for moving on. The flexible approach to stage implementation, which reflects Prochaska *et al.* (1992) should avoid the process becoming rigid (Elliott, 1991) and mechanistic (McNiff, 1988). Consideration of appropriate co-participants may help avoid some of the tensions perceived in collaborative experiences (e.g. Elliott, 1991; Lumby, 1999b; Gorodetsky *et al.*, 1997). Consideration of the time implications could make the process realistic and ensure it does not detract from the teacher's primary role of teaching (Hopkins, 1985).

Overall, the revised action research model offers teachers a way of structuring their approach to reflective practice and accomplishing improvements in teaching and learning.

Limitations of this research

As has been stated in various parts of this thesis, there are limitations to this study. For example:

- A small number of case studies from only six institutions informed the research. Consequently, the extent to which the findings can be generalised to the wider community of post-compulsory education is limited.
- Most of the teachers involved in this study were very positive about professional development. They, and their views, may not be typical of teachers, in general, in post-compulsory education. Therefore, the findings may only be relevant to those who are favourably disposed towards self-directed professional development and may not be representative of those who are less motivated to participate in this activity.
- The figures used to determine the proportion of teachers who frequently engage ('Perpetuals'), occasionally engage ('Intermittents') or rarely/ never engage ('Dormants') in self-directed professional development, within the institutional departments represented by the teachers in this study, were based on participants' estimates. This type of data provides a low level of accuracy.

Firstly, there is little guarantee that the teachers have allocated their colleagues accurately to each of the taxonomic groupings. For instance, someone who appears never to engage in self-directed professional development may occasionally participate, but in a way that is unobserved by others. Secondly, there may be little consistency between the teachers' perceptions of the criteria for each group. Consequently, one teacher's conception of a 'Perpetual' may equate to another teacher's view of an 'Intermittent', and so on. Therefore, drawing inferences about the extent of involvement in self-directed professional development from this information must be done with caution.

- Bias could have been introduced into the study by the researcher's and teachers' prior knowledge. The evidence that development is a stage process which can be likened to a revised version of the action research model may be a product of the teachers', and researcher's, earlier contact with the Experiential Learning Cycle (Kolb, 1993). The principles of Kolb's model are similar to those of the action research cycle and, if these were being followed by the participants during the study, consciously or otherwise, could account for the findings. Consequently, a completely different and better model for accomplishing self-directed professional development may exist. Therefore, the revised action research model should be considered as one possible useful aid to reflective practice rather than as a definitive framework, at least until further research is carried out.

These limitations could have been addressed in the design of the study had there been more time, greater resources, and more flexibility in the selection of the participants. However, within the limitations of the project resources and the developmental process, it was considered preferable to study relatively few cases in depth, rather than more cases superficially. This was necessary to uncover the process of self-directed professional development, and the identity and interplay between the intra-, inter-, and extra-personal factors involved in this activity.

Conclusion

What can be concluded about how best to encourage participation in, and enable accomplishment of, reflective practice aimed at self-directed improvements in teaching and learning in post-compulsory education settings? Certain inferences can be drawn but a degree of caution must be maintained in view of the limitations outlined above. However, these provisos aside, a number of recommendations emerge from this study which may aid the process:

- 1 Reflective practice should be seen in the context of self-directed professional development. A majority of teachers are perceived to be favourably disposed towards self-directed professional development and to participate at least on an occasional basis. Proponents of reflective practice should tap into this interest by:
 - a) encouraging teachers to channel some of their development activity in the direction of reflective practice;
 - b) recommending that teachers adopt the revised action research model as a way of providing guidelines for managing reflective practice.
- 2 Issues at the level of national policy need to be addressed if some of the factors that hinder self-directed professional development are to be eradicated.
 - a) Bigger budgets are required for self-directed professional development to enable teachers to participate in reflective practice and implement ideas arising from it. This funding is necessary to:
 - i) increase teaching resources - facilities, equipment, materials, technical support - required to improve teaching and learning;
 - ii) finance teachers' participation in reflective and developmental activities (e.g. courses and conferences);
 - iii) provide teaching cover.
 - b) Syllabuses should be more flexible to facilitate the choice of a focus for, and appropriate actions from, reflections on the process of teaching and learning. They need to allow:

- i) time for teachers and students to discuss and decide how teaching and learning is to take place; and to monitor and review the actions as a course progresses;
 - ii) an element of teacher and learner autonomy over the content and assessment;
 - iii) an element of experimentation.

- 3 Institutions need to become organisations committed to valuing and supporting the development of staff as well as students. This could motivate and empower involvement in reflective practice within the context of self-directed professional development. Six issues relating to institutional policy and practice need to be addressed.
 - a) Opportunities to engage in self-directed professional development should be overseen so that:
 - i) all staff are treated equally;
 - ii) recognition and rewards are given to staff for achievements and contributions made through participation in self-directed professional development.
 - b) Lines of communication need to be improved and increased so that:
 - i) clear and co-ordinated channels exist for disseminating details of available development opportunities and funding;
 - ii) more dialogue occurs between management at all levels and teachers on the need to improve teaching and learning and ways of facilitating improvements.
 - c) Self-directed professional development must be overtly and actively promoted and supported by:
 - i) those with staff development responsibilities;
 - ii) line management;
 - iii) institutional leadership.

- d) Time should be made available during the working day to facilitate reflection and the development of teaching and learning. This should be created through:
 - i) timetabled morning and afternoon breaks, in addition to lunch, to provide increased informal opportunities for stepping aside from the structured routine and daily demands to reflect on the possibility of improving teaching and learning;
 - ii) the provision in teachers' contracts for compulsory self-directed professional development time, during which reflective practice can take place where desired.
 - e) Teachers' autonomy should be preserved by allowing them freedom to choose the aims and focus of their participation in self-directed professional development.
 - f) The objectives of the institution should be considered constructively alongside teachers' desires for autonomy. Tensions which arise between an institution's need for quality assurance and a teacher's desire to control their own development can be alleviated by a staff development structure which, rather than functioning as a system of accountability is, instead, focused on encouraging teachers to reflect on and further their developmental interests. This requires:
 - i) course reviews, encompassing constructive but critical feedback from the teacher, their students and colleagues, as tools for inviting a teacher's reflections for improvement;
 - ii) annual appraisals that are tools for assisting teachers to reflect on the process of teaching and learning; to identify their developmental aims and needs; and to plan ways of accomplishing them;
 - iii) observations as tools for building on a teacher's developmental aims and needs, and contributing towards their developmental plans.
- 4 Collegiality should be encouraged in order to enable conversations and discussions about teaching and learning; to foster the exchange of views and

ideas; and to promote and sustain critical reflection and purposeful collaboration aimed at improving the process of teaching and learning. Collegiality requires:

- a) staff common rooms to enable staff to meet together both formally and informally;
 - b) timetabled morning and afternoon breaks, in addition to a lunchtime break, to provide opportunities for staff to meet together regularly;
 - c) formal departmental meetings to share, discuss and encourage participation in experiences aimed at self-directed improvements in teaching and learning.
- 5 Student involvement in the development of teaching and learning should be the norm. Seeking improvements in teaching and learning should be approached as a collaborative process between a teacher and their learners. This will provide first-hand feedback and encourage an exchange of views and ideas which can stimulate and inform the reflective process. Students' contributions should be ongoing throughout a course so that both immediate, as well as more long-term, issues can be addressed. A number of ways should be employed:
- a) formal and informal conversations (e.g. tutorials; open-ended discussions; question-and-answer feedback sessions at end of class) with the teacher focused on the process of teaching and learning;
 - b) evaluation tools which assess the quality of the course, the teaching and the resources;
 - c) diagnostic tools which identify characteristics of learners and their teacher (e.g. questionnaires on learning styles; CSQ).

These recommendations may facilitate reflective practice and lead to the development of teaching and learning as a natural and integral part of a teacher's experience and expectations. As a result, institutions might truly become learning

organisations with all individuals interested in the process of teaching and learning coming together to seek and support improvement and development.

These statements are made on the basis of investigations carried out in this study in relation to illuminating how reflective practice, aimed at improving teaching and learning, may be facilitated. The extent of teachers' involvement and willingness to engage in self-directed professional development has been illuminated. Numerous influences on participation and accomplishment have been highlighted and their effects noted, with the result that four key factors conducive to participation and accomplishment have been distinguished - collaboration, time, teacher autonomy and institutional culture. A method similar to that of the action research model has been identified for structuring participation in, and accomplishment of, reflective practice. On the basis of the foregoing, suggestions for encouraging participation in, and enabling accomplishment of, reflective practice aimed at improving teaching and learning in post-compulsory education settings have been made, together with avenues for further research.

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APPENDICES

APPENDIX 1

RESEARCH METHODOLOGY - THE CASE STUDIES

The Case Studies - Appendix 1.1

APPENDIX 1.1

The twelve case studies: no. teachers involved; institution (college, school or university); start date of involvement; whether teacher trained; no. years of teaching experience; course type (and subjects) taught; age group, gender; no. student groups participating.

T = teacher; F = facilitator.

Case Study One	
T1:	'P' University; March 1998; trained in 1991; 8 years experience; undergraduate degree (Accounting); 40-44 years old; male; 4 student groups.
Case Study Two	
T2:	'P' University; May 1998; undergoing training; 11 years experience; MBA (Human Resource Management); 45-49 years old; male; 3 student groups.
Case Study Three	
Three teachers from one college, working in the same study area, occasionally team teaching.	
T3a:	'A' College of Further Education; June 1998; undergoing training; 12 years experience; GNVQ Intermediate and Advanced Health and Social Care (Influences on Health and Well-being), and NVQ level 2 Care (Early Years Child Care and Education); 35-39 years old; female; 4 student groups.
T3b:	'A' College of Further Education; June 1998; trained in 1996; 2 years experience; GNVQ Foundation (Pathways to Care) and Intermediate in Health and Social Care (Structures and Services of Health Care); 40-44 years old; female; 3 student groups.
T3c:	'A' College of Further Education; June 1998; trained in 1992; 10 years experience; GNVQ Intermediate in Health and Social Care (Communications and Interpersonal Relationships), Open College Network (Preparing for Work); 50-54 years old; male; 4 student groups.

Case Study Four

Two teachers working in the same college and study area but not team teaching.

T4a:

'B' College of Further Education; July 1998; trained in 1996; 7 years experience; GNVQ Advanced in Health and Social Care, and NNEB Diploma; 45-49 years old; female; 4 student groups.

T4b:

'B' College of Further Education; October 1998; trained in 1998; 2 years experience; Certificate in Childcare (Physical Development), and GNVQ Intermediate in Health and Social Care (Influences on Health and Well-being); 40-44 years old; female; 2 student groups; withdrew from study summer 1999 through ill health.

Case Study Five

T5:

'P' University; December 1998; trained in 1985; 22 years experience; Certificate in Education (FE); 50-54 years old; female; 2 student groups.

Case Study Six

T6:

'P' University; February 1999; undergoing training; 18 months experience; undergraduate degree (Geography); 25-29 years old; male; 2 student groups.

Case Study Seven

T7:

'B' College of Further Education; February 1999; undergoing training; 5 years experience; A and GCSE level (Sociology); 30-34 years old; male; 3 student groups.

Case Study Eight

T8

'O' College of Further Education; February 1999; undergoing training; 4 years experience; CITB (Industrial Gas); 40-44 years old; male; 1 student group.

Case Study Nine

T9:

'O' College of Further Education; May 1999; undergoing training; 10 years experience; NVQ Level 2 (Hairdressing); 50-54 years old; female; 2 student groups.

Case Study Ten

T10:

'H' School 6th Form; October 1999; trained in 1985; 15 years experience; A level (Mathematics); 35-39 years old; female; 1 student group.

Case Study Eleven

T11:

'P' University; March 2000; not teacher trained; 40 years experience, undergraduate degree (Psychology); 55-59 years old; male; 2 student groups.

Case Study Twelve

Whole College approach - CSQ offered to staff as tool for self-directed professional development, administered and facilitated by two college staff with responsibility for or interest in staff development.

F12a:

'N' College of Further Education; October 1999; Teacher trainer (Certificate in Education - FE); female. Other details not known.

F12b:

'N' College of Further Education; October 1999; trained 1996; 7 years experience; Vocational Access (Communication); 50-54 years old; female.

T12a:

'N' College of Further Education; December 1999; B. Tech. Advanced (Tourism); female; 1 student group. . Other details not known.

T12b:

'N' College of Further Education; November 1999; A level (Mathematics); female; 1 student group. Other details not known.

T12c:

'N' College of Further Education; November 1999; trained (City and Guilds 730) 1993; 20+ years experience; A level (Chemistry); 50-54 years old; female; 1 student group.

T12d:

'N' College of Further Education; November 1999; trained 1966; 20 years experience; A level (English); 55-59 years old; female; 1 student group.

T12e:

'N' College of Further Education; April 2000; trained 1993; 15 years experience; Vocational Access (Portfolio Building); 45-59 years old; female; 1 student group.

Case Study Twelve continued

T12f:

'N' College of Further Education; November 1999; NVQ level 2 (Administration); female; 1 student group. Other details not known.

T12g:

'N' College of Further Education; December 1999; trained 1993; 15 years experience; Special Educational Needs; 45-49 years old; female; 1 student group.

T12h:

'N' College of Further Education; March 2000; trained 2000; 2 years experience; City and Guilds (Interior Design); 45-49 years old; female; 2 student groups.

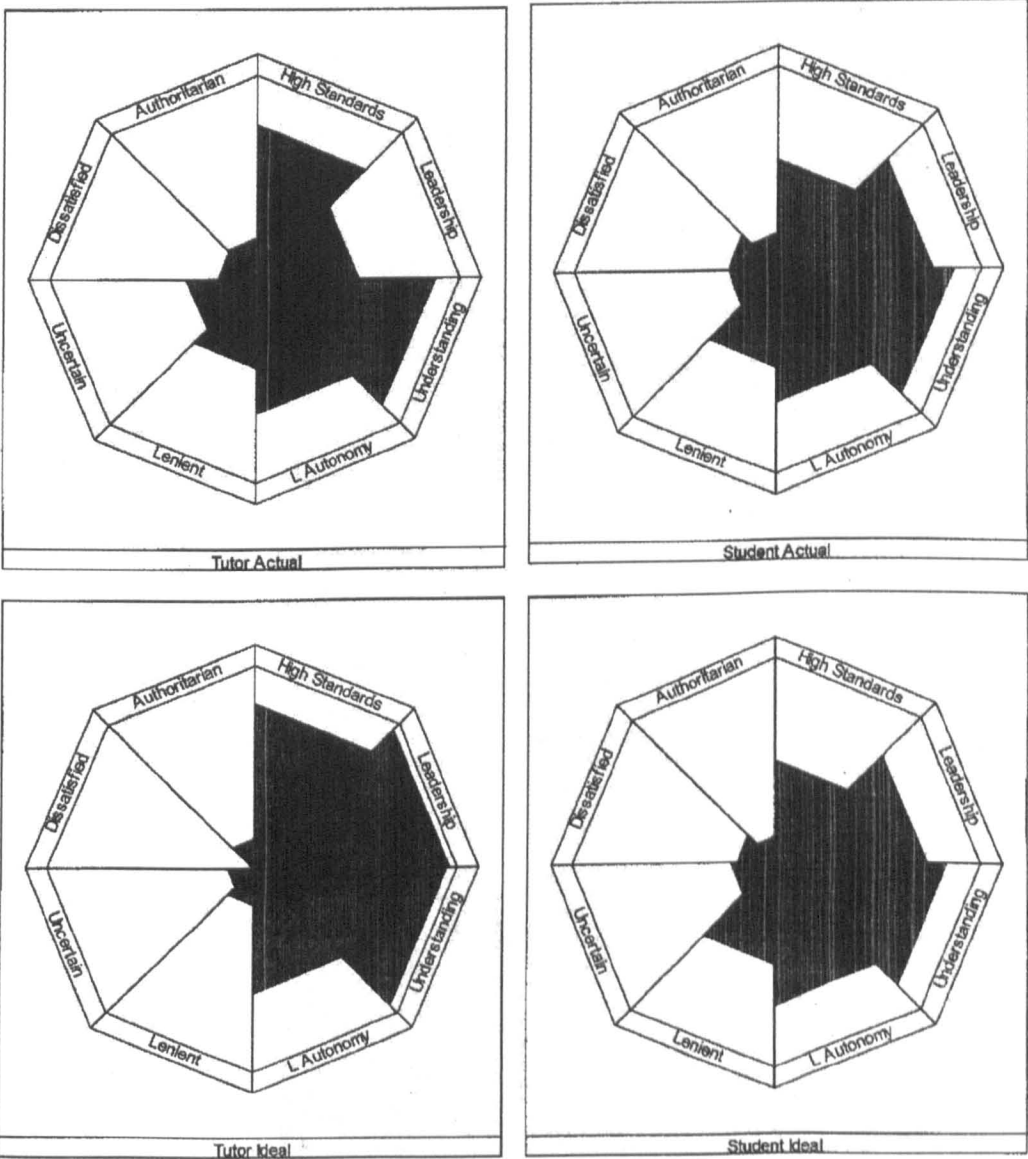
APPENDIX 3

THE COMMUNICATION STYLES QUESTIONNAIRE - THE RESULTS

Presentation of the results - Appendices 3.1 to 3.4

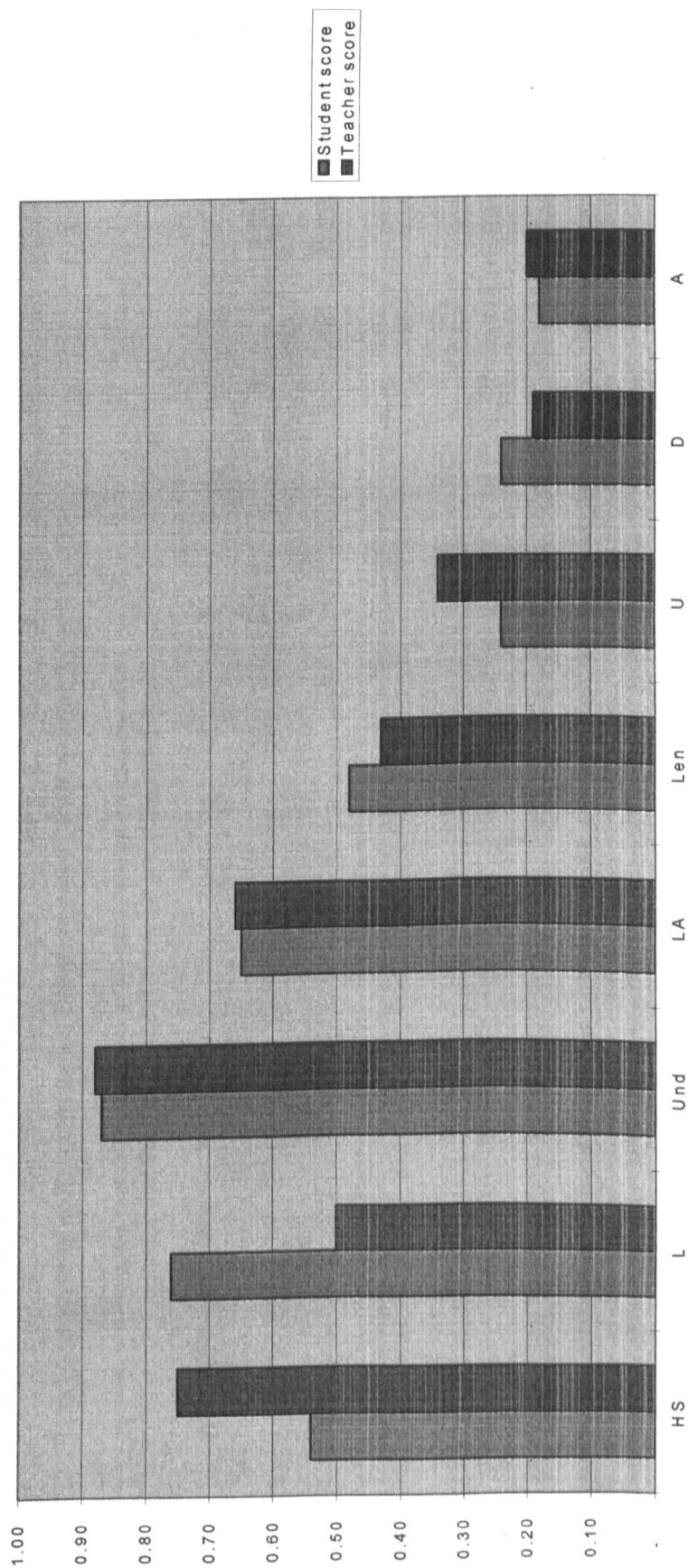
APPENDIX 3.1

An example of the Octagon-shaped graphs.



APPENDIX 3.2

An example of a bar chart detailing the scale scores.



APPENDIX 3.3

An example of a statement of scale scores.

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' scale scores for the Octagon profiles - within a range of 0 and 1

Scores: 0 indicates that the behaviours in the scale are *never* displayed
1 indicates that the behaviours in the scale are *always* displayed

A TUTOR - A CLASS

Scale	ACTUAL PROFILES		IDEAL PROFILES	
	<u>Tutor</u>	<u>Students</u>	<u>Tutor</u>	<u>Students</u>
High Standards	0.75	0.54	0.81	0.50
Leadership	0.50	0.76	0.96	0.74
Understanding	0.88	0.87	0.95	0.84
Learner Autonomy	0.66	0.65	0.61	0.70
Lenient	0.43	0.48	0.18	0.50
Uncertain	0.34	0.24	0.13	0.22
Dissatisfied	0.19	0.24	0.00	0.19
Authoritarian	0.20	0.18	0.15	0.13

APPENDIX 3.4

An example of the breakdown of the individual statement ratings.

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' responses to questions about actual and ideal tutor behaviour
(Students' responses are shown as a class average)

Scores: 1 = never; 5 = always

A TUTOR - A CLASS

High Standards

- 8 I expect the students to keep up with the demands of the course
- 22 I set a lot of homework
- 26 I assess the students' work fairly
- 42 I set hard work
- 48 My standards are high
- 51 I demand that work is handed in on time
- 54 I provide the students with useful feedback
- 61 It takes a lot of effort to do the work I set
- 64 I am disappointed, if the students don't do their best

Leadership

- 1 I talk enthusiastically about the subject
- 7 I explain things clearly
- 13 I hold the students' attention
- 19 I know everything that goes on in the room
- 25 I am well organized
- 31 I act confidently

Actual Scores		Ideal Scores	
Tutor	Students	Tutor	Students
5	4.1	4	4.3
1	1.0	3	1.4
5	4.6	5	4.6
4	2.5	3	2.1
5	3.4	5	3.0
3	2.9	4	2.1
4	4.5	5	4.5
4	3.3	4	3.1
5	2.1	5	2.0
4	4.1	5	4.1
3	4.9	5	4.9
3	3.3	5	3.4
3	3.4	5	2.8
1	4.1	5	4.4
4	4.4	4	4.4

	Actual Scores		Ideal Scores	
	Tutor	Students	Tutor	Students
<u>Understanding</u>				
2 I am friendly	5	5.0	4	4.5
14 I can take a joke	4	4.4	4	4.1
23 I am patient	3	4.8	5	5.0
37 I help the students with their work	4	4.8	5	4.0
38 I trust the students	5	4.5	5	4.6
43 I am someone the students can depend on	4	4.1	5	3.6
44 If the students disagree with me, we can talk about it	5	3.8	5	4.8
50 I am willing to explain things again	5	4.8	5	4.3
53 The students can talk to me about things other than work	5	4.4	5	3.9
56 If the students have something to say I will listen	5	4.5	5	4.6
<u>Learner Autonomy</u>				
3 I give the students opportunities to contribute their opinions	4	4.0	5	4.4
5 I give the students opportunities to share their views with each other	5	4.1	4	3.9
6 I expect the students to decide how they allocate their time to each topic	2	4.1	3	3.8
9 The students can change my mind	5	3.6	4	3.1
15 I allow the students to work at their own pace	5	4.3	3	4.0
16 I expect the students to assess their own work	4	4.0	3	3.0
20 I allow the students to assess each others' work	4	2.3	3	3.3
21 The students have the opportunity to choose the assignments they work on	2	2.8	3	3.9
27 I allow the students choice in what they study	3	3.3	4	4.3
33 I let the students present their work to the class	3	3.9	3	4.1
55 I let the students research for themselves	3	3.4	3	4.3
<u>Lenient</u>				
4 I give work that is too easy to do	3	2.4	1	2.0
10 I am lenient in marking work	3	3.0	1	2.4
28 I let the students work at a slow pace	2	3.4	2	3.9
32 I let the students make a lot of noise	3	3.4	3	2.9
39 I let the students fool around in class	3	2.3	2	2.9
45 I let the students get away with a lot in class	2	2.4	1	2.8
57 I let the students talk about anything in class	3	3.8	2	4.3

	Actual Scores		Ideal Scores	
	Tutor	Students	Tutor	Students
<u>Uncertain</u>				
34 I pretend not to notice when the students fool around	3	2.5	3	2.4
46 I act as if I don't know what to do	3	1.0	1	1.3
49 I seem uninterested in the subject	1	1.5	1	2.0
52 I let the students boss me around	3	2.0	3	2.1
58 I am not sure what to do when the students fool around	2	1.9	1	1.4
60 The students' attention wanders when I am talking	3	2.8	1	2.3
62 It is easy for students to make a fool out of me	2	2.5	1	2.4
63 It is easy for the students to pick a fight with me	2	1.6	1	1.3
<u>Dissatisfied</u>				
11 I think the students know very little	1	2.3	1	1.5
17 I put the students down	2	1.8	1	1.8
29 I appear dissatisfied with the students	2	1.5	1	2.0
35 I have a low opinion of the students	1	1.8	1	1.4
40 I am sarcastic	1	2.5	1	2.3
41 I get angry unexpectedly	3	1.3	1	1.8
47 I get angry quickly	2	2.5	1	1.5
59 I am impatient	2	2.1	1	2.0
<u>Authoritarian</u>				
12 The students have to be silent in my class	1	2.9	3	2.1
18 The students are afraid of me	3	1.0	1	1.1
24 The students need my permission before they speak	1	1.9	2	1.9
30 The students do not feel at ease to ask me questions	2	1.8	1	1.0
36 The students do not feel at ease to speak to each other in my class	2	1.0	1	1.5

APPENDIX 4

PHASE ONE - CONSISTENT FEATURES

Consistent features of CSQ scale scores and statement ratings -

Appendices 4.1 to 4.2

APPENDIX 4.1

Tables comparing scale scores across the four CSQ formats arising from the 29 sets of results during Phase One.

Table 4.1 Frequencies of differences between Teacher Actual (TA) and Student Actual (SA) scale scores (N = 29), and average difference of 'most favoured direction'[†].

Scale	TA > SA	TA = SA	TA < SA	Mean difference [†] (s.d.)
<i>High Standards</i>	21	1	7	0.08 (0.06)
<i>Leadership</i>	12	0	17	-0.16 (0.07)
<i>Understanding</i>	17	1	11	0.10 (0.08)
<i>Learner Autonomy</i>	15	0	14	—
<i>Lenient</i>	15	0	14	—
<i>Uncertain</i>	14	1	14	—
<i>Dissatisfied</i>	11	1	17	-0.12 (0.09)
<i>Authoritarian</i>	11	0	18	-0.11 (0.08)

[†] A consistent feature was considered to exist when 16 (55%) or more profiles favoured one direction or the other. This was an arbitrary choice, but one that indicated a clear majority. The mean value of this difference was calculated only on the basis of those profiles constituting the 'most favoured direction'.

Table 4.2 Frequencies of differences between Teacher Ideal (TI) and Teacher Actual (TA) scale scores (N = 29), and average difference of ‘most favoured direction’[†].

Scale	TI > TA	TI = TA	TI < TA	Mean difference [†] (s.d.)
<i>High Standards</i>	24	2	3	0.11 (0.06)
<i>Leadership</i>	27	1	1	0.23 (0.10)
<i>Understanding</i>	25	4	0	0.11 (0.07)
<i>Learner Autonomy</i>	20	1	8	0.14 (0.10)
<i>Lenient</i>	9	4	16	-0.13 (0.06)
<i>Uncertain</i>	5	3	21	-0.12 (0.07)
<i>Dissatisfied</i>	3	4	22	-0.15 (0.09)
<i>Authoritarian</i>	11	3	15	—

[†] A consistent feature was considered to exist when 16 (55%) or more profiles favoured one direction or the other. This was an arbitrary choice, but one that indicated a clear majority. The mean value of this difference was calculated only on the basis of those profiles constituting the ‘most favoured direction.’

Table 4.3 Frequencies of differences between Student Ideal (SI) and Student Actual (SA) scale scores (N = 29), and average difference of ‘most favoured direction’[†].

Scale	SI > SA	SI = SA	SI < SA	Mean difference [†] (s.d.)
<i>High Standards</i>	14	3	12	—
<i>Leadership</i>	28	0	1	0.16 (0.09)
<i>Understanding</i>	28	0	1	0.13 (0.08)
<i>Learner Autonomy</i>	24	2	3	0.08 (0.04)
<i>Lenient</i>	13	2	14	—
<i>Uncertain</i>	6	0	23	-0.09 (0.07)
<i>Dissatisfied</i>	0	0	29	-0.10 (0.07)
<i>Authoritarian</i>	3	2	24	-0.07 (0.04)

[†] A consistent feature was considered to exist when 16 (55%) or more profiles favoured one direction or the other. This was an arbitrary choice, but one that indicated a clear majority. The mean value of this difference was calculated only on the basis of those profiles constituting the ‘most favoured direction.’

Table 4.4 CSQ scale scores illustrating consistent features between Teacher Actual (TA) and Student Actual (SA); Teacher Actual and Teacher Ideal (TI); and Student Actual and Student Ideal (SI).

Scale	TA	SA [†]	TI	SI
<i>High Standards</i>	0.75	0.67	0.86	0.67
<i>Leadership</i>	0.55	0.71	0.78	0.87
<i>Understanding</i>	0.88	0.78	0.99	0.91
<i>Learner Autonomy</i>	0.58	0.58	0.72	0.64
<i>Lenient</i>	0.36	0.36	0.23	0.36
<i>Uncertain</i>	0.22	0.22	0.10	0.13
<i>Dissatisfied</i>	0.10	0.22	*0.00	0.12
<i>Authoritarian</i>	0.13	0.24	0.13	0.17

[†] Using mean values of Student Actual (SA) scale scores as base values scale scores for Teacher Actual (TA), Teacher Ideal (TI) and Student Ideal (SI) have been calculated with reference to the mean differences shown in Tables 4.1 to 4.3, to give an indication of the consistent features. This occurred as follows:

TA = SA ± Differences between TA and SA in Table 4.1;

TI = TA ± Differences between TA and TI in Table 4.2;

SI = SA ± Differences between SA and SI in Table 4.3.

*Calculated figure is -0.05 but 0.00 is lowest possible scale score.

APPENDIX 4.2

Tables showing consistent features in statement ratings by Teachers and Students.

Table 4.5 No. teachers (N = 29) indicating whether, ideally, they should display more (+) or less (-) of a communicative behaviour. Details shown for statements where more than 50%[†] of teachers favoured an increase or decrease in ratings of 1.0 or more.

Scale and Question	FE (n = 20)	HE (n = 9)	TOTAL (N = 29)
<i>High Standards</i>			
I assess the students' work fairly	+11	+7	+18
I provide the students with useful feedback	+13	+2	+15
I set a lot of homework (FE only)	+14	N/A	+14
<i>Leadership</i>			
I am a good leader (HE only)	N/A	+7	+7
I am well organised (FE only)	+20	N/A	+20
I know everything that goes on in the room	+12	+4	+16
I talk enthusiastically about the subject	+11	+4	+15
I explain things clearly	+19	+4	+23
I hold the students' attention	+18	+6	+24
<i>Understanding</i>			
I realise when the students don't understand (HE only)	N/A	+9	+9
My class is pleasant (HE only)	N/A	+6	+6
I am someone the students can depend on	+11	+3	+14

Scale and Question	FE (n = 20)	HE (n = 9)	TOTAL (N = 29)
<i>Learner Autonomy</i>			
I allow the students choice in what they study	+13	+4	+17
The students have the opportunity to choose the assignments they work on	+13	+3	+16
<i>Uncertain</i>			
The students' attention wanders when I am talking	-17	-7	-24
<i>Dissatisfied</i>			
I am impatient	-12	-6	-18
<i>Authoritarian</i>			
The students do not feel at ease to ask me questions	-8	-6	-14

† 'More than 50% of teachers' has the following meanings:

For questions appearing on both the FE and HE versions of the CSQ, n = 15+;

For questions only on the FE questionnaire n = 11+;

For questions only on the HE questionnaire n = 5+.

Table 4.6 No. student groups (N = 29) indicating whether, ideally, they would like their teacher to display more (+) or less (-) of a communicative behaviour. Details shown for statements where more than 50%[†] of student groups favoured an increase or decrease in ratings of 0.75 or more. 0.75 was an arbitrary choice but one which indicated that a majority of students in a group favoured the increase or decrease.

Question	FE (n = 20)	HE (n = 9)	TOTAL (N = 29)
<i>Leadership</i>			
My tutor is a good leader (HE only)	N/A	+7	+7
My tutor explains things clearly	+11	+7	+18
My tutor is organised (FE only)	+11	N/A	+11
My tutor holds our attention	+12	+4	+16
<i>Understanding</i>			
My tutor realises when we don't understand (HE only)	N/A	+9	+9
<i>Learner Autonomy</i>			
We have the opportunity to choose the assignments we work on	+14	+7	+21
My tutor allows us choice in what we study	+10	+6	+16
<i>Uncertain</i>			
My attention wanders when my tutor is talking	-12	-5	-17

[†] 'More than 50% of student groups' has the following meanings:

For questions appearing on both the FE and HE versions of the CSQ, n = 15+;

For questions only on the FE questionnaire n = 11+;

For questions only on the HE questionnaire n = 5+.

APPENDIX 5

PHASE ONE - CSQ RESULTS LEADING TO DEVELOPMENT

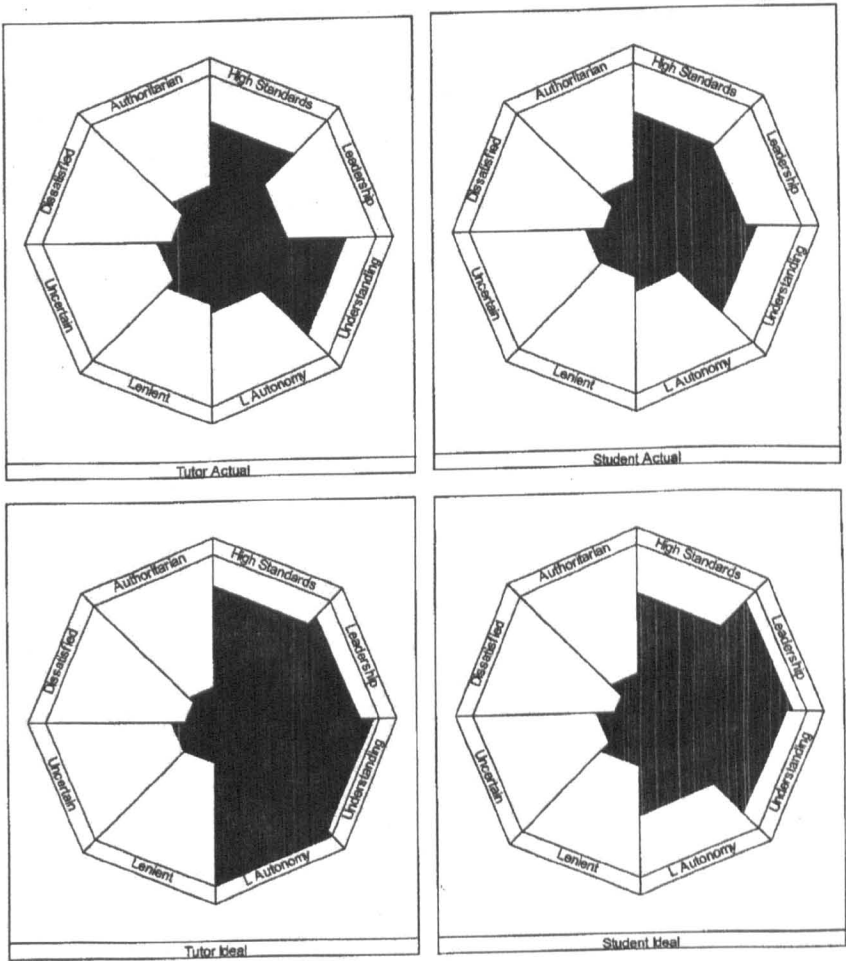
CSQ results which formed the basis of the self-directed professional development reported by T1, T2, T3a and T4a - Appendices 5.1 to 5.4

APPENDIX 5.1

CSQ results which formed the basis of the self-directed professional development
reported by T1 in Phase One

T1 - Developing *Learner Autonomy*

CSQ profiles for Student Group One.



T1 continued:

The statement of scale scores (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' scale scores for the Octagon profiles - within a range of 0 and 1

Scores: 0 indicates that the behaviours in the scale are *never* displayed
1 indicates that the behaviours in the scale are *always* displayed

T1 - STUDENT GROUP ONE

	ACTUAL PROFILES		IDEAL PROFILES	
	<u>Tutor</u>	<u>Students</u>	<u>Tutor</u>	<u>Students</u>
<u>Scale</u>				
High Standards	0.72	0.70	0.81	0.71
Leadership	0.46	0.67	0.88	0.92
Understanding	0.82	0.74	0.96	0.88
Learner Autonomy	0.43	0.38	1.00	0.63
Lenient	0.38	0.29	0.25	0.33
Uncertain	0.32	0.30	0.25	0.25
Dissatisfied	0.23	0.19	0.17	0.14
Authoritarian	0.33	0.29	0.21	0.23

T1 continued:

The breakdown of the individual statement ratings (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' responses to questions about actual tutor behaviour
(Students' responses are shown as a class average)

Scores: 1 = never; 5 = always

T1 - STUDENT GROUP ONE

High Standards

- 8 I expect the students to keep up with the demands of the course
- 26 I assess the students' work fairly
- 42 I set hard work
- 48 My standards are high
- 54 I provide the students with useful feedback
- 61 It takes a lot of effort to do the work I set
- 65 I set a lot of homework
- 70 I demand that work is handed in on time
- 73 I am disappointed if the students don't do their best

Leadership

- 1 I talk enthusiastically about the subject
- 7 I explain things clearly
- 13 I hold the students' attention
- 19 I know everything that goes on in the room
- 25 I am a good leader
- 31 I act confidently.

<u>Actual Scores</u>		<u>Ideal Scores</u>	
Tutor	Students	Tutor	Students
4	4.2	4	3.9
5	4.2	5	4.9
4	3.5	3	3.1
4	4.2	5	4.1
4	3.9	5	4.7
3	4.0	4	3.3
1	1.6	2	1.8
4	3.7	4	3.8
4	3.1	4	3.9
3	3.7	5	4.9
3	4.0	5	4.9
3	3.5	5	4.8
3	3.4	2	3.7
2	3.5	5	4.7
3	3.9	5	4.9

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Understanding</u>				
2 I am friendly	4	4.5	5	4.9
14 I can take a joke	5	3.3	5	4.1
20 My class is pleasant	4	3.9	5	4.8
32 The students regard me as one of them	2	2.3	3	3.4
37 I help the students with their work	4	4.5	5	4.7
38 I trust the students	4	3.9	5	4.7
43 I am someone the students can depend on	4	3.8	5	4.5
44 If the students don't agree with me, we can talk about it	4	4.4	5	4.7
50 I am willing to explain things again	5	4.8	5	4.9
56 If the students have something to say I will listen	5	4.9	5	5.0
62 I realize when the students don't understand	4	3.7	5	4.6
64 I give equal help to everyone	5	4.3	5	4.7
66 I am patient	5	4.4	5	4.9
71 The students can talk to me about things other than work	5	2.8	5	3.5
74 I help the students with their work outside class	5	3.9	5	4.7
<u>Learner Autonomy</u>				
3 The students can decide some things to do in class	2	2.6	5	3.4
9 The students can sometimes change my mind	4	2.2	5	2.9
15 I allow the students to work at their own pace	4	3.9	5	4.3
21 The students have the opportunity to choose the assignments they work on	1	1.2	5	3.5
27 I allow the students choice in what they study	1	1.9	5	3.5
33 I let the students present their work to the class	2	2.5	5	3.3
72 I let the students research some of the work themselves	5	3.4	5	3.7

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Lenient</u>				
4 I give work that is easy to do	3	1.9	3	1.7
10 I am lenient in marking work	4	2.3	2	2.5
16 I put up with work which is not the students' best	3	3.1	3	2.4
22 It takes only a little effort to do work I set	2	2.3	2	2.4
28 I let the students work at a slow pace	4	2.8	3	2.5
34 I do not mind if work is handed in late	1	1.6	2	1.9
39 I let the students fool around in class	1	1.5	1	2.0
45 I let the students get away with a lot in class	2	1.9	1	2.2
51 I am lenient	4	2.9	2	3.5
57 I let the students talk about anything in class	2	2.1	1	2.5
63 I let the students move around the room without asking permission	3	2.1	2	2.2
67 I let the students make a lot of noise	1	1.1	1	1.2
<u>Uncertain</u>				
40 I seem uncertain	2	1.9	1	1.1
46 I act as if I do not know what to do	2	1.8	1	1.5
49 I am uninterested in teaching the subject	1	1.3	1	1.0
52 I give in to the students' demands	2	2.3	1	2.5
58 I am not sure what to do when the students are inattentive	4	2.2	5	1.3
60 The students' attention wanders when I am talking	3	2.7	1	4.4
68 I pretend not to notice when the students are inattentive	2	3.2	4	2.1

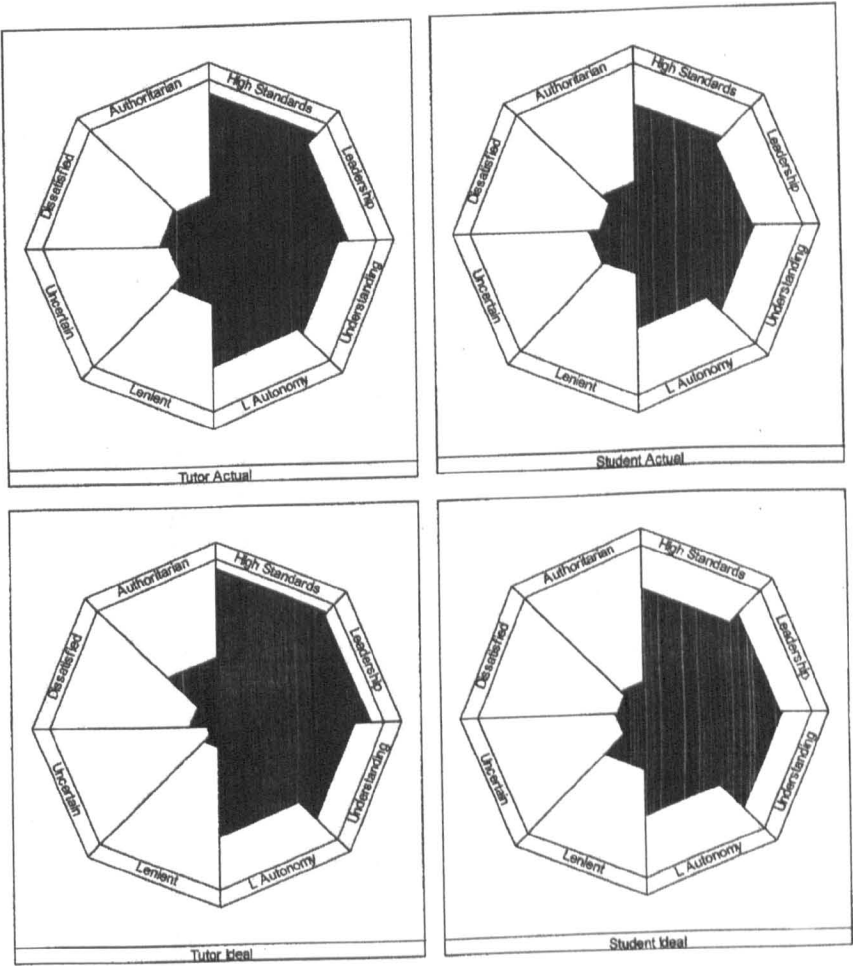
	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Dissatisfied</u>				
5 I think the students cheat	1	1.2	1	1.3
11 I think the students know very little	4	2.5	4	2.2
17 I put the students down	1	1.5	1	1.2
23 I think that the students do things badly	3	2.1	1	1.5
29 I appear dissatisfied with the students	2	1.5	1	1.4
35 I am suspicious of the students	1	1.9	1	1.1
41 I get angry unexpectedly	1	1.5	1	1.1
47 I get angry quickly	1	1.2	1	1.1
53 I am too quick to correct the students when they break a rule	2	2.3	1	2.5
55 I am severe when marking work	3	2.9	2	2.9
59 I am impatient	3	1.5	5	1.5
69 I am sarcastic	1	1.1	1	1.2
<u>Authoritarian</u>				
6 I am strict	4	2.4	4	2.7
12 The students have to be silent in my class	2	2.8	3	2.1
18 The students are afraid of me	1	1.6	1	1.6
24 The students need my permission before they speak	1	1.8	1	1.9
30 The students do not feel at ease to ask me questions	4	1.8	1	1.3
36 The students do not feel at ease to speak to each other in my class	2	2.4	1	1.8

APPENDIX 5.2

CSQ results which formed the basis of the self-directed professional development
reported by T2 in Phase One

T2 - Developing Leadership and Learner Autonomy

CSQ profiles for Student Group One.



T2 continued:

The statement of scale scores (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' scale scores for the Octagon profiles - within a range of 0 and 1

Scores: 0 indicates that the behaviours in the scale are *never* displayed
1 indicates that the behaviours in the scale are *always* displayed

T2 - STUDENT GROUP ONE

<u>Scale</u>	ACTUAL PROFILES		IDEAL PROFILES	
	<u>Tutor</u>	<u>Students</u>	<u>Tutor</u>	<u>Students</u>
High Standards	0.92	0.75	0.94	0.74
Leadership	0.83	0.70	0.92	0.81
Understanding	0.77	0.72	0.82	0.83
Learner Autonomy	0.73	0.60	0.68	0.63
Lenient	0.34	0.27	0.13	0.34
Uncertain	0.25	0.28	0.07	0.17
Dissatisfied	0.31	0.22	0.17	0.16
Authoritarian	0.29	0.28	0.42	0.19

T2 continued:

The breakdown of the individual statement ratings (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' responses to questions about actual tutor behaviour
(Students' responses are shown as a class average)

Scores: 1 = never; 5 = always

T2 - STUDENT GROUP ONE

High Standards

- 8 I expect the students to keep up with the demands of the course
- 26 I assess the students' work fairly
- 42 I set hard work
- 48 My standards are high
- 54 I provide the students with useful feedback
- 61 It takes a lot of effort to do the work I set
- 65 I expect the students to carry out background reading for my class
- 70 I demand that work is handed in on time
- 73 I am disappointed if the students don't do their best

Leadership

- 1 I talk enthusiastically about the subject
- 7 I explain things clearly
- 13 I hold the students' attention
- 19 I know everything that goes on in the room
- 25 I am a good leader
- 31 I act confidently

<u>Actual Scores</u>		<u>Ideal Scores</u>	
Tutor	Students	Tutor	Students
4.0	4.1	4.0	3.9
5.0	4.1	5.0	4.9
4.0	3.5	5.0	3.1
5.0	4.3	5.0	4.3
5.0	4.1	5.0	4.5
5.0	3.7	4.0	3.6
5.0	4.2	5.0	3.8
4.0	3.9	5.0	4.0
5.0	4.2	5.0	3.9
5.0	4.8	5.0	4.6
5.0	3.7	5.0	4.8
4.0	3.9	5.0	4.6
4.0	2.7	3.0	3.1
4.0	3.6	3.0	4.0
4.0	4.0	5.0	4.6

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Understanding</u>				
2 I am friendly	4.0	4.2	4.0	4.2
14 I can take a joke	4.0	4.0	5.0	4.3
20 My class is pleasant	4.0	4.0	5.0	4.3
32 The students think of me as one of them	1.0	2.8	1.0	3.8
37 I help the students with their work	4.0	3.9	4.0	4.0
38 I trust the students	4.0	3.9	4.0	4.6
43 I am someone the students can depend on	5.0	4.0	5.0	4.6
44 If the students don't agree with me, we can talk about it	5.0	4.0	5.0	4.4
50 I am willing to explain things again	5.0	4.3	5.0	4.5
56 If the students have something to say I will listen	5.0	4.5	5.0	4.7
62 I realize when the students don't understand	4.0	3.3	5.0	4.4
64 I give equal help to everyone	4.0	4.0	2.0	4.3
66 I am patient	4.0	4.0	5.0	4.5
71 The students can talk to me about things other than work	4.0	3.5	5.0	4.0
<u>Learner Autonomy</u>				
3 I give the students opportunities to contribute their opinions	4.0	4.0	5.0	4.1
9 The students can change my mind	4.0	2.9	4.0	3.2
15 I allow the students to work at their own pace	2.0	3.0	2.0	3.3
21 The students have the opportunity to choose the assignments they work on	1.0	2.1	2.0	3.7
27 I allow the students choice in what they study	4.0	2.7	2.0	3.5
33 I let the students present their work to the class	5.0	3.9	3.0	3.4
39 I give scope for the students to share their views with each other	5.0	4.1	5.0	4.5
45 I expect the students to decide how they allocate their time to each topic	5.0	3.4	4.0	3.2
57 I expect the students to appraise their own work	4.0	3.7	5.0	3.3
67 I allow the students to assess each others work	4.0	3.8	4.0	2.9
72 I let the students research for themselves	5.0	3.9	5.0	3.9

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Lenient</u>				
4 I give work that is too easy to do	2.0	2.0	2.0	2.0
10 I am lenient in marking work	2.0	2.1	1.0	2.5
16 I put up with work which is not the students' best	2.0	2.1	1.0	2.5
22 It takes only a little effort to do work I set	2.0	2.0	1.0	2.2
28 I let the students work at a slow pace	2.0	2.1	2.0	2.4
34 I do not mind if work is handed in late	2.0	1.7	2.0	2.0
51 I am lenient	2.0	2.5	1.0	2.6
63 I let the students move around the room without asking permission	5.0	2.1	2.0	2.9
<u>Uncertain</u>				
40 I seem uncertain	1.0	2.0	2.0	1.5
46 I act as if I do not know what to do	1.0	1.6	1.0	1.2
49 I am uninterested in teaching the subject	1.0	1.1	1.0	1.1
52 I give in to the students' demands	2.0	2.5	2.0	2.3
58 I am not sure what to do when the students are inattentive	5.0	2.8	1.0	1.8
68 I pretend not to notice when the students are inattentive	2.0	2.5	1.0	2.6
<u>Dissatisfied</u>				
5 I think the students cheat	2.0	1.4	2.0	1.5
11 I think the students know very little	2.0	2.2	3.0	2.0
17 I put the students down	5.0	1.5	1.0	1.2
23 I think that the students do things badly	1.0	1.9	1.0	1.6
29 I appear dissatisfied with the students	3.0	2.4	2.0	1.5
35 I have a low opinion of the students	1.0	1.4	1.0	1.6
41 I get angry unexpectedly	2.0	1.5	1.0	1.1
47 I get angry quickly	1.0	1.5	1.0	1.1
53 I am too quick to correct the students when they break a rule	2.0	2.2	2.0	2.2
55 I am severe when marking work	4.0	3.3	4.0	2.6
59 I am impatient	3.0	2.0	1.0	1.5
69 I am sarcastic	1.0	1.4	1.0	1.7

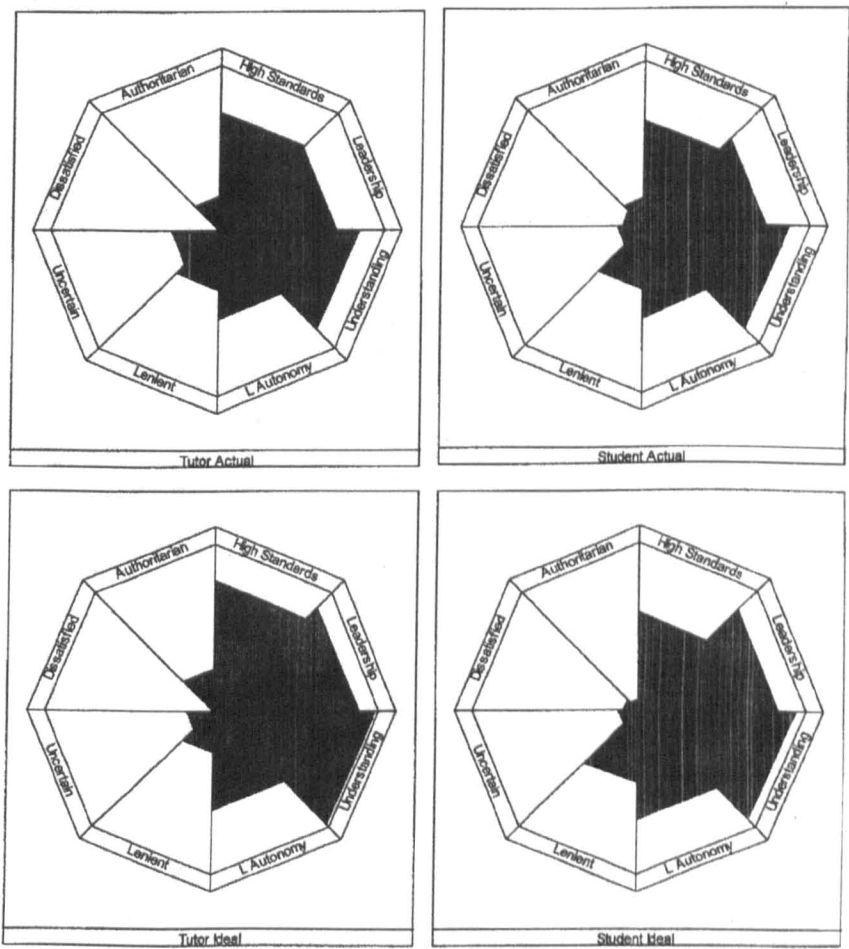
	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Authoritarian</u>				
6 I am strict	4.0	3.0	4.0	2.7
12 The students have to be silent in my class	2.0	2.4	3.0	1.9
18 The students are afraid of me	2.0	1.4	2.0	1.1
24 The students need my permission before they speak	1.0	2.0	3.0	1.6
30 The students do not feel at ease to ask me questions	2.0	1.8	1.0	1.3
36 The students do not feel at ease to speak to each other in my class	2.0	2.2	3.0	2.1

APPENDIX 5.3

CSQ results which formed the basis of the self-directed professional development
reported by T3a in Phase One

T3a - Developing Leadership and Learner Autonomy

CSQ profiles for Student Group Three.



T3a continued:

The statement of scale scores (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' scale scores for the Octagon profiles - within a range of 0 and 1

Scores: 0 indicates that the behaviours in the scale are *never* displayed
1 indicates that the behaviours in the scale are *always* displayed

T3A - STUDENT GROUP THREE

	ACTUAL PROFILES		IDEAL PROFILES	
	<u>Tutor</u>	<u>Students</u>	<u>Tutor</u>	<u>Students</u>
<u>Scale</u>				
High Standards	0.72	0.64	0.78	0.58
Leadership	0.71	0.74	0.88	0.84
Understanding	0.85	0.88	0.98	0.94
Learner Autonomy	0.54	0.55	0.61	0.67
Lenient	0.36	0.38	0.25	0.45
Uncertain	0.28	0.16	0.16	0.12
Dissatisfied	0.00	0.13	0.00	0.09
Authoritarian	0.20	0.17	0.25	0.06

T3a continued:

The breakdown of the individual statement ratings (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' responses to questions about actual tutor behaviour
(Students' responses are shown as a class average)

Scores: 1 = never; 5 = always

T3A - STUDENT GROUP THREE

High Standards

- 8 I expect the students to keep up with the demands of the course
- 22 I set a lot of homework
- 26 I assess the students' work fairly
- 42 I set hard work
- 48 My standards are high
- 51 I demand that work is handed in on time
- 54 I provide the students with useful feedback
- 61 It takes a lot of effort to do the work I set
- 64 I am disappointed, if the students don't do their best

Leadership

- 1 I talk enthusiastically about the subject
- 7 I explain things clearly
- 13 I hold the students' attention
- 19 I know everything that goes on in the room
- 25 I am well organized
- 31 I act confidently

<u>Actual Scores</u>		<u>Ideal Scores</u>	
Tutor	Students	Tutor	Students
4.0	4.0	4.0	3.7
3.0	2.6	3.0	2.2
5.0	4.5	5.0	4.8
3.0	2.7	3.0	2.1
4.0	3.8	5.0	3.5
4.0	3.8	4.0	3.7
5.0	4.5	5.0	4.7
3.0	2.9	4.0	2.5
4.0	3.2	4.0	2.5
5.0	4.5	5.0	4.5
4.0	4.3	5.0	4.8
3.0	4.0	5.0	4.3
3.0	2.5	3.0	2.6
3.0	4.0	5.0	4.9
5.0	4.5	4.0	4.9

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Understanding</u>				
2 I am friendly	4.0	4.6	5.0	5.0
14 I can take a joke	5.0	4.5	5.0	4.7
23 I am patient	4.0	4.5	5.0	4.9
37 I help the students with their work	4.0	4.5	5.0	4.8
38 I trust the students	5.0	4.5	5.0	4.8
43 I am someone the students can depend on	4.0	4.3	5.0	4.7
44 If the students disagree with me, we can talk about it	5.0	4.6	5.0	4.7
50 I am willing to explain things again	5.0	4.5	5.0	4.8
53 The students can talk to me about things other than work	3.0	4.3	4.0	4.5
56 If the students have something to say I will listen	5.0	4.8	5.0	4.8
<u>Learner Autonomy</u>				
3 I give the students opportunities to contribute their opinions	4.0	4.3	5.0	4.5
5 I give the students opportunities to share their views with each other	3.0	4.1	4.0	4.5
6 I expect the students to decide how they allocate their time to each topic	3.0	3.2	4.0	3.5
9 The students can change my mind	3.0	2.7	3.0	2.9
15 I allow the students to work at their own pace	4.0	3.5	4.0	4.4
16 I expect the students to assess their own work	3.0	3.1	3.0	3.2
20 I allow the students to assess each others' work	3.0	2.9	3.0	3.5
21 The students have the opportunity to choose the assignments they work on	4.0	2.0	3.0	3.4
27 I allow the students choice in what they study	2.0	2.6	3.0	3.4
33 I let the students present their work to the class	3.0	3.1	3.0	3.5
55 I let the students research for themselves	4.0	3.8	3.0	3.9
<u>Lenient</u>				
4 I give work that is too easy to do	2.0	2.5	2.0	2.5
10 I am lenient in marking work	2.0	2.4	1.0	3.0
28 I let the students work at a slow pace	3.0	2.8	3.0	2.9
32 I let the students make a lot of noise	3.0	2.5	2.0	2.6
39 I let the students fool around in class	3.0	2.2	1.0	2.5
45 I let the students get away with a lot in class	2.0	2.2	2.0	2.5
57 I let the students talk about anything in class	2.0	2.8	3.0	3.4

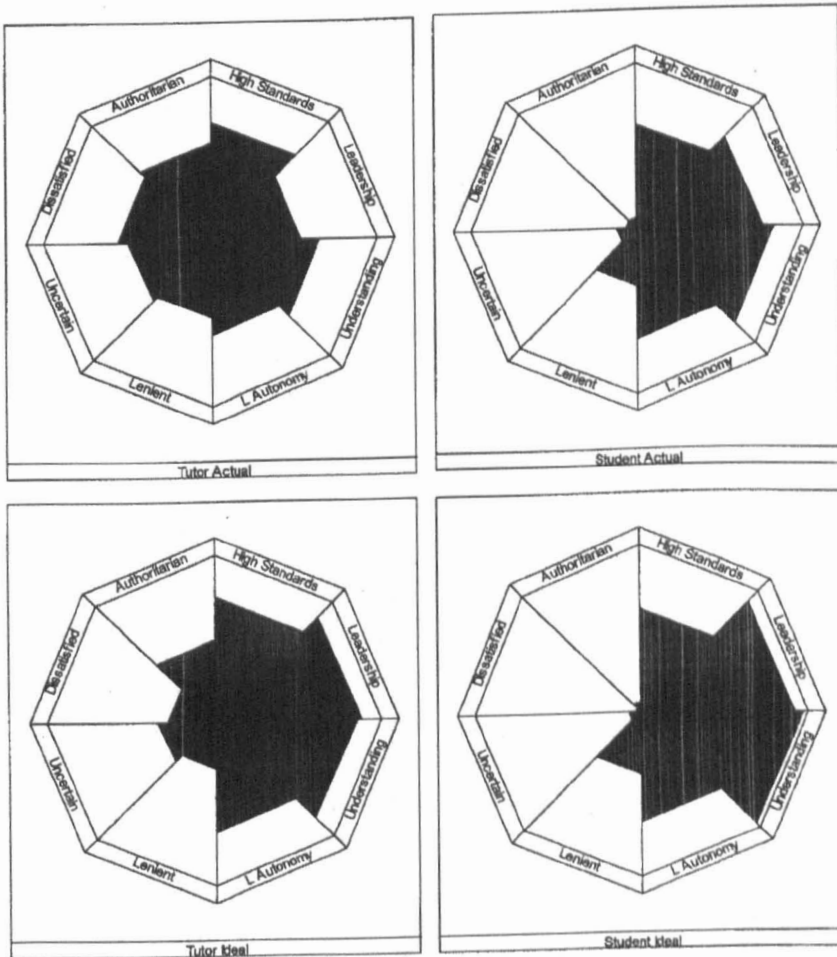
	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Uncertain</u>				
34 I pretend not to notice when the students fool around	2.0	2.2	2.0	2.1
46 I act as if I don't know what to do	4.0	1.2	5.0	1.2
49 I seem uninterested in the subject	1.0	1.4	1.0	1.5
52 I let the students boss me around	2.0	1.4	1.0	1.8
58 I am not sure what to do when the students fool around	1.0	1.5	1.0	1.4
60 The students' attention wanders when I am talking	3.0	2.2	1.0	1.5
62 It is easy for students to make a fool out of me	3.0	1.7	1.0	1.2
63 It is easy for the students to pick a fight with me	1.0	1.3	1.0	1.2
<u>Dissatisfied</u>				
11 I think the students know very little	1.0	1.1	1.0	1.0
17 I put the students down	1.0	1.1	1.0	1.0
29 I appear dissatisfied with the students	1.0	1.7	1.0	1.4
35 I have a low opinion of the students	1.0	1.0	1.0	1.2
40 I am sarcastic	1.0	2.9	1.0	2.6
41 I get angry unexpectedly	1.0	1.2	1.0	1.1
47 I get angry quickly	1.0	1.3	1.0	1.3
59 I am impatient	1.0	1.7	1.0	1.2
<u>Authoritarian</u>				
12 The students have to be silent in my class	3.0	2.0	3.0	1.5
18 The students are afraid of me	1.0	1.2	1.0	1.0
24 The students need my permission before they speak	2.0	1.8	3.0	1.4
30 The students do not feel at ease to ask me questions	1.0	2.0	1.0	1.2
36 The students do not feel at ease to speak to each other in my class	2.0	1.5	2.0	1.2

APPENDIX 5.4

CSQ results which formed the basis of the self-directed professional development
reported by T4a in Phase One

T4a - Developing Leadership

CSQ profiles for Student Group Two.



T4a (Student Group Two) continued:

The statement of scale scores (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' scale scores for the Octagon profiles - within a range of 0 and 1

Scores: 0 indicates that the behaviours in the scale are *never* displayed
 1 indicates that the behaviours in the scale are *always* displayed

T4a - STUDENT GROUP TWO

	ACTUAL PROFILES		IDEAL PROFILES	
	<u>Tutor</u>	<u>Students</u>	<u>Tutor</u>	<u>Students</u>
<u>Scale</u>				
High Standards	0.72	0.63	0.75	0.62
Leadership	0.54	0.76	0.88	0.92
Understanding	0.65	0.83	0.85	0.97
Learner Autonomy	0.57	0.67	0.68	0.67
Lentent	0.46	0.35	0.29	0.38
Uncertain	0.50	0.12	0.34	0.07
Dissatisfied	0.56	0.06	0.28	0.03
Authoritarian	0.60	0.06	0.50	0.06

T4a (Student Group Two) continued:

The breakdown of the individual statement ratings (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' responses to questions about actual and ideal tutor behaviour
(Students' responses are shown as a class average)

Scores: 1 = never; 5 = always

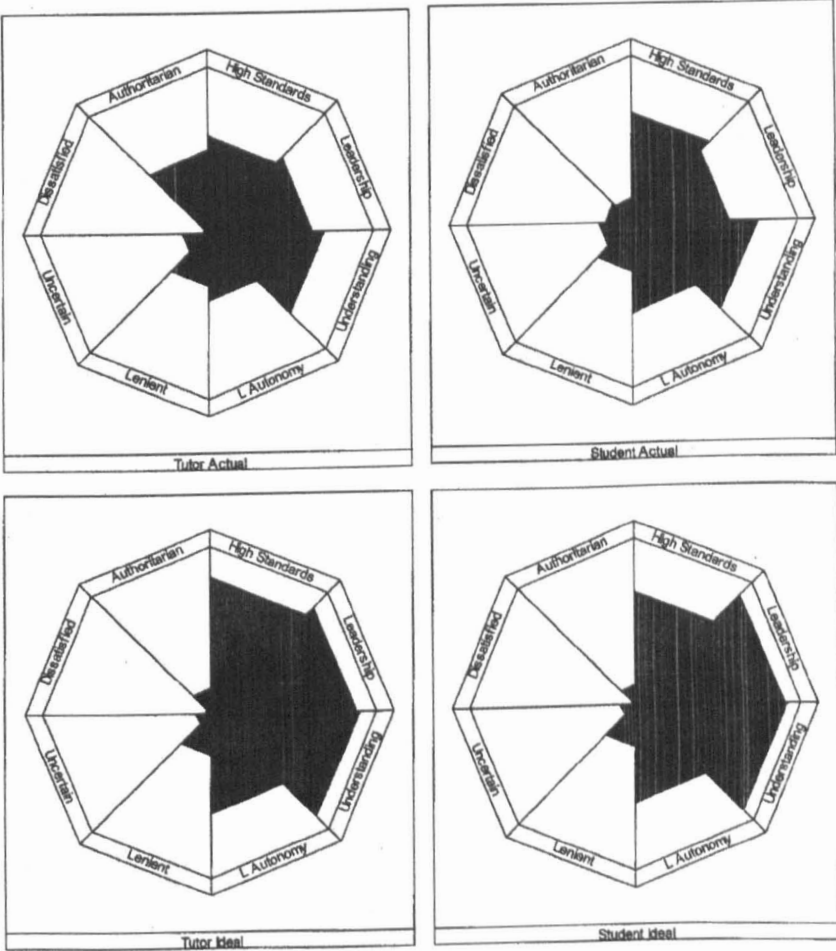
T4a - STUDENT GROUP TWO

	Actual Scores		Ideal Scores	
	Tutor	Students	Tutor	Students
High Standards				
8 I expect the students to keep up with the demands of the course	4.0	4.3	4.0	4.1
22 I set a lot of homework	3.0	2.5	3.0	2.1
26 I assess the students' work fairly	4.0	4.0	5.0	5.0
42 I set hard work	4.0	3.0	4.0	2.7
48 My standards are high	4.0	3.9	5.0	3.8
51 I demand that work is handed in on time	4.0	3.8	4.0	3.7
54 I provide the students with useful feedback	4.0	4.5	4.0	4.8
61 It takes a lot of effort to do the work I set	4.0	2.8	4.0	2.5
64 I am disappointed, if the students don't do their best	4.0	2.7	3.0	2.5
Leadership				
1 I talk enthusiastically about the subject	4.0	4.2	5.0	4.8
7 I explain things clearly	2.0	4.0	5.0	5.0
13 I hold the students' attention	3.0	3.6	5.0	4.8
19 I know everything that goes on in the room	3.0	3.4	2.0	3.6
25 I am well organized	3.0	4.1	5.0	4.9
31 I act confidently	4.0	4.8	5.0	5.0

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Understanding</u>				
2 I am friendly	3.0	4.6	4.0	5.0
14 I can take a joke	3.0	3.8	4.0	4.5
23 I am patient	4.0	4.4	4.0	5.0
37 I help the students with their work	4.0	4.3	5.0	4.8
38 I trust the students	4.0	4.2	4.0	5.0
43 I am someone the students can depend on	4.0	3.5	5.0	4.9
44 If the students disagree with me, we can talk about it	3.0	4.3	4.0	4.9
50 I am willing to explain things again	4.0	4.8	5.0	4.9
53 The students can talk to me about things other than work	3.0	4.5	4.0	4.7
56 If the students have something to say I will listen	4.0	4.6	5.0	4.9
<u>Learner Autonomy</u>				
3 I give the students opportunities to contribute their opinions	4.0	4.5	4.0	4.8
5 I give the students opportunities to share their views with each other	3.0	4.5	4.0	4.5
6 I expect the students to decide how they allocate their time to each topic	3.0	3.2	4.0	3.3
9 The students can change my mind	3.0	3.3	3.0	2.7
15 I allow the students to work at their own pace	2.0	4.1	3.0	4.1
16 I expect the students to assess their own work	2.0	3.0	4.0	3.1
20 I allow the students to assess each others' work	3.0	3.1	3.0	3.0
21 The students have the opportunity to choose the assignments they work on	5.0	2.4	4.0	3.3
27 I allow the students choice in what they study	3.0	3.1	4.0	3.2
33 I let the students present their work to the class	4.0	4.6	4.0	3.9
55 I let the students research for themselves	4.0	4.5	4.0	4.3
<u>Lenient</u>				
4 I give work that is too easy to do	4.0	1.9	1.0	2.1
10 I am lenient in marking work	2.0	1.9	2.0	2.9
28 I let the students work at a slow pace	2.0	2.9	4.0	2.8
32 I let the students make a lot of noise	3.0	2.9	2.0	2.4
39 I let the students fool around in class	3.0	2.0	2.0	2.1
45 I let the students get away with a lot in class	3.0	2.0	2.0	1.9
57 I let the students talk about anything in class	3.0	3.2	2.0	3.4

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Uncertain</u>				
34 I pretend not to notice when the students fool around	3.0	1.6	4.0	1.9
46 I act as if I don't know what to do	4.0	1.4	1.0	1.0
49 I seem uninterested in the subject	4.0	1.5	1.0	1.0
52 I let the students boss me around	3.0	1.2	1.0	1.4
58 I am not sure what to do when the students fool around	3.0	1.3	5.0	1.2
60 The students' attention wanders when I am talking	4.0	2.5	5.0	1.4
62 It is easy for students to make a fool out of me	2.0	1.2	1.0	1.2
63 It is easy for the students to pick a fight with me	1.0	1.2	1.0	1.1
<u>Dissatisfied</u>				
11 I think the students know very little	2.0	1.7	2.0	1.2
17 I put the students down	2.0	1.0	1.0	1.0
29 I appear dissatisfied with the students	2.0	1.2	1.0	1.0
35 I have a low opinion of the students	5.0	1.1	1.0	1.3
40 I am sarcastic	4.0	1.2	1.0	1.2
41 I get angry unexpectedly	4.0	1.3	5.0	1.2
47 I get angry quickly	5.0	1.1	5.0	1.1
59 I am impatient	2.0	1.2	1.0	1.1
<u>Authoritarian</u>				
12 The students have to be silent in my class	3.0	1.7	3.0	1.5
18 The students are afraid of me	4.0	1.2	1.0	1.3
24 The students need my permission before they speak	3.0	1.0	2.0	1.1
30 The students do not feel at ease to ask me questions	3.0	1.4	5.0	1.0
36 The students do not feel at ease to speak to each other in my class	4.0	1.0	4.0	1.3

CSQ profiles for Student Group Three.



T4a (Student Group Three) continued:

The statement of scale scores (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' scale scores for the Octagon profiles - within a range of 0 and 1

Scores: 0 indicates that the behaviours in the scale are *never* displayed
1 indicates that the behaviours in the scale are *always* displayed

T4a - STUDENT GROUP THREE

	ACTUAL PROFILES		IDEAL PROFILES	
	<u>Tutor</u>	<u>Students</u>	<u>Tutor</u>	<u>Students</u>
<u>Scale</u>				
High Standards	0.58	0.66	0.81	0.67
Leadership	0.63	0.59	0.88	0.90
Understanding	0.70	0.76	0.90	0.92
Learner Autonomy	0.41	0.55	0.61	0.60
Lenient	0.32	0.30	0.25	0.25
Uncertain	0.16	0.20	0.09	0.09
Dissatisfied	0.03	0.16	0.03	0.02
Authoritarian	0.50	0.14	0.15	0.12

T4a (Student Group Three) continued:

The breakdown of the individual statement ratings (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' responses to questions about actual tutor behaviour
(Students' responses are shown as a class average)

Scores: 1 = never; 5 = always

T4a - STUDENT GROUP THREE

High Standards

- 8 I expect the students to keep up with the demands of the course
- 22 I set a lot of homework
- 26 I assess the students' work fairly
- 42 I set hard work
- 48 My standards are high
- 51 I demand that work is handed in on time
- 54 I provide the students with useful feedback
- 61 It takes a lot of effort to do the work I set
- 64 I am disappointed, if the students don't do their best

Leadership

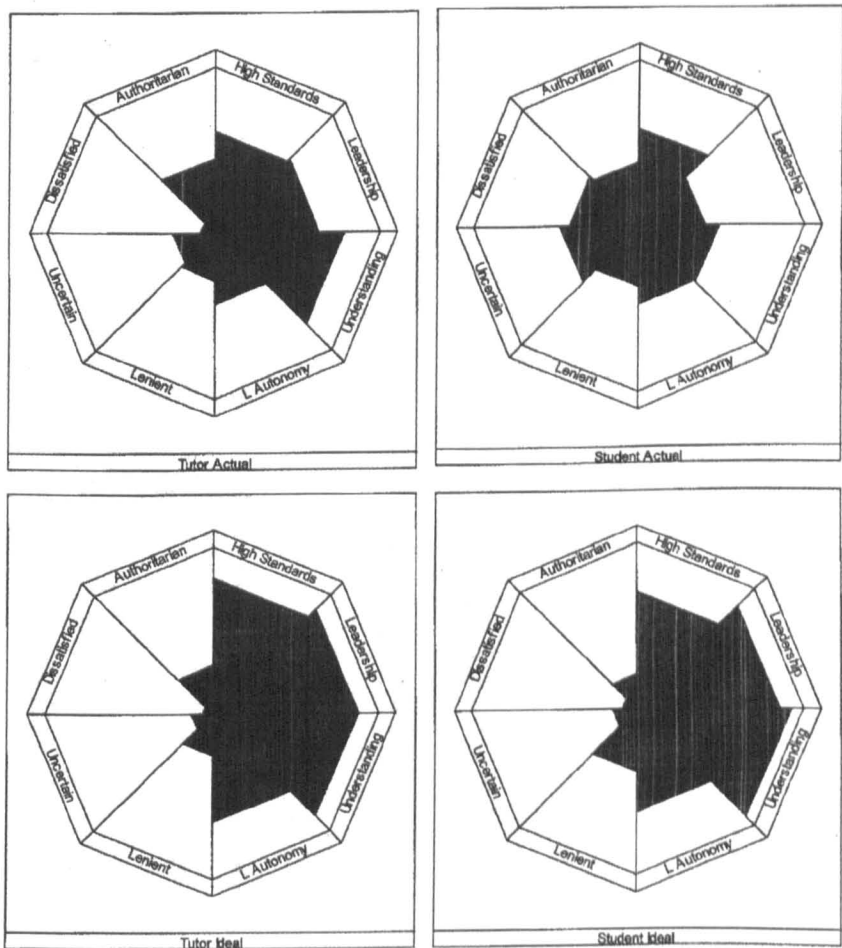
- 1 I talk enthusiastically about the subject
- 7 I explain things clearly
- 13 I hold the students' attention
- 19 I know everything that goes on in the room
- 25 I am well organized
- 31 I act confidently

Actual Scores		Ideal Scores	
Tutor	Students	Tutor	Students
4.0	4.5	5.0	4.4
1.0	3.0	3.0	2.3
4.0	4.5	5.0	5.0
2.0	2.9	2.0	2.5
4.0	3.9	5.0	4.5
5.0	3.4	5.0	3.6
4.0	4.5	5.0	4.8
4.0	2.6	4.0	2.8
5.0	3.4	4.0	3.3
4.0	3.8	5.0	4.6
4.0	3.6	5.0	5.0
4.0	3.3	5.0	4.9
2.0	2.1	2.0	3.4
3.0	3.6	5.0	4.9
4.0	3.9	5.0	4.8

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Understanding</u>				
2 I am friendly	4.0	4.6	5.0	4.6
14 I can take a joke	3.0	3.5	5.0	4.4
23 I am patient	4.0	4.0	5.0	4.9
37 I help the students with their work	5.0	3.9	5.0	4.1
38 I trust the students	4.0	3.8	4.0	4.8
43 I am someone the students can depend on	4.0	3.6	4.0	4.9
44 If the students disagree with me, we can talk about it	4.0	4.5	5.0	4.9
50 I am willing to explain things again	2.0	4.4	5.0	4.8
53 The students can talk to me about things other than work	3.0	3.3	3.0	4.6
56 If the students have something to say I will listen	5.0	4.8	5.0	4.8
<u>Learner Autonomy</u>				
3 I give the students opportunities to contribute their opinions	4.0	4.3	4.0	4.5
5 I give the students opportunities to share their views with each other	4.0	4.4	2.0	4.3
6 I expect the students to decide how they allocate their time to each topic	2.0	2.5	4.0	3.0
9 The students can change my mind	3.0	2.9	4.0	2.0
15 I allow the students to work at their own pace	2.0	3.4	4.0	4.1
16 I expect the students to assess their own work	2.0	2.4	3.0	2.9
20 I allow the students to assess each others' work	2.0	1.9	3.0	2.5
21 The students have the opportunity to choose the assignments they work on	2.0	2.0	4.0	3.3
27 I allow the students choice in what they study	2.0	3.1	4.0	3.1
33 I let the students present their work to the class	2.0	4.5	2.0	3.8
55 I let the students research for themselves	4.0	4.5	4.0	3.9
<u>Lentent</u>				
4 I give work that is too easy to do	3.0	2.3	2.0	1.8
10 I am lenient in marking work	2.0	2.3	4.0	1.5
28 I let the students work at a slow pace	2.0	2.9	2.0	2.6
32 I let the students make a lot of noise	2.0	2.1	1.0	2.3
39 I let the students fool around in class	3.0	1.5	1.0	1.6
45 I let the students get away with a lot in class	2.0	1.8	2.0	1.4
57 I let the students talk about anything in class	2.0	2.6	2.0	2.8

	Actual Scores		Ideal Scores	
	Tutor	Students	Tutor	Students
<u>Uncertain</u>				
34 I pretend not to notice when the students fool around	2.0	2.4	3.0	1.9
46 I act as if I don't know what to do	2.0	1.6	1.0	1.3
49 I seem uninterested in the subject	1.0	1.3	1.0	1.0
52 I let the students boss me around	1.0	1.4	1.0	1.6
58 I am not sure what to do when the students fool around	2.0	2.3	1.0	1.4
60 The students' attention wanders when I am talking	3.0	2.6	2.0	1.3
62 It is easy for students to make a fool out of me	1.0	1.6	1.0	1.4
63 It is easy for the students to pick a fight with me	1.0	1.3	1.0	1.3
<u>Dissatisfied</u>				
11 I think the students know very little	1.0	2.3	1.0	1.1
17 I put the students down	1.0	1.8	1.0	1.0
29 I appear dissatisfied with the students	2.0	2.5	2.0	1.1
35 I have a low opinion of the students	1.0	1.6	1.0	1.0
40 I am sarcastic	1.0	1.1	1.0	1.3
41 I get angry unexpectedly	1.0	1.3	1.0	1.0
47 I get angry quickly	1.0	1.0	1.0	1.0
59 I am impatient	1.0	1.6	1.0	1.0
<u>Authoritarian</u>				
12 The students have to be silent in my class	3.0	2.5	2.0	1.9
18 The students are afraid of me	2.0	1.0	1.0	1.0
24 The students need my permission before they speak	4.0	1.3	3.0	1.6
30 The students do not feel at ease to ask me questions	4.0	1.4	1.0	1.5
36 The students do not feel at ease to speak to each other in my class	2.0	1.8	1.0	1.4

CSQ profiles for Student Group Four.



T4a (Student Group Four) continued:

The statement of scale scores (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' scale scores for the Octagon profiles - within a range of 0 and 1

Scores: 0 indicates that the behaviours in the scale are *never* displayed
1 indicates that the behaviours in the scale are *always* displayed

T4a - STUDENT GROUP FOUR

	ACTUAL PROFILES		IDEAL PROFILES	
	<u>Tutor</u>	<u>Students</u>	<u>Tutor</u>	<u>Students</u>
<u>Scale</u>				
High Standards	0.61	0.59	0.81	0.70
Leadership	0.63	0.40	0.88	0.86
Understanding	0.78	0.49	0.88	0.93
Learner Autonomy	0.43	0.48	0.66	0.63
Lenient	0.29	0.37	0.25	0.38
Uncertain	0.25	0.48	0.13	0.15
Dissatisfied	0.09	0.42	0.06	0.09
Authoritarian	0.45	0.39	0.30	0.21

T4a (Student Group Four) continued:

The breakdown of the individual statement ratings (relevant issues highlighted in bold).

COMMUNICATION STYLES QUESTIONNAIRE

Tutor's and students' responses to questions about actual tutor behaviour
(Students' responses are shown as a class average)

Scores: 1 = never; 5 = always

T4a - STUDENT GROUP FOUR

High Standards

- 8 I expect the students to keep up with the demands of the course
- 22 I set a lot of homework
- 26 I assess the students' work fairly
- 42 I set hard work
- 48 My standards are high
- 51 I demand that work is handed in on time
- 54 I provide the students with useful feedback
- 61 It takes a lot of effort to do the work I set
- 64 I am disappointed, if the students don't do their best

Leadership

- 1 I talk enthusiastically about the subject
- 7 I explain things clearly
- 13 I hold the students' attention
- 19 I know everything that goes on in the room
- 25 I am well organized
- 31 I act confidently

Actual Scores		Ideal Scores	
Tutor	Students	Tutor	Students
4.0	4.2	4.0	4.4
1.0	2.2	3.0	2.6
4.0	2.8	5.0	4.8
2.0	2.8	4.0	3.0
4.0	3.4	4.0	4.3
4.0	3.8	5.0	4.4
4.0	2.9	5.0	4.7
4.0	3.6	4.0	2.1
4.0	3.5	4.0	3.9
4.0	3.2	5.0	4.5
4.0	2.8	5.0	4.8
3.0	1.5	5.0	4.8
2.0	2.1	2.0	2.7
4.0	3.0	5.0	4.9
4.0	3.0	5.0	4.8

	Actual Scores		Ideal Scores	
	Tutor	Students	Tutor	Students
Understanding				
2 I am friendly	4.0	3.8	4.0	4.7
14 I can take a joke	4.0	2.0	4.0	4.7
23 I am patient	5.0	3.2	5.0	4.2
37 I help the students with their work	5.0	3.2	5.0	4.6
38 I trust the students	4.0	2.7	5.0	4.6
43 I am someone the students can depend on	3.0	2.8	5.0	4.8
44 If the students disagree with me, we can talk about it	3.0	2.9	5.0	4.8
50 I am willing to explain things again	5.0	3.6	5.0	5.0
53 The students can talk to me about things other than work	3.0	1.9	2.0	4.5
56 If the students have something to say I will listen	5.0	3.5	5.0	5.0
Learner Autonomy				
3 I give the students opportunities to contribute their opinions	4.0	4.0	4.0	4.4
5 I give the students opportunities to share their views with each other	2.0	3.6	4.0	4.1
6 I expect the students to decide how they allocate their time to each topic	2.0	2.6	4.0	3.7
9 The students can change my mind	2.0	1.8	3.0	2.3
15 I allow the students to work at their own pace	3.0	2.9	3.0	4.1
16 I expect the students to assess their own work	3.0	3.1	3.0	3.0
20 I allow the students to assess each others' work	3.0	3.2	3.0	3.3
21 The students have the opportunity to choose the assignments they work on	3.0	1.3	4.0	3.0
27 I allow the students choice in what they study	3.0	2.0	4.0	3.3
33 I let the students present their work to the class	2.0	3.8	4.0	3.6
55 I let the students research for themselves	3.0	3.8	4.0	4.0
Lentent				
4 I give work that is too easy to do	2.0	2.8	1.0	2.0
10 I am lenient in marking work	2.0	2.5	2.0	2.8
28 I let the students work at a slow pace	2.0	2.3	2.0	2.8
32 I let the students make a lot of noise	3.0	2.5	2.0	2.5
39 I let the students fool around in class	2.0	2.5	2.0	2.1
45 I let the students get away with a lot in class	2.0	2.5	2.0	2.5
57 I let the students talk about anything in class	2.0	2.4	3.0	3.2

	<u>Actual Scores</u>		<u>Ideal Scores</u>	
	Tutor	Students	Tutor	Students
<u>Uncertain</u>				
34 I pretend not to notice when the students fool around	4.0	3.3	4.0	2.2
46 I act as if I don't know what to do	2.0	2.5	1.0	1.3
49 I seem uninterested in the subject	1.0	2.4	1.0	1.3
52 I let the students boss me around	1.0	2.2	1.0	1.3
58 I am not sure what to do when the students fool around	2.0	3.0	1.0	1.8
60 The students' attention wanders when I am talking	3.0	4.2	2.0	1.8
62 It is easy for students to make a fool out of me	2.0	3.0	1.0	1.7
63 It is easy for the students to pick a fight with me	1.0	2.6	1.0	1.3
<u>Dissatisfied</u>				
11 I think the students know very little	1.0	2.8	1.0	1.5
17 I put the students down	2.0	2.4	1.0	1.1
29 I appear dissatisfied with the students	2.0	3.4	3.0	1.5
35 I have a low opinion of the students	2.0	2.6	1.0	1.4
40 I am sarcastic	1.0	2.3	1.0	1.5
41 I get angry unexpectedly	1.0	2.6	1.0	1.5
47 I get angry quickly	1.0	2.5	1.0	1.2
59 I am impatient	1.0	2.8	1.0	1.2
<u>Authoritarian</u>				
12 The students have to be silent in my class	4.0	2.5	2.0	2.3
18 The students are afraid of me	3.0	1.9	1.0	1.2
24 The students need my permission before they speak	2.0	2.5	3.0	2.2
30 The students do not feel at ease to ask me questions	3.0	3.3	1.0	1.7
36 The students do not feel at ease to speak to each other in my class	2.0	2.5	4.0	1.8

APPENDIX 6

PHASE TWO - DATA COLLECTION INSTRUMENTS

Interview schedules and 'Stages of Change' questionnaire - Appendices 6.1 to 6.3

APPENDIX 6.1

Semi-structured interview schedule used with teachers in Phase Two

1. Motivation for using the CSQ as a tool for Self-directed Professional Development (SDPD)

What motivated you to use the CSQ for reflecting on how you communicate with your students?

To what extent have you undertaken SDPD since becoming a teacher?

(What were these experiences?

What were the characteristics of the successful occasions?

What was important to you about these characteristics?

What made any occasions unsuccessful?

In what ways were these unsuccessful?

To what extent do you feel you are developing professionally?)

In what ways do your colleagues get involved in SDPD?

(To what extent do you and your colleagues discuss and devise ways of improving in teaching & learning?

Under what circumstances does this happen?

What happens?

Has this always been the case? What used to happen?

What brought about the change?

How do you feel about this?

What would you like to happen?

How realistic is this?

If your colleagues had the opportunity to use the CSQ, what do you think their reactions would be?)

How does your institution encourage SDPD?

(Identify your needs?

Policy?

Publicity?

Structure?

Products/ packages/ courses?

Finance?

Time?

Support?

Who encourages?

Who can undertake?

How do you feel about this in relation to your own aims for professional development?)

2. Experience of using the CSQ

What kind of experience has this been for you?

(In what ways has it been useful/not useful etc.

How has that been important/ valuable to you?)

What has this experience involved for you? thoughts, feelings, actions?

Can you talk me through your experience from when you first heard about the CSQ to now?

What would you pass on to others that was worthwhile or interesting, provided ideas or insights, was a positive experience?

What would you think others would find less helpful/ useful?

What has this experience meant to you?

What impact has the CSQ experience had on you generally?)

How would you describe your students' role in this process?

(In what ways do you feel your students contributed to your process of reflection?

What influence did your students' views have in determining your subsequent actions?

What specifically did you take account of from your students views?

How did you decide on this?

What kind of experience do you think this has been for your students?

In what ways has it been good/ bad etc?

How have you perceived this?

To what extent do you feel students should be involved in the development of teaching and learning?

In what ways? How do you think this should be achieved?)

How have you perceived the role of the researchers in this process of reflection and development?

(To what extent did their involvement impact on your process of reflection and development?

In what ways?

With what effect?)

What impact, if any, has participating without colleagues had on your reflection and development?

(What difference might the involvement of colleagues have made?

Would this have been important to you?

In what ways?)

To what extent did the CS model (dimensions of control and warmth) relate to your approach to teaching and learning?

(What impact did this have on your process of reflection and decision making?)

3. Development Activities

What was your initial response to the feedback from the CSQ?

(What happened next?)

What actions, if any, have you taken as a result of your participation and reflection?

(When did you take these actions?

What was appropriate about the timing of the action?)

What prompted you to develop X aspect of your Communication Style (CS)?

(What were the advantages of developing X?

What were the disadvantages of keeping things as they were?

What were the disadvantages of developing X?

What were the advantages of keeping things as they were?

What impact have these developments had?

On whom?

When?

How have you been monitoring/ assessing the effect of implementing these actions?

Did you consider implementing other activities besides X?

What?

What led you to discard the alternatives?

OR

Would you have liked to have considered alternatives?

What stopped you?

What would have helped?

To what extent was X a safe or risky action to take?

In what ways?)

What did you take into consideration when deciding what action to take?

(What do you feel affected your decision making in this process?

How have you handled/ dealt with these issues?

Are these factors the same or different from those involved in your every day decision making processes concerning teaching and learning?)

What do you consider to be the outcomes of your participation?

4. Evaluation of CSQ experience as a SDPD tool

In what ways, if at all, do you feel this experience has specifically contributed to your professional development?

(How are these important to you?)

How have these outcomes compared with your initial expectations?

(What did you initially hope to achieve?

In what ways have your expectations been fulfilled?

What helped you to achieve your expectations?

In what ways has it failed to live up to your initial expectations?

What hindered the achievement of your expectations?

What could have helped you to achieve your expectations?

Have your expectations been exceeded in any ways?)

What helped and hindered this whole process of reflection and development?

(How have you responded to these matters?

How have you been able to participate to the extent that you have?

Would you have liked to have taken things further?

Such as?

What stopped this?

Is this often the case when you want to develop professionally?)

Would anything else have been useful to you during this experience?

(What advice would you give the researchers in order to improve the experience for others who use the CSQ?

What difference might this have made to your experience?)

5. SDPD views, attitude, culture

What does the term 'self-directed professional development' mean to you?

In what ways is the kind of SDPD you have described important to you?

Where are you going from here in your SDPD?

(What plans do you have in place?

How would you like to shape your professional development?

What aspects would/ do you seek to develop?

In what ways are these important to you?

When do you hope/would you like to accomplish this?

What do you need to help you achieve your aims?

Is it available?

How? Where? Who? When?

What needs to happen to make these things available?

What responsibility should your institution take in respect of encouraging SDPD?

Generally, to what extent do you think you are developing professionally?

What leads you to this observation?

To what extent are you satisfied with this?)

What do you feel influences the ways and extent to which you can undertake SDPD?

(In what ways do these affect participation/ continuation?

Does anything encourage you to undertake SDPD?

What?

How?

Does anything deter you from undertaking SDPD?

What?

How?

What do you feel needs to happen to enable you to undertake SDPD?

What constrains this?

To what extent are you able to undertake SDPD without impinging on other areas of your life?

How are you able to do this?

How do you deal with this?

How do you feel about this?

What do you need to successfully undertake SDPD?

For you, what would be the ideal format for undertaking SDPD?)

APPENDIX 6.2

Semi-structured interview schedule used with facilitators in Phase Two

1. College use of the CSQ as a tool for Self-directed Professional Development (SDPD)

How had the CSQ come to be used in the college?

What expectations did the college have of the use of the CSQ by its staff?

How was the college supporting and encouraging a wider use of the CSQ?

2. Administration of the CSQ to individual teachers

How had the CSQ been administered to individual teachers and the results followed up?

What actions, if any, had the participants taken in response to their CSQ results and discussions?

3. The role of facilitators

How had their role as administrators and facilitators of the CSQ been received by the participants?

4. Future use of the CSQ

What suggestions did they have to improve the experience for others?

APPENDIX 7

PHASE THREE - REPERTORY GRID, PILOT STUDY ONE

Repertory Grid materials and instructions -

Appendices 7.1 to 7.3

APPENDIX 7.1

Instructions for completing the ‘actual’ and ‘ideal’ Repertory Grids used in Pilot Study One, Phase Three.

This questionnaire requests your views in respect of directing your own professional development.

You are asked to rate each of four characteristics related to self-directed professional development, on a range of statements which the Communication Styles of Teachers research has found influences professional development. The characteristics are:

Your evaluation (observation) of yourself and your professional activities for the purposes of your self-directed professional development;

Your reflection on yourself and your professional activities for the purposes of your self-directed professional development;

Planning for the purposes of your self-directed professional development;

The implementation of ideas for the purposes of your self-directed professional development;

The rating is on a 5 point scale, as follows:

Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree

The questionnaire is in two parts. One relates to the characteristics as they relate to your **present situation**. The other to the characteristics as you would like them to relate to your **ideal situation**.

Please turn over this page.

APPENDIX 7.2

The 'actual' Repertory Grid used in Pilot Study One, Phase Three.

This part of the questionnaire refers to your views in respect of each characteristic as it relates to you directing your professional development in your **present situation**.

Each characteristic has been allocated its own page and is highlighted at the top of the page. It is then followed by 18 statements.

Please read each statement in light of the characteristic mentioned at the top of the page and then place a tick in the box which relates most closely to your view.

Please turn over to the next page.

In my present situation, my evaluation (observation) of myself and my professional activities for the purposes of directing my professional development:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
is catalysed by discussing with students those matters of my professional activities that are relevant to them					
is promoted actively by those in authority in the university					
is constrained by inadequate facilities and resources (e.g. rooms, equipment, materials, texts etc.)					
is frustrated by insufficient time provided at work to fit it in					
is encouraged by my immediate management					
is guided by having a mentor as a sounding board					
is motivated by belonging to a group or network of people who understand what I'm trying to do in my professional activities or development					
is directed by my use of an instrument that pinpoints specific issues for consideration					
is stimulated by discussing with colleagues experiences of or insights into professional activities and development					
is prevented by the prescriptive nature (e.g. syllabus/ assessment criteria/ length) of the courses I teach					
is aided by the university providing regular appraisals to explore options for professional development					
is hindered by a lack of follow-up or feedback on my professional activities and development					
is helped by those responsible for professional development within the university actively seeking, on my behalf, suitable opportunities for my professional development					
is limited by the definition the university has of what constitutes professional development					
is restricted by the funds available from the university to finance my professional development activities					
is difficult when changes (e.g. curriculum, term length, inspection, personal circumstances) to established routines are taking place					
benefits from having someone to talk things through with					
is supported by the existence within the university of a well structured system for staff development					

In my present situation, reflection for the purposes of directing my professional development:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
is catalysed by discussing with students those matters of my professional activities that are relevant to them					
is promoted actively by those in authority in the university					
is constrained by inadequate facilities and resources (e.g. rooms, equipment, materials, texts etc.)					
is frustrated by insufficient time provided at work to fit it in					
is encouraged by my immediate management					
is guided by having a mentor as a sounding board					
is motivated by belonging to a group or network of people who understand what I'm trying to do in my professional activities or development					
is directed by my use of an instrument that pinpoints specific issues for consideration					
is stimulated by discussing with colleagues experiences of or insights into professional activities and development					
is prevented by the prescriptive nature (e.g. syllabus/ assessment criteria/ length) of the courses I teach					
is aided by the university providing regular appraisals to explore options for professional development					
is hindered by a lack of follow-up or feedback on my professional activities and development					
is helped by those responsible for professional development within the university actively seeking, on my behalf, suitable opportunities for my professional development					
is limited by the definition the university has of what constitutes professional development					
is restricted by the funds available from the university to finance my professional development activities					
is difficult when changes (e.g. curriculum, term length, inspection, personal circumstances) to established routines are taking place					
benefits from having someone to talk things through with					
is supported by the existence within the university of a well structured system for staff development					

In my present situation, planning for the purposes of directing my professional development:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
is catalysed by discussing with students those matters of my professional activities that are relevant to them					
is promoted actively by those in authority in the university					
is constrained by inadequate facilities and resources (e.g. rooms, equipment, materials, texts etc.)					
is frustrated by insufficient time provided at work to fit it in					
is encouraged by my immediate management					
is guided by having a mentor as a sounding board					
is motivated by belonging to a group or network of people who understand what I'm trying to do in my professional activities or development					
is directed by my use of an instrument that pinpoints specific issues for consideration					
is stimulated by discussing with colleagues experiences of or insights into professional activities and development					
is prevented by the prescriptive nature (e.g. syllabus/ assessment criteria/ length) of the courses I teach					
is aided by the university providing regular appraisals to explore options for professional development					
is hindered by a lack of follow-up or feedback on my professional activities and development					
is helped by those responsible for professional development within the university actively seeking, on my behalf, suitable opportunities for my professional development					
is limited by the definition the university has of what constitutes professional development					
is restricted by the funds available from the university to finance my professional development activities					
is difficult when changes (e.g. curriculum, term length, inspection, personal circumstances) to established routines are taking place					
benefits from having someone to talk things through with					
is supported by the existence within the university of a well structured system for staff development					

In my present situation, the implementation of plans in respect of directing my professional development:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
is catalysed by discussing with students those matters of my professional activities that are relevant to them					
is promoted actively by those in authority in the university					
is constrained by inadequate facilities and resources (e.g. rooms, equipment, materials, texts etc.)					
is frustrated by insufficient time provided at work to fit it in					
is encouraged by my immediate management					
is guided by having a mentor as a sounding board					
is motivated by belonging to a group or network of people who understand what I'm trying to do in my professional activities or development					
is directed by my use of an instrument that pinpoints specific issues for consideration					
is stimulated by discussing with colleagues experiences of or insights into professional activities and development					
is prevented by the prescriptive nature (e.g. syllabus/ assessment criteria/ length) of the courses I teach					
is aided by the university providing regular appraisals to explore options for professional development					
is hindered by a lack of follow-up or feedback on my professional activities and development					
is helped by those responsible for professional development within the university actively seeking, on my behalf, suitable opportunities for my professional development					
is limited by the definition the university has of what constitutes professional development					
is restricted by the funds available from the university to finance my professional development activities					
is difficult when changes (e.g. curriculum, term length, inspection, personal circumstances) to established routines are taking place					
benefits from having someone to talk things through with					
is supported by the existence within the university of a well structured system for staff development					

APPENDIX 7.3

The 'ideal' Repertory Grid used in Pilot Study One, Phase Three.

This part of the questionnaire refers to your views in respect of each characteristic were you to find yourself directing your professional development in an **ideal situation**.

Each characteristic has been allocated its own page and is highlighted at the top of the page. It is then followed by 18 statements.

Please read each statement in light of the characteristic mentioned at the top of the page and then place a tick in the box which relates most closely to your view.

Please turn over to the next page.

In an ideal situation, my evaluation (observation) of myself and my professional activities for the purposes of directing my professional development:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
would be catalysed by discussing with students those matters of my professional activities that are relevant to them					
would be promoted actively by those in authority in the university					
would not be constrained if adequate facilities and resources (e.g. rooms, equipment, materials etc.) were available					
would not be frustrated if sufficient time were provided at work to fit it in					
would be encouraged by my immediate management					
would be guided by having a mentor as a sounding board					
would be motivated by belonging to a group or network of people who understand what I am trying to do in my professional activities or development					
would be directed by my use of an instrument that pinpoints specific issues for consideration					
would be stimulated by discussing with colleagues experiences of or insights into professional activities and development					
would not be prevented if the nature (e.g. syllabus/ assessment criteria/ length) of the courses I taught were not prescriptive					
would be aided by the university providing regular appraisals to explore options for professional development					
would not be hindered if I received follow-up or feedback on my professional activities and development					
would be helped by those responsible for professional development within the university actively seeking out, on my behalf, suitable opportunities for my professional development					
would not be limited by the university's definition of what constitutes professional development					
would not be restricted if the university made funds available to finance my professional development activities					
would not be difficult when changes (e.g. curriculum, term length, inspection, personal circumstances) to established routines are taking place					
would benefit from having someone to talk things through with					
would be supported by the existence within the university of a well structured system for staff development					

In an ideal situation, reflection for the purposes of directing my professional development:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
would be catalysed by discussing with students those matters of my professional activities that are relevant to them					
would be promoted actively by those in authority in the university					
would not be constrained if adequate facilities and resources (e.g. rooms, equipment, materials etc.) were available					
would not be frustrated if sufficient time were provided at work to fit it in					
would be encouraged by my immediate management					
would be guided by having a mentor as a sounding board					
would be motivated by belonging to a group or network of people who understand what I am trying to do in my professional activities or development					
would be directed by my use of an instrument that pinpoints specific issues for consideration					
would be stimulated by discussing with colleagues experiences of or insights into professional activities and development					
would not be prevented if the nature (e.g. syllabus/ assessment critical/ length) of the courses I taught were not prescriptive					
would be aided by the university providing regular appraisals to explore options for professional development					
would not be hindered if I received follow-up or feedback on my professional activities and development					
would be helped by those responsible for professional development within the university actively seeking out, on my behalf, suitable opportunities for my professional development					
would not be limited by the university's definition of what constitutes professional development					
would not be restricted if the university made funds available to finance my professional development activities					
would not be difficult when changes (e.g. curriculum, term length, inspection, personal circumstances) to established routines are taking place					
would benefit from having someone to talk things through with					
would be supported by the existence within the university of a well structured system for staff development					

In an ideal situation, planning for the purposes of directing my professional development:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
would be catalysed by discussing with students those matters of my professional activities that are relevant to them					
would be promoted actively by those in authority in the university					
would not be constrained if adequate facilities and resources (e.g. rooms, equipment, materials etc.) were available					
would not be frustrated if sufficient time were provided at work to fit it in					
would be encouraged by my immediate management					
would be guided by having a mentor as a sounding board					
would be motivated by belonging to a group or network of people who understand what I am trying to do in my professional activities or development					
would be directed by my use of an instrument that pinpoints specific issues for consideration					
would be stimulated by discussing with colleagues experiences of or insights into professional activities and development					
would not be prevented if the nature (e.g. syllabus/ assessment criteria/ length) of the courses I taught were not prescriptive					
would be aided by the university providing regular appraisals to explore options for professional development					
would not be hindered if I received follow-up or feedback on my professional activities and development					
would be helped by those responsible for professional development within the university actively seeking out, on my behalf, suitable opportunities for my professional development					
would not be limited by the university's definition of what constitutes professional development					
would not be restricted if the university made funds available to finance my professional development activities					
would not be difficult when changes (e.g. curriculum, term length, inspection, personal circumstances) to established routines are taking place					
would benefit from having someone to talk things through with					
would be supported by the existence within the university of a well structured system for staff development					

In an ideal situation, the implementation of plans for the purpose of furthering my professional development:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
would be catalysed by discussing with students those matters of my professional activities that are relevant to them					
would be promoted actively by those in authority in the university					
would not be constrained if adequate facilities and resources (e.g. rooms, equipment, materials etc.) were available					
would not be frustrated if sufficient time were provided at work to fit it in					
would be encouraged by my immediate management					
would be guided by having a mentor as a sounding board					
would be motivated by belonging to a group or network of people who understand what I am trying to do in my professional activities or development					
would be directed by my use of an instrument that pinpoints specific issues for consideration					
would be stimulated by discussing with colleagues experiences of or insights into professional activities and development					
would not be prevented if the nature (e.g. syllabus/ assessment criteria/ length) of the courses I taught were not prescriptive					
would be aided by the university providing regular appraisals to explore options for professional development					
would not be hindered if I received follow-up or feedback on my professional activities and development					
would be helped by those responsible for professional development within the university actively seeking out, on my behalf, suitable opportunities for my professional development					
would not be limited by the university's definition of what constitutes professional development					
would not be restricted if the university made funds available to finance my professional development activities					
would not be difficult when changes (e.g. curriculum, term length, inspection, personal circumstances) to established routines are taking place					
would benefit from having someone to talk things through with					
would be supported by the existence within the university of a well structured system for staff development					

APPENDIX 8

PHASE THREE - REPERTORY GRID, PILOT STUDY TWO

Repertory Grid contents and instructions - Appendix 8.1

APPENDIX 8.1

Instructions and Repertory Grid used in Pilot Study Two, Phase Three.

Please rate each person against each statement on a scale between 7 (Emergent) and 1 (Contrast)

	Lecturer	Demonstrator	Technician	Computer Officer	Researcher	Manager	Students	Emergent (7)	Contrast (1)
								can suggest choices for practical workshops	cannot suggest choices for practical workshops
								will support students in their group work	will not support students in their group work
								is able to set up the additional information on the psychology website	is unable to set up the additional information on the psychology website
								will assist the students with their data collection and analysis	will not assist the students with their data collection and analysis
								can encourage students to participate in question and answer sessions	cannot encourage students to participate in the question and answer sessions
								will give in advance the plan of the lecture and practical	will not give in advance the plan of the lecture and practical
								can contribute to the preparation of more detailed handouts	cannot contribute to the preparation of more detailed handouts
								can help to outline the key points of sessions or topics	cannot help outline key points of sessions or topics
								can encourage to ask for more explanations	cannot encourage to ask for more explanations

APPENDIX 9

PHASE THREE - Q SORT, PILOT STUDY THREE

Q Sort statements, procedures and recording chart -

Appendices 9.1 to 9.4

APPENDIX 9.1

The twenty-eight statements which formed the Q-Sort set used in Pilot Study Three, Phase Three.

- a** Active promotion of professional development by those in authority in my college/ school/ university
- b** Recognition of professional development by the college/ school/ university as being as important as the delivery of courses
- c** Freedom to determine the areas I want to develop
- d** Time during the workday to engage in professional development activities (e.g. courses, conferences, training, studying etc.)
- e** Time during the workday to explore and apply ideas arising from professional development activities
- f** Time during the workday to plan the development of my professional activities
- g** Time during the workday to reflect on my professional activities
- h** Time during the workday to assess the impact of my professional development on student learning
- i** Feedback from students on how I am doing from their perspectives
- j** Discussions with students about their learning experience to increase my awareness of their views and needs
- k** Feedback, other than from students, on my professional activities
- l** Regular evaluations of the courses I teach
- m** Regular appraisals to explore options for my professional development
- n** Personal or video observations of my classroom interaction with the students

- o** Follow-up on my professional development
- p** A staff development department that actively seeks out suitable development opportunities on my behalf
- q** A well structured and co-ordinated system for staff development within my college/ school/ university
- r** Sharing with colleagues experiences and ideas about teaching and learning
- s** A mentor to act as a sounding board
- t** Someone/ group/ network who understands and supports what I am trying to do in my professional activities or development
- u** Someone within the college/ school/ university to talk to about my professional activities and development
- v** Someone outside the college/ school/ university to talk to about my professional activities and development
- w** Encouragement and support from my immediate line manager for my professional development
- x** Encouragement and support from those above my immediate line manager for my professional development
- y** A diagnostic tool or instrument to pinpoint specific issues to consider for professional development
- z** Costs for any development activities being met by the college/ school/ university rather than myself
- aa** The courses I teach having a less prescriptive nature (e.g. syllabus/ assessment criteria/ outcomes/ length etc.)
- bb** An improvement in the provision of resources and facilities (e.g. rooms/ equipment/ materials etc.) to facilitate better teaching and learning

APPENDIX 9.2

Instructions for the 'Initial' Q-Sort procedure used in Pilot Study Three, Phase Three.

Initial Sort:

The following statements have been identified by tutors using the CSQ as factors which help teachers develop professionally with regard to improving student learning. I would like you to read through these statements in order to get a broad impression of their overall content. At the same time, in relation to your own professional development with regard to improving student learning, please sort them into 3 roughly equal groupings as follows:

- (1) statements that you consider MOST ESSENTIAL for your professional development with regard to improving student learning
- (2) statements that you consider LEAST ESSENTIAL for your professional development in respect of improving student learning
- (3) the remainder

APPENDIX 9.3

Instructions for the 'Progressive' Q-Sort procedure used in Pilot Study Three, Phase Three.

Progressive Sort:

- a) Could you now please spread out those statements you consider 'most essential', and select the 2 that you regard as 'the most essential'.
- b) Could you now please spread out those statements you consider 'least essential' and select the 2 that you regard as 'the least essential'.
- c) Could you return to those statements you consider 'most essential' and select those 3 that you regard as 'the next most essential'.
- d) Could you now please return to those statements you consider 'least essential' and select those 3 that you regard as 'the next least essential'.
- e) Could you now please return to those statements you consider 'most essential' and select the 3 that you regard as 'the next most essential'.
- f) Could you now please return to those statements you consider 'least essential' and select the 3 that you regard as 'the next least essential'.
- g) From the remaining statements could you please now select the X that you regard as 'the next most essential'.
- h) From the remaining statements could you please now select the X that you regard as 'the next least essential'.

APPENDIX 9.4

Chart used to record participants' responses (statement code letter) in the Q-Sort procedure used in Pilot Study Three, Phase Three.

least essential (initial sort in capitals)									most essential (initial sort in capitals)	
-4	-3	-2	-1	0	+1	+2	+3	+4		
(2)									(2)	
	(3)	(3)				(3)	(3)			
			(4)	(4)	(4)					

Participant's Name:

APPENDIX 10

PHASE THREE - Q SORT, MAIN STUDY

Q Sort statements, procedures and recording chart -

Appendices 10.1 to 10.4

APPENDIX 10.1

The twenty-five statements which formed the Q-Sort set used in the Main Study, Phase Three.

- a** Active promotion of professional development by those in authority in my college/ school/ university
- b** Recognition of professional development by the college/ school/ university as being as important as the delivery of courses
- c** Freedom to determine the areas I want to develop
- d** Time during work hours to engage in professional development activities (e.g. courses, conferences, training, studying etc.)
- g** Time during work hours to consider (i.e. reflect on, plan, execute, review) the development of my professional activities
- i** Feedback from students on how I am doing from their perspectives
- j** Discussions with students about their learning experience to increase my awareness of their views and needs
- k** Feedback, other than from students, on my professional activities
- l** Regular evaluations of the courses I teach
- m** Regular appraisals to explore options for my professional development
- n** Observations (teaching or video) of my classroom interaction with the students
- o** Follow-up on my professional development
- p** A staff development department that actively seeks out suitable development opportunities on my behalf

- q** A well structured and co-ordinated system for staff development within my college/ school/ university
- r** Sharing with colleagues experiences and ideas about teaching and learning
- s** A mentor to act as a sounding board
- t** Someone/ group/ network who understands and supports what I am trying to do in my professional activities or development
- u** Someone within the college/ school/ university to talk to about my professional activities and development
- v** Someone outside the college/ school/ university to talk to about my professional activities and development
- w** Encouragement and support from my immediate line manager for my professional development
- x** Encouragement and support from those above my immediate line manager for my professional development
- y** A diagnostic tool (e.g. course evaluation/ CSQ/ self-assessment questionnaire etc.) to pinpoint specific issues to consider for professional development
- z** Costs for any development activities to be met by the college/ school/ university rather than myself
- aa** The courses I teach having a less prescriptive nature (e.g. syllabus/ assessment criteria/ outcomes/ length etc.)
- bb** An improvement in the provision of resources and facilities (e.g. rooms/ equipment/ library/ materials/ IT etc.) to facilitate better teaching and learning

APPENDIX 10.2

Instructions for the 'Initial' Q-Sort procedure used in the Main Study, Phase Three.

Initial Sort:

The following 25 statements have been identified by tutors using the CSQ as factors which help teachers develop professionally with regard to improving student learning. I would like you to read through these statements in order to get a broad impression of their overall content. At the same time, in relation to your own professional development with regard to improving student learning, please sort them into 3 roughly equal groupings as follows :

1. statements that you consider, in an ideal situation, **MOST ESSENTIAL** for your professional development with regard to improving student learning
2. statements that you consider, in an ideal situation, **LEAST ESSENTIAL** for your professional development in respect of improving student learning
3. the remainder which are between the two

The letter in the right hand corner of each card is purely a code for each statement for my record purposes.

APPENDIX 10.3

Instructions for the 'Progressive' Q-Sort procedure used in the Main Study, Phase Three.

Progressive Sort:

- a) Could you now please spread out those statements you consider 'most essential', and select the 2 that you regard as 'the most essential'.
- b) Could you now please spread out those statements you consider 'least essential' and select the 2 that you regard as 'the least essential'
- c) Could you return to those statements you consider 'most essential' and select those 2 that you regard as 'the next-most essential'
- d) Could you now please return to those statements you consider 'least essential' and select those 2 that you regard as 'the next-least essential'
- e) Could you now please return to those statements you consider 'most essential' and select the 3 that you regard as the 'the next-most essential'
- f) Could you now please return to those statements you consider 'unessential' and select the 3 that you regard as 'the next-least essential'
- g) From the remaining statements could you please now select the X that you regard as 'the next-most essential'
- h) From the remaining statements could you please now select the X that you regard as 'the next-least essential'

APPENDIX 10.4

Chart used to record participants' responses (statement code letters) to the Q-Sort procedure used in the Main Study, Phase Three.

least essential (initial sort in capitals)									most essential (initial sort in capitals)	
-4	-3	-2	-1	0	+1	+2	+3	+4		
(2)									(2)	
	(2)	(3)	(3)		(3)	(3)	(2)			
				(5)						

Participants Name:

APPENDIX 11

PHASE THREE - DISSEMINATION PROCESS

Dissemination questionnaire - Appendix 11.1

APPENDIX 11.1

Questionnaire requesting feedback, which formed part of the dissemination process in Phase Three and accompanied details sent to participants of the findings to Phases Two and Three.

Please complete and return in the SAE provided.

WHO GETS INVOLVED IN SELF-DIRECTED PROFESSIONAL DEVELOPMENT

Consider your department. To what extent are the portraits of 'Perpetuals', 'Intermittents' and 'Dormants' descriptions of colleagues' attitudes & actions in respect of professional development?

What proportion/ percentage of each type would you say are represented in your department?

Perpetuals

Intermittents

Dormants

If institutions do comprise 'Perpetuals', 'Intermittents' and 'Dormants' what are the implications for engaging more people in professional development?

FACTORS INFLUENCING REFLECTION AND DEVELOPMENT

How can factors that hinder professional development directed towards improving teaching and learning be dealt with?

How can factors which facilitate professional development directed towards improving teaching and learning be put in place?

CONTRIBUTIONS FROM OTHERS INVOLVED IN THE REFLECTIVE PROCESS

To what extent do you agree or disagree with the contributions ascribed to each of the groups (external facilitators, colleagues/peers, students) involved in the CSQ process?

What, in your experience with the CSQ, would you say has helped your process of reflection and development along?