TOWARDS DEVELOPING A QUALITATIVE PERSPECTIVE OF
STUDENT FL TEACHERS' KNOWLEDGE, ITS ORIGINS,
DEVELOPMENT AND RELATIONSHIP TO PRACTICE

by

Gloria Gutiérrez Almarza

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VOLUME I

ESOL Department
University of London
Institute of Education
20, Bedford Way
London, WC1
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To my father and my mother
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Organization of this work

This work is composed of two volumes. Volume I includes from chapter one to chapter five. Volume two gathers the appendices which complement the text in the first volume.

Chapter one presents an overview of the theoretical and methodological assumptions which underlie this work. It also introduces the motivations, aims and objectives which inspired it.

Chapter two looks at the relevant literature. It explores the origins of research on teachers' thinking, teachers' knowledge and teachers' socialization and their contribution to teaching and teacher education. This review reveals the current lack of research on FLTE and a disregard for the personal contributions of the learners of teaching to the understanding of teachers' development processes.

Chapter three presents the methodological process followed to carry out this study. It considers methodology from a broad perspective, involving epistemological and technical decisions.

In chapter four, four individual case studies and a cross case-study are presented in order to examine how students learn to teach a foreign language.

Chapter five discusses the research findings presented in chapter four and offers some implications that can be drawn from them for the education of student teachers.
Abbreviations

B/B: blackboard
C: Class
E2L: English as a second language
FL: Foreign Language
FLTE: Foreign Language Teacher Education
FPO: Further Professional Options
I. Methodology: Institution methodology
LA: Language Acquisition
L1: First language
L2: Second language
MLD: Modern Language Department
MT: Mother tongue
P: Pupil
PGCE: Postgraduate Certificate of Education
PP: Pupils
Q/A: question and answer
SLA: second language acquisition
SMK: subject matter knowledge
SR: Stimulated Recall
T: Teacher
TE: Teacher Education
TP: Teaching Practice
TT: Teacher Training
W/S: worksheet
SYNOPSIS

The knowledge that teachers have about content, about the way content is learned and taught influences the way they teach. But because teachers' knowledge is difficult to access, it has remained under-researched. A review of FLTE literature reveals a persistent failure to address the issue of teachers' knowledge from the teachers' own perspective, to study how pre-training knowledge, accumulated by years of language learning in formal and informal situations, might influence student teachers' learning process during preservice TE and to analyse the relationships between knowledge and teaching. This thesis argues that to improve the quality of TE we should track the ideas that student teachers have at different stages of the programme and the way these ideas influence the way they teach. It focuses on the student teachers' point of view and provides a detailed analysis of their knowledge, its origins, content at different stages during the programme and the relationship of knowledge to teaching.

A series of qualitative techniques (interviews, journals, classroom observations and Stimulated Recall techniques) were used to study the content of the knowledge during preservice programme. Data analysis was a dynamic balance between induction and deduction. While the main analytical categories (knowledge about language, knowledge about language learning and about language teaching) were theoretically derived, the individual content of these was inductively derived from the data. Within each of these general categories changes were analysed at different stages in the TE programme so that each student teacher's developmental process could be described and the different strands of knowledge on which they draw when they teach could be traced.

The results map the specificity of the content of student teachers' knowledge and the way they draw on different kinds of knowledge when they teach. A cross-case study looks for shared trends.

These results have important implications for the content and the process of TE programmes.
Chapter 1. Introduction to the Research Problems, Motivations, Assumptions and Aims of the Research

We play school. Grace has a couple of chairs and a wooden table in her cellar, and a small blackboard and chalk...Grace is the teacher, Carol and I the students. We have to do spelling tests and sums in arithmetic; it is like real school, but worse, because we never get to draw pictures. We cannot pretend to be bad, because Grace doesn't like disorder. (Atwood, M. 1990: 53)

1.1 Introduction

There is a double purpose to this chapter. Firstly, at a general level, it aims to offer an outline of the theoretical and methodological aspects of this project which will then be presented in detail in the chapters to follow. Secondly and more specifically, it seeks to make explicit the motivations and theoretical and epistemological assumptions which led to the formulation of the research objectives.

In general terms, it can be said that there is great concern amongst different authors that the teaching profession still lacks a structure of knowledge which will explain and direct it. Research has not yet offered enough information to elaborate a general theory of teaching (Marcelo, 1989: 10). More specifically, we cannot claim that we know how pupils learn a foreign language in formal settings or how good teachers teach. Though some research has been carried out on the performance and interaction of teachers, both in reference to specific curricular areas (Spada, 1990
Assumptions, Motivations and Aims of the Research

and Rees 1989) in FL and in general terms (Dunkin and Biddle, 1974) the results are far from generalisable and difficult to translate into knowledge, skills, or attitudes to be developed during pre-service teacher training programmes. Although TE courses can be based on research on teaching (Freeman, 1989), few are based on the process of learning to teach. Consequently it seems that there is some justification for conducting research on the actual processes of how teachers learn to teach their subject matters.

If we draw an analogy between foreign language learning and learning how to teach we can say that in both instances we know, to a certain extent, what we should be aiming for. In the first case for a competent use of the target language. In the second, for expertise in teaching. Yet, we still do not know, for certain, how the two processes take place. In this project I will try to map out some of the features of the process of becoming a FL teacher.

This study is not about the content or structure of a particular TE programme nor is it about what student teachers should know or how they should perform while teaching. This study is not meant to evaluate student teachers practice according to a set of predefined criteria, nor is it meant to be an assessment of the knowledge they have about teaching and learning a FL. Rather it aims to uncover some of the issues that characterize the process of learning to teach a FL, more specifically the origin and content of student teachers' knowledge, the changes it undergoes during an initial TE course and how it relates to the way they teach during TP. The study draws on teacher socialization studies which view pretraining learning experiences as an important contribution to the origin of teachers' knowledge. It also draws on the assumptions of research on teachers' thinking and particularly on teachers' knowledge. The next sections present some of the issues of relevance to TE and to this project.

1.2 Learning to teach

There are two main dimensions involved in becoming a teacher: the process student teachers go through and the content or what they are supposed to learn.
1.2.1 The process of TE

Teachers' thinking researchers and cognitive psychologists understand the process of becoming a teacher as complex and taxing:

Learning to teach is a complex process involving interactions and changes in cognition, affect and performance. This contrasts sharply with the view of professional learning frequently evident in schools, where teachers greatly undervalue the process, typically conceptualising it as a matter of picking up practical tips, best learned through trial and error. (Calderhead 1987b: 8)

On the one hand, different teacher educators and researchers (e.g. Calderhead, 1989; 1990a and 1990b; Claxton, 1985; Ben-Peretz, 1984; Fish, 1989; Broekmans, 1984) (see also 2.4) agree that this complexity is due to the interaction between cognitive, metacognitive and affective factors and powerful ideological contexts which student teachers translate into teaching activity. On the other, many theorists (e.g. Shavelson and Stern 1981; Borko and Shavelson 1983; Pearse and Pickard, 1987) agree with Schön's argument that teachers are not only professionals who make reasonable judgements and decisions in a complex environment by applying knowledge and techniques they have been presented with during their time at college. They are also reflective professionals (Elbaz, 1981; Munby, 1986).

Yet there is ample evidence, in the way TE courses are designed and implemented, that this complexity is ignored. This is mainly manifested by the continuous absence of a consideration of the student teachers' contribution to the learning process. A brief analysis of TE curricula specifications shows transmission models of learning which require student teachers to conform to a norm rather than to foster reflective and critical attitudes. Yet there are a number of arguments, familiar in other areas, which would call for a more student centred approach. Firstly, LA studies have shown that the contribution of the learner has proved essential to understanding more deeply the learning processes. In the same way that decisions to organize FL teaching are partly based on what is believed to be the language learning process, it is only fair to say that when organizing educational activities to train teachers, we should base them on what we know about the processes by which student teachers become teachers. Secondly, in language pedagogy, teacher centred approaches have given way to learner centred ones. For example, Jong (1989) argues that the task of modern language TE is "to prepare the future teacher
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for a learner-centered approach to teaching. The aim of language teaching is to increase the learner’s communicative competence in the FL while taking his needs firmly into account" (170). Thirdly, in recent research on TE in general terms or in content areas other than foreign languages, there has also been an influence of cognitive psychology as we will see in chapter two. Along these lines Calderhead says:

research on the processes of learning to teach has much to offer to teacher education by outlining the kinds of knowledge and skills that teachers require to develop their teaching practice and by suggesting the conditions which they might foster this development. (1987a: 7)

In all these areas there is a recognition that the mind of the participants plays a determinant role in learning activities. So what I will be doing is to try and bring FLTE more in line with recent research results, mainly in TE, thus hoping to repair this logical disparity.

Despite the valuable contribution of the available research on how prospective teachers learn the profession, we are still far from being able to offer a clear picture of that complex process. Researchers working in this field (e.g. Borko et al, 1987; Calderhead, 1988a, 1988c and 1987b; Feiman-Nemser, 1983; Tabachnick and Zeichner, 1984) encourage others to carry out more research. They all conclude very much along the same lines, saying that much of the research on teachers’ knowledge and teachers’ thinking has dealt with experienced teachers while research on student teachers focuses mainly on their attitudes to teacher training, and their socialization into the teaching profession. The lack of studies on the different aspects of the process of TE is widely voiced among the research community. Relatively little research directly addresses the issue of student teachers’ knowledge growth in their specific subject matters or how it relates to instruction during teaching practice (Calderhead and Robson, 1988):

In attempts to develop knowledge for teaching, however, we have little understanding of the nature of the integrated body of knowledge that teachers use, how it originates or how its growth is most appropriately fostered. What kind of knowledge do student teachers bring to teacher education? Does their existing knowledge influence how they learn and what they extract from their teacher education courses? What kinds of activities best foster knowledge growth? What is the relationship between student teachers’ knowledge and their developing practice? How are different areas of knowledge integrated and used? Such questions are important to explore if we wish to improve the contribution
teacher education courses make to student teachers' knowledge growth. (1)

More research needs to be done on the process of TE from the perspective of the student teachers. Research needs to address simultaneously student teachers' pretraining conceptions about learning and teaching a subject matter and about the subject matter itself. It needs to look at how these early conceptions influence the knowledge they acquire in the course of professional training, how the conceptions change, and their relationships to practice. Longitudinal studies which would follow trainee teachers from the very moment that they enter professional training (Zeichner, 1985) and which analyse how teachers' views change over time (Castle and Dworet, 1987), the nature and effects of professional training and its relationship to classroom practice (Calderhead, 1988a) would provide valuable information for teacher educators.

Finally, Borko et al (1987) and Borko and Livingstone (1989) point out the need to base educational teaching programmes on what is known about the teaching behaviour of novices. Studying the processes by which novices become experts and students become teachers and basing educational programmes on them, might make more sense than basing them only on what we know about experienced teachers.

1.2.2 The Content of TE

The TE content, teaching itself, is also a complex field. Wallace (1990) argues, as others before him have, that the number and complexity of professional decisions made every working day by teachers are such that they cannot be explained only in terms of the conscious application of specific, taught skills. So a lot of the decisions teachers take would have not been covered even in the most comprehensive training in language teaching skills (see also Woods, 1990).

Innumerable studies have been conducted on the generic aspects of teaching which focus mainly on actual teaching behaviour and use a process-product model (see 2.2.1). This research area developed when it was felt that if knowledge about teaching and TE were to advance, it would be by studying actual classroom performance. If something could be said about TE it would draw on the observable behaviour of teachers:
If teachers do vary in their effectiveness, then it must be because they vary in the behaviour they exhibit in the classroom. To shed light on this point one must study classrooms - where the action actually is. (Dunken and Biddle, 1974: 13)

Accordingly, an infinite number of observation instruments were developed, to look at general aspects of teaching and then adapted to look at specific curricular subjects. Rees (1989), for example, offers a thorough review of observation instruments, with special reference to Foreign Languages. These schedules have been used both for training and research. Although a lot of them were designed, piloted and validated so that transferability was guaranteed, when it came to actual research projects or training situations, they all had to be changed and modified to suit the new situation, the theoretical and methodological assumptions of the trainers or researchers and the specific objectives (see, for example Allen, Fröhlich and Spada, 1984). But the fact that only the observable aspects were considered legitimate research ground did not lead to the expected results. Teaching was certainly more than what one could see. The limitations of such studies have received considerable attention, mainly outside FL, in the past decade (see 2.1).

A new perspective on teaching was developed by theorists who understand that behaviour is thought-regulated and that teaching behaviour is mediated by teachers' psychological contexts and determined by ecological contexts. Drawing on cognitive psychology and anthropological/ethnographical understandings of human activity, educational research has tended, in the last decade, to see teaching from the perspectives of those under study (see 1.4, 1.5 and 2.2). Qualitative researchers consider that the actions of people are determined by their beliefs, perspectives and motives and teachers' thinking researchers argue that it is difficult to understand what teachers do in their classrooms if we lack an understanding of the teachers' psychological context. Teachers' activity is largely determined by their thought processes (Clark and Yinger, 1987: 84). Teacher thoughts include teachers' theories and beliefs, planning and interaction thoughts and decisions. Teacher action is the observable behaviour. So an understanding of a specific situation would include a description of the actual actions and participants' interpretations which will provide the context in which to understand those actions. Woods, from a FL perspective also argues that,

We (researchers, as well as evaluators, teacher trainers and student teachers) cannot understand what happens in a classroom outside the context of previous and subsequent classes, and outside the context of the perspectives of the
Yet, even if we agree that there is much more to teaching than the teaching behaviour displayed by teachers in the classroom, the relationships between thinking and action and how each influence the other are not linear, clear cut or neat, as researchers in the area have shown in their attempts to conceptualize it (see 2.2.3). What this implies is that it is important to observe classroom activity, but that we will not understand it if we do not know what the motivations of the observable behaviour are. It is these underlying motivations and assumptions which are the focus of this study. Methodologically it has been argued whether implicit theories, sets of beliefs or knowledge can be made explicit (Hüber, 1989a; Wilson, 1977; Calderhead, 1990a). Regardless of the problems this may pose, it is important to design strategies which may make these areas more accessible (See 3.7).

1.3 FL Teacher Education

The great demand for English all around the world has stimulated a great improvement in the development of teaching procedures, methods and teaching materials. Yet this growth has not run parallel to research on FLTE. The area is still far from developed and FL teachers are educated all over the world according to principles, ideas and programmes which are seldom backed by research findings as strongly argued by Richards and Nunan, 1990 and Richards and Crookes, 1988. Wragg, in his review of research on teacher education (1982), emphasizes that more studies are needed of the training of foreign language teachers. As Richards and Nunan point out in the preface of their 1990 book "few of the articles [on EFLTE] published in the last twenty years are data based, and most consist of anecdotal wish lists of what is best for the teacher. Little data have been gathered on the kinds of programmes that work and don't work, and there has been a reluctance to subject assumptions behind current approaches and practices to critical scrutiny" (:xi). FLTE has drawn heavily on research and theoretical discussions in Linguistics, Psychology and lately by classroom centred research (see 2.3.3) but when it comes to analysis of its own process research has rarely gone beyond descriptions and discussions of programmes (e.g. Moeller, 1989; Millar, 1989).

Besides, as suggested above, FLTE has not been influenced by mainstream
research on teachers' thinking. The third edition of Wittrock's (1986) *Handbook of Research on Teaching* dedicates the fifth part to research on the teaching of subjects and grade levels. It is surprising to see that there is no chapter dedicated to research on FL teaching and learning. More recently Houston *et al*'s (1990), *Handbook on Research on Teacher Education* doesn't include any references to the education of FL teachers either. This absence contrasts with the numerous research projects based on research on teachers' thinking, which study how mathematics or science teachers, for example, (Cooney, undated, 1984a and 1984b), or social studies teachers (Adler, 1984) learn how to teach. Consequently, as Stern argued in 1983, we are still far from clear what the essential issues of FLTE are. Very little has been done to explore FL teachers' thinking or knowledge (Woods, 1990, is an exception) and teachers' knowledge growth (see 2.3.3). And yet, as Calderhead (1987d:17) points out, research on teachers' knowledge bases and how they are used would help us conceptualize the process of professional development and how it may be enhanced through TE.

1.4 Student Teachers' knowledge. Content, origin and relationship to practice

1.4.1 The content of student teachers' knowledge

On the one hand, although in recent years the concept of teachers' knowledge (2.3) has enjoyed considerable attention in educational research and new developments and insights have been arrived at, in general student teachers are not seen as having a body of knowledge on which they can reflect and on which they can draw to organize the way they teach. For example, studies of novice-expert differences show the inadequate knowledge that novice teachers possess. This may be due to the fact that most studies on professional knowledge attribute a main role to practice in developing this knowledge (see, for example, Elbaz, 1983 or Gudmundsdottir and Shulman 1987a and 1987b).

Student teachers, on the whole, when they come to the training institutions are viewed as possessing little knowledge about the subject matter on which they can draw when they teach. Subsequently few opportunities are created for them to reflect on their existing experiential knowledge during TE. Nevertheless, the same
situation Elbaz describes referring to practicing teachers is also true of student teachers:

The single factor which seems to have the greatest power to carry forward our understanding of the teacher's role is the idea of teachers' knowledge. Teachers' thinking processes have been given some attention in recent research. But teachers are not commonly seen to possess a body of knowledge and expertise appropriate to their work. (1983:11)

On the other hand, different research has given different weight to different aspects of the content of teachers' knowledge, for example, Barnes (1989:16) points out that "teachers must understand all the factors that interact in a teaching situation - learners, learning, subject matter, and teaching- if they are to make sound judgements". Stern (1983) includes a theory of language teaching, a view of the nature of language, a concept of language learning, an awareness of social context, an interpretation of teaching in general and a view of language pedagogy.

A dissatisfaction with the generic characteristics of teaching, on which process-product and, to a certain extent, teachers' thinking research had focused, led researchers (e.g. Shulman, 1986) to emphasize the importance of teachers' subject matter knowledge and a special pedagogical knowledge to make subject matter understandable to learners (see 2.3) and findings from a number of investigations illustrate the need for research which studies the development of teacher's pedagogical expertise in specific curricular areas because,

different branches of knowledge employ different kinds of theory, and students will not be masters of them equally. Thus, for example, the scientific law has a status different from the statuary law, the historical generalization or the grammatical rule, each of which lends itself to a different method of teaching. (Dow, 1979: 122)

Once we have defined the different strands of knowledge that meet in what we've been calling 'teachers' knowledge' it is only fair to say that subject matter knowledge constrains lesson structures in that different types of content need to be taught differently. (Leinhardt and Greeno, 1986: 75)
1.4.2 **The origin of student teachers' knowledge**

**Pretraining Knowledge**

The quotation from Margaret Atwood, at the beginning of this chapter, could well be an illustration of one of the important aspects of this project, basically that student teachers have a wide experience of what it means to be a learner in a classroom, of what teachers do in classrooms, what kind of roles teachers and learners play when they teach particular curricular subjects and what kinds of interactions may occur between teacher and pupils.

There is a vast corpus of data (see 2.4) which has provided evidence to support the idea that student teachers tend to recall and build upon their own experiences in classrooms (e.g. Lortie, 1975). If this is so, it is rather surprising that teacher training courses do little to make these experiential theories, perspectives or knowledge explicit. There are two aspects worth mentioning here. Firstly that, because this knowledge is based on different personal learning experiences, it is not uniform and linear, but is rich, diverse and complex, and probably different from the linear prescriptive mode of the knowledge they are presented with during TE. Secondly research on the pretraining stage or on what student teachers bring with them to the professional courses and how it influences their learning (see 2.4) tends to conclude that teachers' professional courses do not seem to make much difference, due to these well-rooted assumptions.

Since there are no studies in FL which address these issues, it seemed important to start this research project by finding out what knowledge student FL teachers bring with them. It also seemed necessary to find out how and whether student teachers hold on to their previous assumptions before, during, and after Teaching Practice. As Elbaz comments,

> In developing a conceptualization which articulates and provides detailed understanding of [student] teachers' practical knowledge, I hope to make possible a fuller use of the human resources which teachers bring to their work. (1983: 6)

**Teacher Education. Interaction between Pretraining knowledge and TE knowledge**

Teacher Education courses in general have shown a disregard for the knowledge
students bring with them. Students teachers are trained in skills which they implement during TP with a lack of consideration for the student teachers and their perspectives and professional inclinations (teachers' psychological context) on the subjects they teach. The consequences of this linear, simple process which basically assumes that learning takes places top-down, are well documented by teacher trainers in anecdotal evidence or in research results, which suggest basically that TE courses do not influence the process of learning to teach (2.4). It is, however, becoming increasingly difficult to see TE in these terms. Firstly, some of the main criticisms of this model make reference to the fact that learning doesn't take place in a linear top-down way but in interaction with previous knowledge, as argued by constructive learning theories. The new knowledge, rather, interacts meaningfully with the learner's previous conceptual framework. Consequently, different teachers are likely to implement curricula and plan in different ways despite having attended the same TE courses (Elbaz, 1983).

Secondly, there is ample evidence that student teachers bring with them a wealth of knowledge based on their own experience as learners which influence and direct their learning process in different ways, as argued mainly by socialization studies (2.4).

Thirdly, as pointed out before, teacher-centered pedagogies are, at least in theory, 'old hat' in FL teaching. Learners' needs, inclinations, individual learning styles are common terms in both curriculum materials and suggestions for TE courses (see, for example, Littlewood, 1984). The active role of the learner in the learning process has been reaffirmed by the latest learning theories, in which the learner is seen as "constructing meaningful understandings as a result of engagement in activities within an instructional situation that takes into account the context, the learner's prior knowledge, and his or her goals of learning" (Barnes, 1989:14).

Yet, although teacher educators are familiar with these ideas, we do not seem to practice what we preach, and by and large, preservice education courses are designed and carried out without much consideration for learners (in this case adults who, unlike doctors and lawyers, for example, have spent a considerable part of their lives in contact with teachers and in classrooms similar to the settings they will work in).
Teaching Practice

There are two main ideas which I will point out now.

Firstly, as has already been pointed out in 1.1.2 and will be made more apparent in 2.2.2, it is essential to look at teaching as a complex activity which involves teachers in cognitive and behavioural processes. Secondly, socialization studies (2.4) and research on teachers' knowledge (2.3) show that the kind of knowledge student teachers and teachers call on to organize their instruction is based either on pretraining school and college experiences or else develops during practice. These findings suggest that TE courses have a very low impact on teachers' knowledge growth.

In summary, the area that seems to be in need of research is the process of FLTE from the point of view of the student teachers. The conceptual framework that guided the access to this process is offered by the teachers' thinking paradigm, more specifically its latest developments in studying teachers' knowledge and socialization studies (chapter two). It is important to conduct research which would uncover the knowledge student teachers bring with them so that it can be explored, challenged and developed more efficiently into a personal understanding of professional issues during TE. In this project the content of student teachers' knowledge is categorized as subject matter knowledge (knowledge about language), and knowledge about teaching and learning the subject matter. These general categories are drawn from the literature about teachers' knowledge, in both general TE literature and FLTE. The specific content assigned to each one of the categories is drawn from the student teachers' own ideas. However the choice of a research area still leaves open major methodological questions, specifically those involved in making a choice between qualitative and quantitative research, which I will address next.

1.5 Epistemological and Methodological Issues

The research stance I chose to document the learning process in preservice FLTE is qualitative because as Hopkins et al say qualitative research is,
an approach that is applicable across a range of settings, describes and analyses phenomena on their own terms, and helps us to think constructively and to generate meaning out of complex and problematic situations. Consequently, it is also an approach that empowers individuals, increases feelings of efficacy and gives us a modicum of control over the situation we are researching. (1989:78)

More specifically, in harmony with the conceptual framework, I chose a qualitative perspective because it offers the possibility of seeing through the eyes of the research subjects and because behaviour can be understood in the context of meanings employed by the participants (Bryman 1984: 78). Qualitative enquiries into the nature of teacher thinking and action can be seen as a type of basic research that is necessary to provide a depth of understanding of educational phenomena (Butt and Raymon, 1987:74). Because, to study student teachers' knowledge from a perspective which assumes causal and simple relationships, which does not take into account research participants' perspectives or which considers theory generation free from context and time, would have probably reduced the process to commonalities and devoid it of its singular richness.

While chapter three presents a description of the methodological and analytical processes followed, this section aims to provide an epistemological discussion of the research methodology in an effort to put the research process in perspective. It reviews some of the issues that seem to be relevant in a discussion about research. Basically, it addresses the following aspects:

- the need to make explicit methodological assumptions
- the relationships between different approaches to research, specifically between quantitative/qualitative perspectives
- whether and to what extent eclectic positions and triangulation procedures are possible or defensible in qualitative research
- validity in qualitative studies
- relationship between the general epistemological debate, educational research and FLTE research
- where this study stands in relation to the debate.

I will not attempt to present a comprehensive view of the state of these issues but to show that, in the same way that teaching is understood from different perspectives and described using different metaphors, a discussion of research methods is also as varied and as full of disagreement. I believe that a review of the key contours of
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this debate will allow for a better understanding of different research projects and help set this project in context.

1.5.1 Methodology, a process which makes assumptions explicit

In the same way that research on teachers' thinking, for example, has been stimulated by different educational motivations and research questions and guided by different theoretical frameworks (see 2.2.2), it has also been carried out from a variety of methodological perspectives. As Calderhead points out (1987a: 183), these involve alternative presumptions about the nature of social scientific activity and different ideas on the relationship of theory and research to practice. As a way of illustration see, for example, the difference between Morine-Dershiner's (1989) study of 'novice-expert differences' which uses 'concept mapping' techniques in a pre-post-map fashion and from which quantitative indices are computed for each concept map (Kagan, 1990) and Connelly and Clandinin's (1990) more descriptive biographical work on teachers using 'stories of experience' and 'narrative inquiry'.

Disciplined enquiry is guided by theoretical assumptions about the nature of the activity under study: in this case about Teacher Education, and what is understood as the content knowledge of teaching, for example, subject matter knowledge, knowledge about learning and learners and knowledge about classroom processes. But it is also guided by epistemological assumptions such as the nature of reality, of knowledge and how it is generated, the nature of the relationship between the researcher and the researched and how it is accounted for.

Making explicit the methodological (1.5.4) and theoretical assumptions (chapter two) underlying the concepts and methods used in research is not only essential to achieving a fuller exploration of the data we gather but to also to providing the research with higher levels of validity because assumptions guide the decision-making process as in any other cognitive activity and making them explicit will help others evaluate the research (Calderhead, 1987a: 188). Besides, researchers' assumptions are not necessarily the same as the research participants' and the meanings and interpretations attached to the same cues may be different (Munby, 1982). Yet this practice is still not widely used in educational research as Zimpher and Ashbourn (1985: 20) argue:
The situation as it currently exists is fifty years of research about teacher education in which random aspects related to the process of preparing teachers have been studied and described. The research has been undertaken without regard to the beliefs and assumptions of the researchers.

Consequently methodology in this report is presented as a voyage of personal exploration, so that, as Ball (1984) observes, research becomes a highly personal and unique enterprise. Thus, I am very aware that other researchers, with a different set of assumptions, would have made a different set of choices, (e.g. about access, maintaining field relationships, methods of data collection and analysis) and, as a consequence, would have come to different interpretations. Both the way the research situation and problems are defined and approached and the way the resulting data are then analysed is not theory free (Larrosa, 1989; Lincoln and Guba, 1985). The following quotation illustrates very aptly the way methodology is understood in this study and represents the essential bases of any methodological discussion,

The term methodology refers to the way in which we approach problems and seek answers. In the social sciences, the term applies to how one conducts research. Our assumptions, interests, and purposes shape which methodology we choose. When stripped to their essentials, debates over methodology are debates over assumptions and purposes, over theory and perspective. (Bogdan and Taylor, 1984:1)

What follows is an attempt to present my personal stance with reference to the preceding issues.

1.5.2 The research methodology debate

When I set out to review the literature on research methods, I felt the need to understand more deeply the common debate in social and educational research between qualitative and quantitative approaches to research. The dichotomy seemed more complex than most methodological accounts would lead one to believe. This section aims to provide a summary of this heated debate in general terms.

The works by Guba (1981), Lincoln and Guba (1985), Morgan Smircich (1980), Ratcliffe (1983) and Bryman (1984) are particularly important if one wishes to clarify and understand this debate. As Bryman suggests, a review of the literature on research methods shows a deep divide, although not very explicit at times,
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between researchers who discuss enquiry from a technical stance and those who discuss it from an epistemological perspective. The former prefer to understand the qualitative/quantitative distinction as a continuum, rather than a set of dichotomies and contrasting terms, methods and underlying assumptions and see a possibility of continuity from one paradigm into the other (Cohen and Manion, 1980; Burgess, 1985c; Miles and Huberman, 1984; Black and Champion, 1976; Gage, 1989; Hopkins, Bollington and Hewett 1989; Howe and Einsenhart, 1990; Goetz and LeCompte, 1984, among others). The latter raise the distinction from a technical to an ontological and epistemological level (Lincoln and Guba 1985; Guba 1981; Guba and Lincoln, 1990; Morgan Smircich, 1980; Ratcliffe, 1983; Bogdan and Taylor, 1984; Stanley and Wise, 1983; Reason, 1983; 1988; Reason and Rowan 1981). They tend to see the different paradigms as irreconcilable and their relationships in terms of paradigmatic shifts and discontinuity rather than continuity. From this perspective a coherence is sought between world-views and methods. Firestone (1989) places the discussion at two extremes: the purist (incompatibility of paradigms) and the pragmatic (methods as collection of techniques). Yet because writers often shuttle between epistemological and technical spheres of discourse (Bryman, 1984: 98) the discussion is usually far from clear. To avoid contributing to this confusion he proposes to use methodology to refer to epistemological questions and method or technique to describe processes of data collection.

Others take a stronger relativistic position. Ratcliffe (1983) argues that all modes of inquiry (both about the social and the natural worlds) are qualitative in nature for they are based on philosophical assumptions, or what he calls "articles of faith". In his perspective, the traditional distinction between qualitative and quantitative disappears. His argument is based on the following principles:

• all data are theory, method and measurement dependent
• all phenomena change when subject to observation, even the physical world as evidenced by developments in quantum physics
• numbers, words, etc. are not reality itself, but representations of reality. They can but only provide incomplete descriptions.

He argues, quoting Zukav, that,
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Reality is what we take to be true. What we take to be true is what we believe. What we believe is based upon our perceptions. What we perceive depends on what we think. What we think depends upon what we perceive. What we perceive determines what we believe. What we believe determines what we take to be true. What we take to be true is our reality. (Zukav, 1979: 328, quoted by Ratcliffe, 1983: 159)

When discussing these issues from an educational research perspective, Shulman (1986a) and Clark (1980) draw attention to the fact that there are different paradigms or models. These are specific ways of thinking and generating different patterns of research, (objectives, starting points, methods of data collection and analysis, and concepts) which are shared and understood within different scientific communities. Shulman sounds cautious, however, about how the different paradigms relate to each other. He warns of the implicit dangers in both possible types of relationships. We may have a possibly distorted view if we place ourselves in a single paradigmatic frame and potential chaos if we mix different methods in complex designs without a disciplined understanding. He is in favour of complex research or hybrid designs. He conceives all paradigms as insufficient and inadequate since no single research programme can capture the full set of educational events and advocates a 'yoking of inadequacies'. This, in practical terms, is the search for a grand theory which would include a blending of descriptive and experimental designs. On the contrary, Erickson (1986) confesses his disbelief in the possibility of combining disparate methods and emphasizes the discontinuity between what he calls positivist and interpretive approaches.

The following sub sections explore some of the characteristics of this debate and how they appear in the practical world of research. I will consider choice of methods, eclecticism and triangulation practices and quality control.

1.5.2.1 Choice of methods

Discussing methodology from a technical point of view leads researchers to decide which methods to use in their projects by considering degrees of adequacy and aptness of techniques to the research questions and research aims. This implies that some methods lend themselves better than others to research problems.

By contrast, researchers who approach methodology from a more epistemological stand argue that methods are not theory-free and independent from the researcher's
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framework. As Morgan and Smircich observe,

the choice and adequacy of a method embodies a variety of assumptions regarding
the nature of knowledge and the methods through which that knowledge can be
obtained, as well as a set of root assumptions about the nature of the phenomena
to be investigated. (1980:491)

It is this broader theoretical framework which guides both the selection of the
research situation and the selection of research methods (Bryman, 1984: 76).

1.5.2.2 Eclecticism and triangulation procedures

It is from technological positions that eclecticism and triangulation processes (both
in data collection and analysis) are advocated as the following quotation shows,

Triangulation is useful when an established approach yields a limited and
frequently distorted picture. We are reminded here of the traditional dichotomies -
normative v. interpretive, nomothetic v. ideographic, statistical v. clinical. The
first of each pairing is associated with groups and more objective data; the
second, with individuals and subjective data. Again by using, or drawing from,
each of these usually mutually exclusive categories, contrasting perspectives are
disclosed.... You will notice that the combined methods approach may break
down the traditional barriers between the normative and interpretive approaches,
the ideographic and the nomotechnique, and the statistical and clinical. (Cohen
and Manion, 1980: 216)

Goetz and LeCompte, for example, understand ethnography as an eclectic
undertaking, a process which involves triangulating methods, techniques and
sources of information in order to bestow the research with higher degrees of
validity,

Despite the preferences - legitimate and otherwise- for certain general models by
individual schools within social science disciplines, some of the most creative
research uses models eclectically, combining aspects of various modes to produce
more valid research designs. (1984: 50)

Other researchers, from a very pragmatic perspective (e.g. Hüber, 1989b) advocate
the use of computer software to assist in the analysis of qualitative data. Qualitative
analysis may also be used in combination with statistical analysis to help interpret
the data (e.g. Burgess, 1985a). Underlying these triangulation practices, we have
the notion of eclecticism\(^3\). Yet, as Bryman summarizes most aptly,
The third area in which technical and epistemological issues become confused is the suggestion that both quantitative and qualitative research are best thought of as complementary and should therefore be mixed in research of many kinds (...). The difficulty with this thesis, is that the arguments for triangulated strategies is essentially a technical one (...) namely that a superior piece of research will emerge if techniques are combined. This contention may well be true, but the debates about quantitative methodology are (...) epistemological in nature. In spite of this, many writers who address and often acknowledge the distinctiveness of the two methodologies in philosophical terms, make pleas for the mixing of the two. (Bryman, 1984: 85-86)

Gitlin et al (1989) argue that treating method as if it were rhetorically and ideologically innocent, makes it into a mere technique, so the practice of triangulation also implies that methodology is a technical matter and consequently it does not or should not influence the research results.

In general, scholars who maintain a paradigmatic stance argue that the information we gather and conclusions we arrive at are necessarily dependent on the systems of enquiry (Ratcliffe 1983:150). So they are sceptical and critical about a possibility of reconciliation at an epistemological level. While the use of different methods can be a useful contribution to particular research areas, it doesn't follow that epistemological issues underlying the quantitative/qualitative debate are reconciled.

The difficulty is that at a technical level methods may be commensurable as Whyte and others have sought to show, but at an epistemological level quantitative and qualitative methodologies are written about as though their knowledge bases are quite incommensurable. (Bryman, 1984: 87)

At a different level, academics in EFL have regarded the idea of eclecticism rather skeptically. Stern, for example, dismisses it on the basis of the lack of guidance about how to determine the principles which guide different methods (1983: 512, n. 11).

Triangulation techniques, nevertheless, are not written off in qualitative research, yet the meaning and practice is different. From a qualitative perspective triangulation means to use a diversity of different sources of data rather than a mixture of different methods (see Lincoln and Guba, 1985).

1.5.2.3 Quality control

Qualitative research traditions have not yet developed a fixed, widely accepted set of
procedures to assess the quality of research projects. Different researchers take different stances when they discuss issues of quality. If we place the different solutions along a continuum, at one end there are those who, in an effort to systematize qualitative research to make it sound more scientific (respectable), opt for applying traditional quantitative criteria (Miles and Huberman, 1984; Brenner, 1985; Black and Champion, 1976, -although these last authors accept that certain conceptual modifications should be contemplated--; Goetz and LeCompte, 1982). As Gary Anderson observes,

To the extent that these procedures provide the reader with a record of the decision-making process that produced the final analysis, they are valuable. To the extent that they suggest that the final analysis is more the result of methodological rigor than the creative act of researcher interpretations, they attempt to fit ethnography into a positivistic framework. (1989: 252)

At the other end, there are those who argue that new criteria have to be developed to assess projects which involve different sorts of data, which have been collected by different means, and with very different objectives. Clandinin and Connelly (1990) suggest that, as other qualitative methods, narrative relies on criteria other than validity, reliability, and generalisability. It is important not to squeeze the language of narrative criteria into a language created for other forms of research so each inquirer must search for, and defend the criteria that best apply to his or her work. In relation to FL classroom research van Lier maintains the same position

it [Classroom Research] cannot be judged by standards of generalisability and prediction (or proof), but rather by its power to create an understanding of how things happen the way they do, and why they may make sense to the people involved in making them happen that way. There is therefore no point in judging classroom research by criteria of internal and external validity developed for the purpose of evaluating experimental research, just as it is unrealistic to expect experimental research to shed much light on the social context in which learning takes place. By the same token, CR should not express its findings in terms of cause-effect inferences, nor should experimental research make inferences that go beyond the controlled setting in which the findings were obtained. (1988: 53)

Some new criteria have already been developed. Perhaps the most fully developed and widely accepted in the field is the adequacy criteria Guba, (1981) and Lincoln and Guba (1985) have proposed: trustworthiness. Brown and Sime (1981), as quoted by Brenner (1985), have also proposed new concepts for the assessment of qualitative research: authenticity and attestability. The former makes reference to
cross checking data by cross-referring it to different sources of information; the latter to the explicitness of the methodological procedures in a way that the legitimacy of findings can be evaluated by the research community. These are essential for this project.

1.5.3 The epistemological debate in research on teachers' thinking and FL classroom research

In general, as the latest methodological reviews show (see 2.2.3), the notion of eclecticism is well developed in research into teachers' thinking. Techniques derived from different research traditions are combined in the same studies as the basis for 'truth claims', as Kagan observes,

After reviewing various approaches to the assessment of teacher cognition, it becomes clear that one deeply problematic aspect of this literature is that techniques are derived from different epistemological traditions. Likert scales are derived from psychometric test theory, self-reflection hierarchies from studies of cognitive mediation. (...) Each of these traditions provides a different definition of truth; some contradict each other. It is difficult for a reader to judge the validity of a technique unless he or she is familiar with the relevant foundations. (Kagan, 1990: 451)

More specifically in FLTE, there are four aspects which seem worth commenting on. Firstly, quantitative studies within a process-product paradigm and studies which combine qualitative and quantitative approaches are more common than qualitative studies. With a few exceptions language classroom research aims to isolate variables to establish causal relationships between certain actions (usually the teacher's) and certain outcomes (the learner's), assuming a straightforward relationship between the two. (For recent reviews of language classroom research of this type see, Chaudron, 1988; Nunan, 1989; Rees, 1989; Richards and Nunan, 1990). One exception of the study of classroom activity from a confirmatory perspective is the study on classroom interaction conducted by van Lier (1988). He assumes an ethnographic perspective aiming to understand, rather than to test or prove, what goes on in classrooms using a holistic and an emic approach, similar to the way anthropologists set out to understand unknown cultures. What all this means is that he doesn't have a set of pre-established categories, but instead proposes to let the data lead the way by taking into consideration the research participants' viewpoints and the social context in which the action takes place.
The starting point in both kinds of research is observational data since it is assumed that the classroom is where the action is. This is interpreted either by externally imposed categories or by the participants' own perceptions. But although the social contexts are powerful determinants of behaviour, there is still another dimension which does not enter language classroom research. The intentional aspects, the teachers' knowledge that guides classroom activity is still not common research ground as we will see in chapter two.

Secondly, the methodological debate, in terms of the relationship between qualitative and quantitative traditions follows closely the general debate we saw above. For example while Chaudron (1988) conceptualizes classroom research in terms of traditions (psychometric, interaction analysis, discourse analysis, and ethnography), Nunan (1989) argues that, in fact, interactional analysis and discourse analysis are only techniques that can be used either qualitatively or quantitatively. At the same time there seems to be a confusion about what qualitative and quantitative means. Nunan (1989) argues that the difference between these two approaches resides in the fact that quantitative research focuses on the end products, while qualitative research focuses on processes. This latter approach, he observes, is concerned with documenting and analysing what actually goes on in the classroom, rather than simply measuring the end point (Nunan, 1989: 6). Chaudron, on the other hand, suggests that description of classroom behaviours, classification of processes and more subjective inferences leading towards generalisation frequently makes use of quantitative methods (Chaudron, 1988: 15).

Thirdly, eclectic positions are common in research projects. Both approaches are viewed as ends of a continuum, rather than two mutually exclusive domains (e.g. Nunan, 1989) and as mutually dependent (Chaudron 1988). Ellis (1990), in the same vein, argues that the real issue is not so much how the research is carried out as what is done with the results.

Finally, the criteria used to judge the quality of studies on second language classroom research (both quantitative and qualitative) are the same: validity and reliability. Chaudron (1988) advocates a rigorous design, random sampling, control of independent variables, reliable instrumentation and reliable analysis to solve the problems detected in classroom-based research. In this respect, Widdowson advances a cautious note about the relative value that validity of
research findings have. It is dependent on the conditions imposed on a particular 
enquiry and the conceptual analysis that defines its objectives (Widdowson, 1990: 
25). He understands validity as the relevance research has for teaching and 
teachers, pedagogical relevance, rather than as generalisability or reliability.

1.5.4 Underlying methodological assumptions of this project

Following the above discussion, I would argue that methodological accounts cannot 
take place in the abstract and go well beyond technical concerns. They have to be 
linked to the issues under examination and to the researcher's theoretical 
perspectives. The choice of data collection methods should suit the research area 
and a particular epistemological stance as well as the specific research problem. So 
the adequacy of research methods would have to be judged not only in relation to 
how suitable they are to the situation under study but also in relation to the degree 
of coherence with the researcher's epistemological stance. The research process, 
then, follows this sequence:

Epistemology and research area $\rightarrow$ research problem $\rightarrow$ choice of methods

As I pointed out at the beginning of this section, the epistemological and 
methodological bases of this project are those of the qualitative enquiry. I will 
now point out the dimensions of this mode of research which are fundamental for 
my research and how they relate to it.

As discussed above, the possibility of reconciling the assumptions of the 
quantitative and qualitative paradigms is very remote. The social world is not 
concrete or stable. Human beings interact with it and in this interaction they give 
rise to 'multiple realities'. These interpretations need to be understood in their own 
terms rather than to be explained in terms of causal relationships among externally 
defined categories, quantification and generalization to other contexts. This 
research into learning how to teach a FL aims to understand the process from the 
point of view of the student teachers. Because it is assumed that the 'world is not 
as it appears' and that behaviours are meaningful when contextualized in 
psychological and ecological contexts the research is conducted in natural settings 
and the experiences and behaviours are seen as those meanings that participants 
attach to them. The research does not aim to triangulate methods which would yield
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qualitative and quantitative data. However, different qualitative methods are used to triangulate the sources and the type of information. Research into this local and contingent process allows for a reasonable amount of transferability to other contexts, provided that a certain degree of similarity exists. Case studies, such as the ones used in this project, emphasize diversity rather than uniformity. They can account for the personal conceptualizations of knowledge. So it is difficult to see how parameters like these could be mixed with quantification procedures. Furthermore, as we saw above, the quality of qualitatively oriented projects needs to be assessed by criteria which do justice to the nature and process of this type of research rather than by externally imposed criteria. So explicitness of the methodology procedures, cross-referring data to different sources (interviews, diaries, observations) and making the transcripts available to participants for their verification were adopted as on going quality checks in this project.

Apart from these main issues, what is also important in this research is the role of the researcher as research instrument, the relationships with the participants and the ethical issues which these entail.

In summary then, I want to argue that, as Ratcliffe (1983: 160) states, a paradigmatic understanding of the research debate will prevent us from unending battles about the superiority of one method over another. This will help us be more understanding and tolerant of each other's research questions, methods and validity checks and will help us justify the different research modes in different instances in ways that are appropriate to the paradigm. As Guba remarks,

1.6 Motivations and aims of the study

The foregoing introductory discussion is a response to a desire, well rooted in my professional activity as a Teacher Educator. By conducting this research, I hope I can clarify and find out more about the process which I am an active part of: the education of FL teachers. I wished to explore what happens to a group of student teachers and document what changes take place in the course of their participating in
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a professional learning experience. Since, borrowing Calderhead's words, "through an understanding of the processes of professional learning we might begin to provide the structure and the support that is needed to facilitate learning to teach" (Calderhead, 1989: 49).

This initial motivation led me to start reading and discussing with colleagues about a feasible delimitation and conceptualization of the research situation. After the initial literature review it seemed that the ideas, concepts, and assumptions of the teachers' thinking paradigm and more specifically the area of teachers' knowledge could provide a focus for this research and that a qualitative research perspective would be the most appropriate epistemological stance to study the process of learning to teach a FL from the participants' perspective.

Despite the fact that some research has been conducted, teachers' knowledge is still an area which needs investigation. This lack has been pointed out both in the general literature by researchers like Shavelson and Stern (1981), and specifically by researchers in FLTE. (e.g. Richards and Nunan, 1990; Freeman, 1989; Woods, 1990), specially in relation to student teachers.

1.7 Objectives of the study

The research aims to describe and understand the experience of a group of student FL teachers during a preservice teacher programme, particularly the way their pre-training knowledge changes and relates to the way they teach. The study was carried out using a theoretical framework not previously applied to FLTE research. As will become clear from this section, descriptive, qualitative studies which explore and analyse learning processes do not abound and they are even more scarce in the education of teachers in general and in the education of FL teachers in particular. The choice of a qualitative mode of inquiry for this project is triggered both by the nature of the situation to be explored and by particular epistemological and ontological positions discussed in 1.5.4.

Drawing on the theoretical assumption of research on teacher thinking that teaching situations are singular and on qualitative research which focuses on studying concrete, singular situations, without aiming at general laws, no previous hypothesis or pre-specified categories guided the data collection. This made it
easier to understand this process from the participants' point of view but it also generated a series of problems when coding and interpreting the data. This initial stance means that the project does not aim to draw generalisations. Nevertheless, this should not imply that it is anecdotal and that it does not make sense in other situations. As Larrosa (1989:70) points out, although there are no models that one could implement outside the context in which they were developed, they could still be recontextualized.

This study focuses on FLs (French and Spanish) and how student teachers develop their professional knowledge about what is specific to Foreign Language teaching. Teachers' knowledge has been categorized in the literature in different ways (see 1.4.2 and 2.3.2). My conceptualization of student teachers' knowledge is encapsulated in these broad categories and defined inductively, in more specific terms, from the interview, journal and observational data. This knowledge is viewed from the phenomenological tradition of qualitative research, in that it is the meanings that student teachers have attached to different experiences which constitute the research data.

More specifically the aim of this study is to describe the content of student teachers' knowledge about FL teaching, how it changes and how it relates to their practice during TP. Some studies have tried to establish some sort of relationship between teachers pedagogical knowledge and actual classroom performance, assessing this performance against pre-specified sets of criteria (See Kagan, 1990). This study aims to understand what kinds of relationships exists between knowledge and action but with reference to the student teachers' thinking, rather than with an external framework.

So the research objectives are embedded within the theoretical and epistemological frameworks previously outlined and could be summarized as follows

1.- To describe and analyse FL student teachers' professional knowledge growth in the following ways:

a) to trace the origins of student teachers' pretraining knowledge

b) to uncover and analyse which knowledge they bring with them to the TE
institution (about language, about language learning and about language teaching)

c) to document how this knowledge changes over a year of professional education.
d) to analyse how knowledge and action relate to each other during TP

2. To explore and examine up to what degree qualitative research techniques can also be used as teacher education techniques

3.- To explore some of the tenets of a positivistic research paradigm and see how adequate they would be to investigate Teacher Education processes.

1.8 Summary of chapter

In this chapter I have offered a general perspective of the research project, both theoretically and methodologically and I have presented the motivations and aims of the research.

Firstly in mapping the research area, I have identified some of the areas in need of research, particularly the process of becoming a FL teacher from a new framework, teachers' thinking. Secondly, in order to provide a theoretical dimension for the research process discussed in chapter three, I have stated my own position in relation to epistemological and methodological issues, I have presented an outline of what seems to be the current debate between different ways of trying to come to terms with the diverse modes of social and educational research and I have tried to relate the broader debate to the field of FL teaching and TE. This, hopefully, will provide enough information to make the research process more clear because there is,

_a need to approach discussions of methodology in a way that highlights the vital link between theory and method- between the world view to which the researcher subscribes, the types of research questions posed, and the technique that is to be adapted as a basis for research. All these issues are related in the most fundamental ways. (Morgan and Smircich 1980: 499)_

Notes

1. The differences between teacher training and teacher education have been thoroughly discussed in EFL, for example, Widdowson, (1990) and Larsen-Freeman, (1983). Yet I will use the terms at times synonymously to refer to the process teachers or student teachers go through when they follow a formal preparation programme unless otherwise stated.

2. When I use the term paradigm or paradigmatic in this project it should not be interpreted in the sense Kuhn used the term to understand the history of the natural sciences. Kuhn himself did not see how the term could be used to understand the variety which characterises research in the social sciences. It is rather in the same way that Jacob (1987, 1989) reconceptualised the term with a restricted meaning: assumptions about the nature of the human universe, theory, questions, problems and methodologies. Or as Lincoln and Guba (1985:15) define it: "a systematic set of beliefs together with their accompanying methods". This should not imply that qualitative research is a monolithic set of beliefs to which certain rules of practice and assessment criteria are attached. For the purpose of this work I will be talking broadly about quantitative and qualitative traditions, paradigms or modes of research interchangeably. (Buchmann and Floden, 1989). (See also Shulman, 1986 for a discussion of kuhnian paradigms and lakatosian research programmes and his own version of paradigm). As Buchmann and Floden observe,

   Following these broad traditions would mean for educational researchers to wake up from historic amnesia and to recognize the connections of their pursuits to larger questions in the human sciences. (Buchmann and Floden, 1989: 247)

3. It is perhaps necessary to point out that the notion of eclecticism offers different interpretations, for example, Collins Cobuild Dictionary defines it as "choosing what seems to be the best or more useful from several sets of ideas or beliefs, rather than following one complete sets of ideas". At a general level, in the 'philosophy of research' debate, different researchers write either about 'eclecticism' or 'methodological pluralism' (Chilshom, 1990), they draw differences between 'the crank' and the 'reasonable scientist' (Feyerabend, 1964). Others would advocate an 'ecumenical blend' or a mixture of qualitative and quantitative methods (Miles and Hubermans, 1984; Hopkins, 1989, Burgess 1985c). McCraken (1988), in what it seems a rather ambivalent position towards the relationship between qualitative and quantitative modes of research, argues for an ecumenical cooperation, maintains the two ways of doing research as separate and different intellectual habits and frames of mind while at the same time providing a series of standards to assess the quality of qualitative research which are the same as, for example, those proposed by Bunge (1980) to assess scientific theory. Biddle and Anderson (1986) advocate an integrative perspective as an ensemble of confirmatory and discovery perspectives 'into a single expanded view of the social sciences' in an attempt to overcome the felt disadvantages of one and the other. Hüber (1989b) in a review of strategies and methods on teacher thinking, argues for the use of computer software for a quantitative analysis of qualitative data in an attempt to bring people from the qualitative and quantitative fields together. Shulman (1986) in his discussion of eclectic positions, differentiates
between the 'garbage approach' and the healthy 'hybrid programmes'. With a more specific reference to EFL, Widdowson (1990:50), as other researchers, prefers to define the complexity of eclectic attitudes, in terms of opposition: 'haphazard' and 'ad-hockery' versus 'enlightened eclecticism'; 'methodological incoherence' versus pure eclecticism (Taylor, 1985: 39). Rivers' views eclecticism as "absorb[ing] the best techniques of all the best known language-teaching methods into [...] classroom procedures, using them for the purposes for which they are most appropriate" (quoted by Stern 1983: 478).

4. For detailed accounts see references given above, particularly Burgess, (1985a) for a technical account and Lincoln and Guba (1985) as the classic reference to the epistemological tenets of the naturalist paradigm and Morgan and Smircich, (1980).
Chapter 2. Literature Review

2.1 Introduction

If literature reviews generally tend to be imprecise and incomplete, this is even more true when one tries to review eclectic and multidisciplinary areas such as the ones concerned with this project.

This chapter aims firstly to place this project within the research area of teachers’ thinking, more specifically within teachers’ knowledge and secondly, to establish links with and make some of these research findings more relevant to FLTE research, since language classrooms are part of the wider educational community and there is a great deal to learn from trends and directions in general educational theory (Nunan, 1989; Stern, 1983) and the education of teachers others than language teachers. While FLTE has tended to be in a position where teachers were told what they had to teach and how, thus keeping the research focus on the teaching content and methodology, it has remained unaware of some of the latest developments in general educational thinking.

The chapter presents both an overview of the general area of research on teachers’ thinking, a review of the area of teachers’ knowledge, in curricular areas other than languages, as this research is new to our field, and of language teaching whenever some of the contributions were felt to be relevant. The first section includes a brief historical perspective followed by a discussion of the general features of the area (concepts and methodological considerations). This is followed by the criticisms which have been made within the area and an account of its contributions to teaching, research and TE. In the second section I discuss the most important concepts and contours of research on teachers' knowledge and then review some of
the research carried out within this area in order to present those findings which are relevant for this project. It is not an easy task to separate research on experienced teachers' and student teachers' knowledge because a lot of the projects compare the two groups. Nevertheless I discuss them separately to show the different ways in which knowledge was conceptualized and dealt with as well as the dearth of studies on the knowledge of student teachers. This last section reviews the origins (mainly drawing on socialization studies), content and effects of student teachers' knowledge. The chapter ends with a summary which brings together the different strands of this literature review to make more apparent how they are relevant for this research.

2.2 An overview of teacher thinking research

2.2.1 A historical overview

To give a certain sense of perspective to current research on teachers' thinking, it helps to know where we come from in TE research. In general terms, we have gone from studying teachers and their effectiveness in implementing pre-specified programmes or methods using the students' learning outcomes as a measure of effectiveness through studying effective teachers in terms of the behaviour they display in the classroom (process-product research), and finally to considering teachers and their activity in relation to their psychological and ecological contexts (teachers' thinking).

The basic difference between the last two approaches is that in the former teachers' interaction or talk, for example, was related to learning achievement, but these behaviours were not studied in relation to teachers' thought processes as they are in the later. The commonly accepted viewpoint was that participants' meanings (what was inside their heads) had no place in scientific research. This emphasis on observable features derives from the fact that educational research mainly drew on and was conducted in the same terms as behavioural psychology research. The next quote clarifies the origin of this state of affairs:

Ever since work in psychology began to be defined as research, researchers seem always to have been trapped within the long standing dichotomy in psychology,
between experience on the one hand, and behaviour on the other. Within this division, research has, I think, been pretty clearly assigned to the behaviour point. This has meant that research has been viewed as being about the explicit and observable behaviour of subjects, with the method of inquiry being the explicit and observable behaviour of the investigator. By the same token what has been defined as experience has been excluded. So what subjects think and feel about the investigatory situation— as opposed to what they observably do— has been viewed as irrelevant to the ‘real data’; concomitantly, the investigator, as an experiencing person, with concerns and investments in the research, has been totally absent in any account given. The concept of research has been consistently restricted, so that the work which has involved the exploration of subjective meanings, whether in the investigator himself, or in another or others— such work has typically not been defined as research. (Salmon, 1978: 40)

The basic assumptions of this mode of research directed a choice of methodology which aimed to generate general laws by studying cause and effect relationships among categories which did not need to be related to ecological or psychological contexts and by quantifying and measuring the data. Research on teaching, from a process-product approach, aimed to identify recurrent patterns of behaviour. Similarly, language classroom research has focused on what actually goes on between teachers and learners. Stimulated by the belief that the classroom is where the action is, researchers found no substitute for direct observation as a way of finding out about teaching and learning processes (Nunan, 1989:76). Some qualitative studies in the ethnographic tradition aimed to interpret behaviours from the participants’ perspectives, in a way which would allow researchers to derive categories from the teachers’ and learners’ perspectives rather than from those of an external observer (See Chaudron, 1988), but not much research has been done to analyse teachers’ psychological contexts. The main thrust of language research has remained within the classroom. By contrast, teachers’ thinking researchers assume that teachers’ behaviour is rational, can be accounted for and modified if we know what ideas guide their actions (Barlett, 1990 and Thomson, 1984). Although descriptions of teachers’ behaviour are undoubtedly important to an understanding of teaching and learning, in order to gain deeper insight into these processes we should go beyond teachers’ behaviour and explore language teachers’ thinking and knowledge as they plan, implement their plans and reflect on their activity (Nunan, 1990). Next I will explore some of the factors which contributed to the development of this cognitive oriented research.
2.2.2 Factors which contributed to the development of a cognitive mode of research

At the beginning of the 1970s, educational researchers, soon manifested dissatisfaction with the behavioural mode of research. The deficiencies have been well documented in the literature, so I will only mention three here which will hopefully clarify some of the aspects of research on teachers' thinking. Firstly Gimeno Sacristán (1987) argues that the model suffered from a poor theoretical basis. Secondly, Cohen and Manion (1980), Erickson (1986), Montero Mesa (1985), Gage (1989), Contreras Domingo (1985) and Wallace (1991) draw attention to how research findings turned out to be banal, of not much consequence for teachers and failed to offer conclusive results and provide guidelines for how teachers should perform effectively in their classrooms. Thirdly, epistemologically a continuous disregard of the fact that people interpret their experiences and construct theories about reality and about themselves led to a general discontent and educational scholars started to seek for new research models, mainly based on anthropology, which would do more justice to the complex situations under study. As a result, more interpretive approaches sensitive to the fact that the social world is socially and individually constructed (Erickson, 1986) started to enter research projects. Furthermore, the development of cognitive theories of information processing accelerated this paradigmatic shift (Contreras Domingo, 1985). The acceptance that all classrooms are different and that teachers make sense in different ways of what happens in them led to the study of the thinking processes which regulate teaching activities. As Clark (1980) points out, if general cases are to be applied to particular situations, researchers must know more about how teachers exercise judgements, make decisions, define appropriateness and express their thoughts in their actions.

More specifically, Jackson's (1968) *Life in Classrooms*, is often cited in teachers thinking reviews as the turning point in looking at teachers and teaching on which much subsequent research was conceptually based (e.g. pre- and interactive decision-making). This work is one of the first attempts to acknowledge that what people think can be 'real data' and it is one of the first efforts to study teachers' thinking about their professional activity. As Jackson observes,

*Observation typically plays an important part in teacher training programmes and it is used increasingly in educational research. But the teacher's classroom behaviour does not always reveal what we want to know. Occupational attitudes,*
the feelings of satisfaction and of disappointment accompanying success and failure, the reasoning that lies behind the action (...) are scarcely visible except through conversations with a person who has experienced them. (Jackson, 1968:115)

More recently, Panel 6 of the 1974 National Institute of Education National Conference on Studies in Teaching is usually reported as the beginning of the research on this new area. The panel reported that "it is obvious that what teachers do is directed in no small measure by what they think" (Clark and Peterson, 1986) (emphasis added). Subsequently, all reviews on teachers' thinking and research projects open with the initially simple, easy-to-accept premise that what teachers do is logically affected by what they think. The assertion may be obvious but the relation between thoughts and action is problematic. The area opened up a series of questions which range from which concepts we use to the way we go about creating these concepts. What do we mean when we talk about teachers' thoughts? What is action? Who defines what thought and action are? Do we discover concepts in previous theoretical frameworks and then find data which will fit into them? Do we let go of previous categories and let teachers themselves define and conceptualize their activity, mental or behavioural, in their own terms within their own frameworks? Yet there is no a single, accepted answer. Different research projects have provided different answers as we will see in the following section where the conceptual and methodological bases of the research are discussed.

2.2.3 Where are we now and what do we mean when we say teachers' thinking?

I am not going to attempt to review teacher's thinking research, since it has been sufficiently reviewed from different perspectives. My discussion of the area will draw on previous reviews and will point out some of the general characteristics of the area as an introduction to the sections which will follow and which provide the more specific focus for this research. The frequent reviews (thematic and methodological) of the area have made explicit the different theoretical, conceptual and epistemological bases, the general characteristics of the area, the limitations and the contributions to teaching and to TE and research as we will see next.

2.2.3.1 Theoretical and epistemological bases of research on teachers' thinking

Firstly let me start this section by saying that the contribution to this tradition from
language teaching research and FLTE is almost non-existent, so the discussion will necessarily be on general teachers' thinking research and curricular areas other than foreign languages.

Secondly, the general umbrella term of teachers' thinking does not imply a coherent research area. It encompasses such a wide variety of concepts, research questions, procedures and findings that the field has often been conceptualized as 'preparadigmatic'. Researchers with different backgrounds have approached this area with different and partially overlapping concepts and different ways of understanding and conducting research thus contributing to its multidisciplinary nature. Although it is not easy to draw a neat distinction among the different research traditions which converge in teacher thinking research, as they feed on one another, cognitive psychology in its different traditions (American-British and Continental) seems to provide a lot of the concepts. Research on human decision making has provided the concept of teachers' decision making. Information-processing theory, with its emphasis on the teacher, has developed a different series of concepts: implicit theories, beliefs, conceptions, images and metaphors. It is in this latter model in which different research traditions converge with new concepts and research methods. (For example, Zeichner and his team at the university of Wisconsin, from a symbolic interactionist view, used the term perspectives. This conceptual and terminological variety makes particularly difficult to define the concept teachers' thinking). Subsequently I will treat the terms of teachers' thinking, teachers' cognitions and teachers' knowledge interchangeably during the project as vehicles for describing the content of student FL teachers' knowledge.

As a result of this varied background, researchers developed different notions about teachers' thinking. For example, contributions range from more cognitive psychology oriented studies (Hüber, Clark, Peterson, Calderhead, Marcelo), through more sociology oriented ones (Zeichner and Tabachnick) to more holistic, integrative ones like Butt's and Raymond's. A few definitions by researchers belonging to different traditions, will, I hope, illustrate this point:

Teacher cognition is defined as pre- or inservice teachers' self-reflections; beliefs and knowledge about teaching, students, and content; and awareness of problem-solving strategies endemic to classroom teaching. (Kagan, 1990: 419)

[inquiry on teachers' implicit theories operates from] the assumption that 'a teacher cognitive and other behaviors are guided by and make sense in relation to a personally held system of beliefs, values and principles. (Zeichner et al,
the term [teachers' thinking], has a common concern with the way in which knowledge is actively acquired and used by teachers and the circumstances that affect its acquisition and employment. (Calderhead, 1987d)

From these definitions we see that teachers' thinking has come to mean, firstly, the thinking processes which occur in teachers' minds and which determine their behaviour; secondly, a wider belief system which guides cognition and behaviour; and thirdly a more dynamic view which includes the actual processes of acquiring and using knowledge. Since the early stages of this research area, scholars have tried to conceptualize the relationship between thinking and action, to explore what kinds of bridges could be built for a more effective understanding of the link between the way teachers think about their work and the way they engage in action (Calderhead, 1990a). The relationship is not, by any means, easy to describe, as concepts used in the field draw on the researchers' different theoretical and epistemological backgrounds as observed above. For example, early conceptualizations represented the relationship between thinking and action in terms of decision-making and information processing. Later on it was recognized (Calderhead, 1981b and Marcelo, 1987) that teachers do not necessarily follow a rational model of decision-making because when they teach teachers engage themselves in thinking processes other than decision-making. Calderhead points out that exploratory studies have shown that a more appropriate form of conceptualizing teachers' activity might be in terms of the organisation and operation of habitual or automatised sequences of behaviour (routines). Since the concept of decision-making, on its own, is not appropriate to describe the kind of activity which is characteristic of classrooms, he proposes teachers' thoughts processes instead. This concept may include both decision making and routines. This was described by a wide variety of terms (e.g. teachers practical knowledge, images, implicit theories). These are more likely to embed the complex, flexible nature and content of teachers' thoughts, are more likely to be expressed in the teachers own terms and are usually explored by more varied methods of a qualitative nature.

Later on Calderhead (1987c) used the concept of teacher professional knowledge instead of teacher decision-making to organize an edition of research papers. He observes that,
teachers' knowledge provides the source of identifying and interpreting professional situations and responding to them. How this knowledge is conceptualised varies considerably amongst the researchers, from a network of 'implicit theories' to a series of knowledge bases covering different educational phenomena, or a repertoire of schema each focused upon a particular type of practical situation. The knowledge on which teacher thought and action depends appears to be based to some extent upon the 'personal' or 'commonsense' knowledge that the student teacher brings to the professional training. (Calderhead, 1987: 15)

So we see that teachers' thinking has gone beyond the initial conceptualization as decision-making during different stages of the teacher's activity to comprise a recognition that teachers' mental worlds are more complex, inconsistent, fluid, holistic, and interactive than had been admitted initially. Calderhead's framework for this edition of papers includes teachers' knowledge, its origins, nature and influences and relationship to practice.

As a result of this rich background, teachers' thinking research has generated studies with a very varied theoretical content for example, teachers' process of decision-making, planning, interactive teaching, teachers' beliefs, teachers' practical knowledge, differences between expert and novice teachers.

Simultaneously, early reviews conceptualized the area using two separate models. For example, Clark (1980) and Munby (1982) give examples of Teacher Thinking research following two separate models: decision making and information processing. They imply different ways of thinking, different questions, methods and evidence. The highly controlled decision-making model focuses on teachers' behaviour in terms defined by the researcher and the more descriptive information processing model explores the ways in which teachers define their work. Although initially there was a risk of having two competing models (decision-makers versus problem solvers) soon it was recognized that a more integrative conceptual framework, which would incorporate mind and action and the ways in which thoughts influence actions (Halkes, 1986; Calderhead, 1990a), would lead to a more thorough understanding of teaching. So reacting against what seemed a systematic disregard for the psychological and ecological contexts in teachers' thinking (Munby, 1982 and Contreras Domingo, 1985) and the evidence of research results, later reviews (Calderhead, 1981b; Shavelson and Stern, 1981; Marcelo, 1987; Clark and Peterson, 1986, for example) adopted a more integrative
perspective. From this perspective psychological and ecological contexts are considered in explaining teachers' decision making. Because this model shares certain concerns with other fields (e.g. sociology and ethnography, curriculum theory, psychology) it tends to be more eclectic, in that it includes different kinds of research methods and different concepts derived from these different fields of enquiry. For example, some of the studies using this model explore the relationships between teachers' general beliefs (e.g. traditional versus progressive), planning and interactive decision making or between teachers' conceptions of subject matter and how they influence their interactive decision making. It is from this broader model that research on teachers' knowledge developed and which provides the theoretical basis for my research.

Thirdly from an epistemological point of view, ethnography and qualitative research, with its underlying assumptions which emphasize the personal and social construction of meaning and participant observation methodology is entering the field. Epistemologically and methodologically teacher thinking research has been conducted using a variety of research methods, procedures and research designs, which show contradictory or at least varying tendencies, for example some projects may appear more qualitative, while others express their methods in a more positivistic style. Hüber (1989b) and Kagan (1990) have written epistemological reviews of the area. They both consider the field as eclectic.

Hüber views the field as a bifurcated one. Experimental projects where investigators impose their prestructured suppositions exist side by side with approaches which try to capture the subjects' perspectives. In this situation of non-communication between one stance and the other, he argues for a pluralistic liberalisation of methodology so that both approaches would complement each other. This can be done by starting research with field studies which would then be followed by a series of experiments which would vary or influence important ground elements systematically by studying contrasting groups.

Kagan evaluates a number of studies which aim to measure teachers' cognitions, from an epistemological point of view, with particular reference to the criterion of 'ecological validity'. Initially she defines ecological validity as, "the kinds of evidence researchers provide concerning the relevance of a measurement technique to classroom life" (1990: 422). She concludes that the field is "a mixed metaphor, a
paradoxical blend of positivistic rhetoric and hermeneutic sensibilities" (:422) and argues for a possibility of compromising and redefining the construct of ecological validity, saying that research should aim to create constructive changes in the behaviours or cognitions of teachers or students (:460). This concern springs from her political commitment to make research results relevant to practice.

2.2.3.2 General characteristics of the research area of teachers' thinking

As we saw before, what seems to characterize research on teachers' thinking at the beginning of the 1990s is the fact, to paraphrase Hüber, that we are in quest of a paradigm and there is an absence of a common language. But, despite this multidisciplinary nature, the area appears to be, conceptually and epistemologically, an eclectic common effort to understand more thoroughly the nature of teacher professional knowledge, how this knowledge develops and influences teaching. There are a number of features which give the area a unitary nature. From the preceding discussion we can conclude that, despite conceptual and methodological differences, teachers thinking research is characterized firstly by the assumptions that thinking processes guide action and that teachers' thinking processes do not happen in isolation but in psychological and ecological contexts. Secondly, methodologically there is a shift from positivism. Teaching situations are thought of as context-determined, so generalizations do not act as predictions of future events, but as guides to understand particular contexts and situations. Consequently, different research strategies such as self-reports, which recognize the specificity of particular cases and the view point of the research participants, and different data analysis procedures are used together with new research quality checks. Ecological validity has displaced the traditional quality checks of internal and external validity (Marcelo, 1987). Thirdly, it has given rise to the development of new metaphors to talk about teachers (e.g. reflective and thinking professionals).

2.2.3.3 Criticisms within the research area of teachers' thinking

The main criticism which have been voiced within this area have to do with the following issues:

1.- The metaphors of both information processing and decision making seem to remain inappropriate if we want to account for the complexity and richness of
teacher thinking processes. The concept of decision-making is not satisfactory to
describe the strategies used during interactive teaching, since it has been found that
only 25% of the teaching time is of a decision-making nature (Mitchell and Marland
1989). Mitchell and Marland identified different strategies other than decision
making (problem avoidance, teacher reaction, opportunity seeking, mood
assessment) used by teachers during interactive teaching. These are more
interactive and take into account contextual and psychological details.

2.- Its closeness, at times, to behaviourist models means that there is too little
acknowledgement of the validity of teachers' perspectives (Mitchell and Marland
1989) and it may represent a limited perspective on what is important for the
teachers to think about (Shulman, 1986).

3.- Some of the issues addressed lack relevance both theoretically and for the
teacher (e.g. the number of decisions that teachers make in the course of a lesson)
(Mitchell and Marland 1989). Moreover since most of the research has its basis on
psychological research the results seem to be more psychologically than
pedagogically relevant (Contreras Domingo, 1985).

4.- Efforts to clarify teachers' reflective role have not been complemented with a
parallel enquiry into the role that pupils play in the teaching activity (Trillo Alonso,
processes will provide a more comprehensive view of teaching.

5.- Particularly relevant for this study are Shulman's criticisms of the generic way
in which teachers' thinking processes have been studied. The thrust of cognitive
research on learning is subject matter specific rather than generic. The schemata
used to make sense of instruction on photosynthesis in a biology class, for
example, are completely different from those used to communicate in a foreign
language. Nevertheless, the traditional research on teachers' thinking related to
preactive and interactive thoughts has meant a disregard for teachers' cognitive
understanding and representation of subject matter content and the relationships
between such understanding and the instruction teachers provide for students
(Shulman, 1986: 25).

6.- Despite the assumption that thinking processes should not be studied in isolation
but in relation to the ecological and the personal contexts, these two aspects have not been given enough attention. Contreras Domingo (1985) comments that it is necessary to place teachers' thinking research in a classroom ecological model which will help understand the different meanings which are produced in specific contexts as a consequence of institutional and social constraints. Contreras Domingo and Munby (1982) criticize the fact that although one of the often written about postulates of teacher thinking research is the dependence of the thinking processes on implicit theories and beliefs, these remain largely under-researched. Munby argues that since cognitive information processing accounts for the significance of human perception, it seems evident that beliefs and the repertoire of understanding are crucial to models of teacher thinking.

7.- Methodologically the use of frequency counts to analyse teachers' self-reports resulting from SR or thinking aloud techniques are unsatisfactory (Shulman, 1986: 25). Furthermore, some researchers have aimed to generalize their results, overlooking the basic assumption that teaching activity can be very different from one teacher to another, since it is determined by the way they view their role, education and their teaching styles (Contreras Domingo, 1985).

Regardless of these criticisms the area has made major contributions to teaching, TE and research. I will present the most relevant in the next sections.

2.2.3.4 Teacher thinking research and its contribution to understanding teaching

Despite the fact that one of the aims of this research, to use Clark and Peterson's over optimistic claim, is "to fully understand the mental lives of teachers", a review of a decade of research on the thinking processes of teachers, leads them to conclude that this research has taught us as much about how to think about teaching as it has about teachers' thinking (Clark and Peterson, 1986). I will summarize these contributions, drawing heavily on Zabalza (1987), in the following points:

1.- Teaching is more than what teachers do and more than teachers do in their classrooms, so to understand it we have to understand not only the products but also the actions and teachers' interpretations.

2.- Teaching is seen as a professional activity and teachers as rational professionals
who have to constantly adapt to subjects and contexts, making use of their rational thoughts.

3.- Teaching is more than just a rational activity. Teachers' internal worlds are not just a cognitive structure. Teachers are rounded people and their thinking is more than intellectual rationality. It is affective, emotive and experiential. When teachers teach, what they know, think, and value all come together.

4.- Teaching is an individual activity, so prescriptive recipes do not make sense.

5.- Reflection improves action.

6.- The ecological context is fundamental to understand processes of teaching and learning.

2.2.3.5 Teachers' thinking research and its contributions to research and TE

Process-product research allowed for a close and straightforward relationship between research results and practice both in relation to teacher education and to pupils' learning outcomes. Researchers in this area aimed to identify the behaviours displayed by effective teachers. These would then be incorporated into teacher training programmes (Richards, 1990a). This relationship is not so easily drawn in the case of teacher thinking research and consequently researchers take different positions. On the one hand, some researchers are inclined to accept that the contributions which teachers' thinking research can make to the education of teachers are not in the form of prescriptions or programmes to train teachers to be more effective thinkers and decision-makers. They assume that teaching is a complex phenomenon and that, in the light of the limited research and the paucity and inconclusive results available today, the best we can do is provide teachers with situations where they can think about their activity (reflecting contributes to professional development) or with descriptions of what they do. Shulman (1986) and Clark and Peterson (1986) argue that the contribution of teachers' thinking to TE has been almost non existent, as the issues addressed have been irrelevant to teachers and teaching as they tend to focus on discrete and isolated aspects of teachers' thoughts and actions, rather than on the whole process of teaching (Clark and Peterson, 1986: 292).
On the other hand, although most research projects may be descriptive and do not make any attempt to relate research results to TE, some authors have felt that some connections have to be established and have proposed constructing a 'taxonomy of teaching decisions' (Shavelson and Stern, 1981, quoted by Contreras Domingo, 1985). Clark and Peterson (1986) note that, despite these attempts to train teachers in effective decision-making skills, no experimental studies have been undertaken to evaluate systematically the effects of training on students' achievements. They conclude that training teachers in a model of interactive decision-making is premature, since research results are far from conclusive as to what 'effective' means in teachers' decision-making processes. What research on teacher thinking can do is to stimulate teachers' thoughts by the use of new research techniques in the area and by a new relationship between researcher and practitioners.

Kagan (1990) argues that politically it is not defensible to continue producing only descriptive studies. She proposes that research on teachers' cognitions has to be related to teaching and learning processes although effectiveness cannons do not need to be derived from behavioural research but from cognitive criteria. Similarly, Floden and Klinzing (1990) argue that research on teachers' cognitions cannot just provide questions for teachers and teacher educators, it has to provide some sort of general answer. They suggest areas where research may contribute to TE (content, process and testing) as long as the research studies carried out can provide general answers rather than answers to specific questions of the following type: "what are the preconceptions about teaching and learning held by our students?" (Clark, 1988: 7, quoted by Floden and Klinzing, 1990: 20).

Some studies of teachers' interactive decision-making, which followed more closely the process-product paradigm, have used a criterion of effective teaching based on students' achievement and students' on-task-behaviour (See Clark and Peterson, 1986). Furthermore, some efforts have been made to generalize results from descriptive studies, but the attitude of most researchers is not one of prescription.

Despite of this controversy, we can say that teachers' thinking research has contributed to research and TE with new methods to analyse teaching, a new language which fosters communication between teachers, teacher educators and researchers and a new role for researchers and teacher educators and teachers as it
offers them an opportunity to explore their own assumptions (Zabalza, 1987).

As an example of this kind of contribution I will draw attention to the relevance and challenging influence that research into student teachers' pretraining knowledge would have for preservice education. In a sense, if we assume that pretraining knowledge plays an important role in the prospective teachers' professional growth, how do teacher educators take into account what student teachers already know? How would our courses be designed so that student teachers' psychological contexts would contribute to their knowledge growth as well as what teacher educators have decided in advance? (Clark, 1988). These are but two of the questions that this particular area of research may generate in relation to the education of preservice teachers.

The next section reviews the more recent development in teachers' thinking research, teachers' knowledge. The review is necessarily about research conducted in curricular areas other than languages due to the lack of studies like these in our field. Yet some of the issues will hopefully provide food for thought and stimulate similar research on the acquisition of knowledge by language teachers as well as highlighting issues that I will explore in my own analysis.

2.3 Teachers' knowledge

Knowledge about teaching has usually been the knowledge base of TE, nevertheless this knowledge does not inform us about the actual process of professional learning (Zimpher and Asburn, 1985). The knowledge base for teacher education and the knowledge base about teacher education are not the same thing. What we know about teaching may help provide information about the content of teacher education, but may not tell us much about student teachers' knowledge growth. Furthermore, as Mitchell and Marland (1989) point out, we run the same risks as research based on the overt behaviour of teachers if we study teaching isolated from the psychological and ecological contexts on which teachers base their planning and teaching. The focus of this study is this student teachers' psychological context. This component, which I will refer to as student teachers' knowledge, has been conceptualized in different ways: teachers' attitudes, academic abilities, knowledge. I will follow the structure of the previous
section to place current studies on teachers' knowledge in perspective by providing a brief historical summary.

2.3.1 Antecedents of teachers' knowledge research

The antecedents of teacher studies and what teachers are as opposed to what they do in classrooms can be traced back to the early pre- and product research. This 'black box model', as it is often referred to, related effective teaching to physical and psychological characteristics of teachers (Pérez Gómez, 1987; Richards, 1990; Long, 1980; Wilson et al, 1987). Nevertheless, due to the inconsistency with which teacher variables were defined, research failed to provide insights into the character of teachers' knowledge or the way it develops and is used in classrooms (Wilson et al, 1987; Shulman, 1986b).

Emphasis shifted from teacher centred research to research on methods and finally to teachers' actual performance adopting a process-product model (see 2.2.1). It is ironic to note that in early research paradigms (e.g. Dunkin and Biddle, 1974) the cognitive and the affective characteristics of teachers and learners were given equal weight to observable actions. As the field continued to develop, interest waned in the perceptual and cognitive states hypothesized to produce and mediate observable behaviour (Shulman, 1986a). Fenstermacher (1976) suggests that research on teaching has focused for the most part on observable behaviours because teachers' thought, not being accessible to direct observation, is not considered a proper object of empirical inquiry (quoted by Thomson 1984: 106).

As a continuation of teacher research, a number of studies isolated teachers' attitudes as the content of teachers' knowledge. Many studies were conducted to explore, for example, student teachers' attitude change along the course of TE programmes. Among these, Bewsher (1965) and Forsyth (1975), studied whether and to what extent student teachers' attitudes changed after their school placements; Butcher (1965) studied student teachers' attitudes towards education and how they change during a training course. He also compared them with those of experienced teachers. Marso and Pigge (1989) analysed the influence of preservice training and teaching experience upon attitudes and concerns about teaching. Hogben and Lawson (1983) measured student teachers attitude change in relation to their supervisory teachers. More recently Flórez González (1988) measured the
variability of student teachers' attitudes in comparison with those of experienced teachers. The new emphasis on the professional dimension of teachers' work, and teachers' professional learning (Calderhead, 1990b, Shulman, 1987), the subsequent exploration of the relationship between theory and practice in teaching and the relevance of research to practice (Fish, 1989), replaced the concept of teachers' attitudes by others (e.g. knowledge) which could explain teachers' contribution to the teaching and learning process.

2.3.2 What do we mean by teachers' knowledge?

In this section, I will review some of the ways scholars have discussed teachers' knowledge, in particular those on which this project draws. As we saw in 2.2.3 teachers' thinking models (the broader paradigm that teacher knowledge studies belong) consider that teaching activity is mediated by the individual teacher's psychological context, which I have defined as teacher knowledge in this project. But there are a number of problems associated with trying to analyse it. I will draw attention to the conceptual and methodological problems which are relevant to this project.

Firstly, it is difficult to define the concept of teacher knowledge. Research contributions in the field range between two positions. There are those researchers who make the case that teacher knowledge is essentially theoretical (Sanders and McCutcheon, 1986, as cited by Cochran-Smith and Lytle, 1990; Widdowson, 1984; 1990, for example) and those who define professional knowledge as mainly practical (North, 1987, as cited by Cochran-Smith and Lytle, 1990; Elbaz 1983; Clandinin, 1986). Between these two extremes there are others who would argue for a theoretical and a practical component in teacher knowledge, for example Shulman (1987). Sanders and McCutcheon (1986) observe that teachers' knowledge shares some characteristics with scientific knowledge, (both are claims to know, empirical and can be falsifiable); they are different in that practical knowledge is particular and individualistic and consequently difficult to generalise.

It can be argued that as long as we grant teachers' knowledge only a practical dimension we are contributing to its devaluation (Cochran-Smith and Lytle, 1990) and that teachers' status can only be enhanced by giving the profession a theoretical dimension (Widdowson, 1984).
The above debate springs from the more general discussion about knowledge on which it feeds. I will outline this debate and the way it is relevant to teachers. Traditionally, knowledge has been conceptualized according to its structure and its content. For example, cognitive psychologists have distinguished between knowing about or static information which constitutes declarative knowledge and knowing how or dynamic information which constitutes procedural knowledge. This distinction is comparable to Ryle's (1949) know how and know that. Fish (1989) explores how these two dimensions, the relationship between them and their different status have influenced TE programmes. For her, practical knowledge (knowledge how) does not stand in the shadow of theory (knowledge that), but is right at the centre of professional practice. Borko et al (1987) argue that the school socialization period provides student teachers with declarative knowledge which is later on converted into compatible procedural knowledge during field experiences.

Hellgren (1988) adds the dimension of origin of knowledge. He draws on the traditional philosophical distinctions between the kinds of knowledge proposed by Russell (1912) and Ryle (1949) and later cross-referred by Nurmi (1981). In his analysis of the relationship between theory and practice in relation to student teachers, Hellgren discusses the different kinds of knowledge one acquires by different kinds of experiences. He argues that knowledge by experience is acquired from previous school learning experiences (know that and know how). So pretraining knowledge is experience knowledge which is essential for teachers but also restricting. He concludes that although knowledge by experience underlies other forms of knowledge, it has to be mediated by knowledge of description during TE. To expand this personal experiential knowledge, more experience is not enough, as it is doubtful that everybody is aware of the meaning of their experience. Experiential knowledge can be expanded in education by a mediated knowledge of that (subject matter, pedagogy, didactics) and knowledge of how (underlying assumptions and research methods). This is essential for an appropriate relationship between theory and practice in TE. From a wider social perspective, Buchmann (1987) discusses teaching knowledge and a framework to analyse its structure. The knowledge about their educative process which student teachers have accumulated during their schooling years, folkways, is learned by acquaintance, through participation in cultural patterns. She argues that this knowledge is taken on faith and activated in experience. It provides ready-made
recipes for action and interpretation that do not require testing or analysis while promising familiar and safe results. It reinforces the idea that teaching is unproblematic and common sense.

Furthermore, several frameworks have been drawn to analyse teacher knowledge. For example, Valli and Tom (1988) describe teachers' knowledge in a framework which comprises: domains, forms, and sources of knowledge.

During the course of a case study with an English teacher, Elbaz (1983) developed a global framework of knowledge to describe its content, structure and use. She analysed interview and observational data within that framework as follows: content (knowledge of self, of setting and subject matter, knowledge of curriculum development and instructions), knowledge orientations (situational, experiential, theoretical, social and personal) and the way it is structured in its relationship with practice (rules of practice, practical principles and images).

Calderhead, using his findings from two studies with preservice teachers, and drawing on the findings of other research programmes, developed an integrative model of professional practice which could replace the model of knowledge implicit in most current TE courses. He points out that in many courses it is assumed that there are certain vital knowledge bases (e.g. subject matter, curriculum, materials, methods, learning) that student teachers must learn but that responsibility to link this knowledge with classroom activity is left to the student teachers (Calderhead, 1988a, 1990b). His model of professional learning includes content and structure and their linking by metacognitive knowledge which acts on different knowledge bases to generate practical knowledge or images that are useful for specific teaching contexts.

Secondly there are a few methodological problems: (a) Investigating teachers' knowledge creates difficulties because of its elusive and tacit nature Kremer-Hayon (1989); (b) there is still no agreement about who can define what professional knowledge is: the teacher, the philosopher of education, governments? (Kremer-Hayon, 1989; Jarvis, 1983); (c) efforts to conceptualize teachers' knowledge have been carried out from different methodological perspectives: epistemological analyses of practice (Schön, 1987), observations of teachers at work (Elbaz 1983, Lampert, 1986) (Kremer-Hayon, 1989: 101), Trumbull (1986) or analyses of
student teachers' and supervisors' perceptions (Kremer-Hayon, 1989) (For the specific way it was done in this project see chapter 3); (d) the possibilities of generalising research results on this area are limited due to the progressively more accepted view of knowledge as contingent and context dependent. Finally, and more specifically, most of the contributions on FL teacher knowledge are derived from theoretical discussions within the profession and from other research areas (Richard and Nunan, 1990) rather than from research (see 2.3.6).

Following roughly the frameworks discussed above I will next discuss the different ways in which the content or domains of teachers' knowledge have been analysed since the focus of this research is the content of student teachers' knowledge.

**The content of teachers' knowledge**

Different concepts from the ones associated with traditional teachers' thinking research are used to study the relationship between thinking and action (see Calderhead, 1990b). For example, studies which acknowledge teachers' points of view and report them in the teachers' own language use the concept of *implicit theories* (Zeichner et al, 1987). The assumption that teachers knowledge has a practical dimension has provided the terms of *practical knowledge* and teachers' *craft knowledge*. The term *perspectives* is used as it can show thinking in relation to action (Zeichner et al, 1987), others use *knowledge* and *beliefs* interchangeably. Hewson and Hewson (1989) define *conception* of teaching science as "a set of ideas, understandings, and interpretations of experience concerning the teacher and teaching, the nature and content of science and the learners and learning which the teacher uses in making decisions about teaching, both in planning and execution" (206). They argue that conceptions can be useful constructs to analyse change and internal consistency and allow for comparisons between teachers.

Some decades of process-product research and to a certain extent teachers' thinking research meant an absence of *subject matter* and subject matter pedagogy from research programmes and TE courses. Shulman and his collaborators at Stanford, were among the first researchers to stimulate a body of enquiry aiming to search for what they called, the "missing paradigm" with the final aim of reconciling *knowing*
and teaching (Shulman, 1986b). The work that he and his team conducted with student teachers, first year teachers, and experienced teachers led them to develop a Model of Professional Learning. This framework includes the following categories to describe the content of the teacher professional knowledge: knowledge of subject matter, pedagogical content knowledge, knowledge of other content, knowledge of curriculum, knowledge of learners, knowledge of educational aims, general pedagogical knowledge (Shulman, 1987; Wilson et al, 1987; Gudmundsdottir and Shulman, 1987b).

Shulman and his team draw on Schwab's discussion of disciplines for their work. He identifies two kinds of structures within them. The substantive structures are "the conceptual devices that are used to define, bound and analyse the subject matter". Examples in language are sentences, nouns, tense. "This kind of structure determines what scholars in the field consider their subject matter to be about and what kind of questions should be asked of their subject". But the ideas and concepts of the disciplines are tied to the methodology used to generate new knowledge. (Gudmundsdottir and Shulman, 1987b). People studying language will have to take courses on different trends in linguistics or sociolinguistics. These form the syntactic structures of disciplines.

The most important concept in Shulman's model is pedagogical content knowledge. It is different from subject matter knowledge. It is knowledge of the subject matter for teaching, and includes ways of representation, explanations, demonstrations and formulations of subject matter to make it comprehensible to others. It involves a reorganization of content and teaching strategies by which content is dealt with and transmitted in class. (Gudmundsdottir and Shulman, 1987b). Pedagogical content knowledge also includes the different ways topics can be taught, pros and cons of each approach and knowledge of the students (misconceptions, topics students find interesting, difficult or easy to learn. (Gudmundsdottir and Shulman, 1987b,). McDiarmid et al capture most aptly the meaning of pedagogical content knowledge:

Teaching involves a wide variety of activities that relate more or less closely to the essential purpose of helping others to understand. Teachers explain, ask questions, respond to pupils, develop and select tasks, and assess what pupils understand. These activities emerge from a bifocal consideration of subject matter and pupils, framed by teachers' own understanding and beliefs about each and shaped further by their ideas about learning and their role in promoting learning, as well as their understandings and assumptions about the content.
Melding these different domains of knowledge is at the heart of teaching. Shulman and his colleagues have labelled the product of this melding *pedagogical content knowledge*. (1989: 194)

Ball and McDiarmid (1990) distinguish three dimensions in subject matter knowledge. The most relevant for the discussion are: *the substantive knowledge of the subject* and *knowledge about the subject*. The former is "the very stuff of a subject, its components and the terms used to classify it, [which] differ from one subject to another" (:440) Knowledge of a language includes concepts and their definitions as well as procedures (e.g. what an adjective is, or the notion of time and how to express time or modality in the language). This dimension is what is conventionally thought of as subject matter. The latter is knowledge about "the relative validity and centrality of different ideas and perspectives, the major disagreements within the field, how claims are justified and validated" (:440). This knowledge also varies from one subject to another. For example knowledge about history should distinguish between fact and conjecture or interpretation. As the authors observe, "historians' different perspectives lead not only to different interpretations of the same phenomena but also to the pursuit of entirely different questions" (:441). Similarly we can say that teachers who see language as a system of rules to be learned would design very different materials and activities from teachers who think of language as a system of negotiated meanings and communication. This is the dimension of the student teachers' subject matter knowledge (*knowledge about language*) I have tried to analyse in this project.

As used in this study, the general concept of *student teachers' knowledge* draws on Hewson and Hewson (1989), (Gudmundsdottir and Shulman, 1987a and 1987b) and Ball and McDiarmid (1991), as well as discussions on FL teacher knowledge and it includes knowledge *about the subject matter, knowledge about language learning and teaching*. It is assumed that student teachers have not only general ideas about learning (e.g. motivation), but also specific knowledge about language learning. Knowledge about language teaching will be a compound of general pedagogical knowledge (interactional aspects of teaching) and subject specific (instructional aspects of teaching).

In this respect, Leinhartd and Smith (1985), Leinhartd and Greeno (1986) and Leinhart and Feinberg (1989), drawing on schema theory and research on teachers' knowledge, conceptualize teachers' knowledge as *knowledge about the structure*.
of the lesson which includes: presentation of new material, guided practice, monitored practice and giving feedback and subject matter knowledge (knowledge about the subject matter and about how it is learned.

The skills associated with lesson structure and subject matter knowledge are so intertwined that Leinhardt and Feinberg (1989) set out to examine the integration of the knowledge systems of lesson structure, based on general pedagogical knowledge, and specific subject-matter knowledge. They argue that to separate the two will not yield a complete picture of what goes on in the classroom. They propose to draw on two different kinds of analysis: planning nets for the pedagogical knowledge and semantic nets for the conceptual, more static subject matter knowledge.

The fact that different types of knowledge all converge in the classroom, has led some researchers to propose different concepts which will account for teachers knowledge more entirely.

2.3.3 Knowledge and the language teacher

I will present now six examples of how teacher knowledge has been addressed in our field. In the first place, following the trend of the day and combining available information on the psychological context (the teacher characteristics) and the training context, Strevens (1974) attempted to describe the underlying principles of teacher training. It is important to notice the importance Strevens had attached to the personal attributes (pressage variable) of the trainee (e.g. age, maturity, personal education, previous experiences) in determining the training process. According to him, TE programmes should include a combination of continuing education, general pedagogical knowledge necessary for all teachers, and pedagogical content knowledge which includes skills (know how), theory (know why) and information (know what) elements. Skills include teachers' command of the language, teaching techniques, classroom activities, and management of learning. The information component is knowledge about the subject matter and includes knowledge about methodology, syllabus, materials and language. The theory component is a more sophisticated knowledge, and includes a knowledge of the principles which guide practice. Yet there is no indication about how to include the personal contribution of the student teachers' into the TE curriculum.
Second, a decade later, the 1983 Georgetown University Round Table on Languages and Linguistics, brought together a series of leading practitioners and applied linguists to discuss what theories and what kind of relationship between theory and practice would be appropriate for the education of FL teachers. The discussions, summarized by Alatis, Stern and Strevens (1983), centered on the content of TE programmes, with varying emphasis on the theoretical and practical aspects. Proposals based on research were generally absent. A few contributions actually touched on an analysis of the process of learning to teach (e.g. Fanselow conducted research to document the process of change involved in TE, evaluating the programme at the University of Columbia Teachers College). Others proposed student-centered and language experiential programmes (Celce-Murcia, Larsen-Freeman, Coste, Altman, di Pietro). Stern proposed analysing what student teachers brought to the training situation, so that training could be devoted to what they still needed to learn. Yet no analysis of how student teachers and teachers make sense of this knowledge base or of the relationship between knowledge and teaching was discussed.

Specifically, the contributions to the round table underline different kinds of content for TE which imply different kinds of relationships between theory and practice. The emphasis ranged from subject matter knowledge (language proficiency, knowledge of linguistics, SLA, literature, culture, etc) to general pedagogical knowledge, (classroom management, discipline and general teaching skills, e.g. Alatis, Altman); from a combination of general knowledge about teaching and subject matter pedagogical knowledge (Finnocchiaro, Coste, Jarvis) to teacher attitudes (Brown, Altman); from research methods (Tucker, Long) to an emphasis on extended classroom experience and supervision (Larson). Larsen-Freeman describes the attempts made by the TE MA at the School for International Training (Vermont) to balance the tension between theory and practice. The programme revolves around the treatment of content not as information to be passed on, but as the possession of attitudes, awareness and skills which can mediate between theory and practice. Similarly, Stern proposes a dynamic understanding of theory, in relation to teaching, composed of thoughts, concepts, values and knowledge. This theory would include knowledge about the subject matter (a view of the nature of language and a concept of language learning) an awareness of the social context, general pedagogical knowledge and pedagogical content knowledge. Stern's (1983) professionalisation model grants some importance to the
contributions of the student teachers' psychological context to the way they learn to teach. His emphasis is on finding out what student teachers lack at the beginning of the year rather than understanding how what they bring influences their learning process. Jarvis argues for a relevant subject specific knowledge saying that,

It is time to recognize the unique properties and characteristics of second language learning and teaching. Knowledge transplanted into our field is neither valid nor useful to a teacher. Only knowledge specifically about the second language situation can guide a teacher in designing and implementing instruction. (1983:237)

She argues that this knowledge is more likely to influence the way teachers behave in their classrooms and so recommends replacing general courses (psychology, general methods, philosophy of education) with language specific courses.

Although the GURT concluded with a desire to conduct research in TE, the fact remains that, almost a decade later the latest Handbook of Research on Teacher Education, edited by Houston et al (1990), dedicates one section of the book to discuss research on TE in the curricular areas. As in previous handbooks, contributions on FLTE are absent.

Thirdly a different kind of contribution to this debate is the influential way of accounting for the relationship between theory and practice in FLs Anthony's traditional distinction between approach, method and technique, its later elaborations (Richards and Rogers, 1982) and counterarguments (Woods, 1990; Pennycook, 1989; Prabhu, 1990). Clarke (1983), for example, contends that the term method is ambiguous and hampers communication among professionals and that techniques do not exist, at least in the way used in method courses. For him a technique is "a bundle of options, a dynamic interaction of systems which can be understood only if we tolerate the complexity and ambiguity inherent in reality" (110). Also, Anthony's use of approach is limiting. This conceptualisation, Clarke observes, only helps maintain the existing split between theory and practice. He proposes the concept of image as a global term to account for all our learning and experiences, present perceptions, plans and expectations for the future. Images direct behaviour, without making a distinction between theory and practice. Discussions on teaching are then framed in images. An interesting concept is Prabhu's notion of teachers' sense of plausibility. This is a personal knowledge
(he also calls it pedagogical perception, or subjective understanding of teaching) which may vary from teacher to teacher in its content and in the way in which it is formed or articulated. It is part and parcel of practice and converts teaching into something else rather than a mechanical activity as it allows teachers to examine what they do, thus contributing to teachers' growth.

Fourthly as more studies of language classroom processes are conducted from different perspectives (Chaudron, 1988; Nunan, 1989; Brumfit and Mitchell 1990; van Lier, 1988; Richards, 1990a and b; Widdowson, 1990; Spada, 1990; Freeman, 1989; Long, 1990) there are stronger arguments for basing FLTE on research into teaching. Freeman (1989) argues that FLTE is shaped according to the way we define teaching and so research on teaching should be the primary source of information for TE, rather than Applied Linguistics, SLA or methodology (1989:29). I will discuss the way two teaching models might contribute to TE. Richards (1990a) observes that the preparation of effective teachers is based on a theory of effective language teaching. This involves a process of studying the nature of effective language teaching on which a theory of teaching is based from which principles for the preparation of teachers are then derived. The goal of FLTE would then be to impart the strategies identified in effective experienced teachers to student teachers. Day (1990), for example, analyses techniques and observation instruments which would help student teachers acquire information about teaching and learning in general (e.g. classroom management, motivation, movement patterns) regardless of subject matter. By observing experienced teachers they can identify effective classroom practices which they can apply to their teaching.

Freeman (1989), on the other hand, bases his proposal for FLTE on a model of teaching as decision-making, which involves knowledge, skills, attitudes and awareness. The concept of attitude allows for the individual teacher's personal understanding of self, teaching and learning processes. Awareness is defined as the "capacity to recognize and monitor the attention one is giving or has given to something" (Freeman, 1989:33). For Freeman, FLTE should educate teachers' decision-making capability through the constituents of knowledge, skills, attitude, and awareness. (:37). Based on this model, he proposes two different strategies for FLTE: training and development. Britten (1988) emphasizes the influence of attitudes on techniques and the importance of changes of attitudes in the process of becoming teachers. He then justifies the integration of a theory component into
methodology to overcome the resistance to the new teaching models which arises in preservice teacher education.

A further contribution to the discussion of the relationship between theory and practice in teaching is the challenging of the traditional top-down relationship in teacher development based on a view of teacher as researcher (e.g. Widdowson, 1984, 1990; Ramani, 1987; Taylor, 1985; Nunan, 1990; Wallace, 1991; Bartlett, 1990; Pennington 1990). These professionals argue that practice becomes the legitimate ground for theorizing about teaching and empowers teachers with a new role of mediators or researchers who can make the connection between theory and practice when they reflect on what they do. They adopt a reflective approach to Teacher Education, assuming that becoming reflective means exploring and challenging beliefs and attitudes about teaching and learning and they propose activities to foster reflective attitudes among teachers. Thus this theory of practice will end the divide between theory and practice (Taylor, 1985) as an interdependency of theory and practice will reconcile the requirements of relevance to teaching and rigour of enquiry (Widdowson, 1984, 1990). Using a model of teaching as *pragmatic mediation*, Widdowson and Candlin proposed a TE programme, *Language Teaching: A Scheme for Teacher Education*, which aims to promote reflection among teachers. It is "a pragmatic approach to language pedagogy which casts the teacher in the role of mediator between theory and practice" (Widdowson, 1990: 60). The scheme includes the following content: language knowledge (e.g. discourse, vocabulary), models of behaviour (skills), modes of action (roles of teachers and pupils).

Widdowson's statement that we are very prone to prescribe what teachers should think about while we do not really know what they think about, is not far from the assumptions of research on teacher thinking. This model is certainly complementary to teachers' thinking research. Both share some assumptions, particularly the importance given to the mediating role of the teacher's cognitive processes in the classroom activity. The University of Wisconsin Elementary Education Student Teaching Programme combines the principles of student teachers' enquiry into practice and the rational analysis of classroom instruction by examining student teachers' intentions and beliefs. However there are differences between the two approaches. One of the differences is that, although in theory, the psychological contexts of the teachers' are taken into account in the *interpretation*
stage of Widdowson's model, for example, there is not an explicit attempt to analyse existing teachers' ideas, conceptions or knowledge or the way these influence practice. The differences will become clearer as the following sections unfold.

Finally, a minor contribution comes from the argument that TE is not just about deciding on appropriate content or changing classroom behaviour during TP, but about helping student teachers make their beliefs or knowledge explicit, analyse them and change them, since they will affect the way they learn the content of the course (Brown, 1990). From a classroom based research background, Gebhard et al (1990) grant student teachers a responsibility for their own teaching decision making and, from a socialization perspective, Marks (1990) reflects on the fact that, when they enter TE courses, student teachers know a lot due to their previous learning experience.

In summary, firstly, contributions to the area of FL teachers' knowledge have been made from discussion of the knowledge bases with varying emphasis either on the theoretical content (e.g. learning theories, Applied Linguistics) or the practical component (TP) and descriptions of TE programmes, through debates about the nature and organization of teachers' knowledge bases (method, approach, technique) to research on teaching.

Secondly, it is generally assumed that knowledge and expertise develop in practice, which means that student teachers' abilities to reflect and analyse practice are nonexistent. Richards and Crookes (1988) emphasize the TP component as the major opportunity for student teachers to acquire practical skills and knowledge required to function as an effective teacher. Brumfit (1983) argues that trainee teachers cannot be expected to see underlying patterns and evaluate success and failure because their perception is very subjective and because "they do not have teaching sensations to extrapolate from" (:61). So although reflective and research attitudes are accepted and underline many inservice training courses (e.g. Ramani, 1987; Candlin and Widdowson's series; Wallace, 1991), preservice programmes are still seen and conducted as prescriptive training in skills with an emphasis on overt behaviour (Brown, 1990).

We have seen how different theoretical bases can constitute the content of TE
programmes, how different TE processes might enhance the learning process or how teaching research can shape the content of TE. Despite this wealth of knowledge, teachers' and student teacher's knowledge has remained in the shadow. It seems that what is missing from scholarly discussions and research on the knowledge base of language teaching are the voices of the teachers themselves, an analysis of the contributions of teachers' psychological contexts to teachers' development and their effects on practice (Cochran-Smith and Lytle, 1990). As Brumfit (1983) observes,

> If we fail to acknowledge the relevance of this [teachers' personal knowledge], even more if we insist on its being converted inappropriately into categories derived from Applied Linguistics or other research, we shall obscure not only teaching, but our field as well. (71)

Because the actual process of becoming a teacher has remained under-researched, in general second language educators know little about the preparation of language teachers (Langue, 1990). As Gebhard (1990) observes,

> teacher educators have taken research findings on effective teaching and directly translated them into skills to be mastered by student teachers in their teacher education programmes [...] [but] such studies do not allow teacher educators to understand the experiences teacher educators and student teachers go through together and the consequences these experiences have on the student teachers' development as teachers during and after the programmes. (119)

Next I will review some of the research projects conducted to analyse teachers' knowledge and its contribution to teachers' development.

2.3.4 Research on teachers' knowledge. Its content, origin and relationship to practice

The research which I will review here has brought to the surface issues which had to do with the content of teacher knowledge, its origins and relationship to practice. In other words, the role of knowledge in learning to teach.

One of the seminal works on teachers' knowledge is Elbaz' (1983). From a curricular perspective, she sees teachers' knowledge as practical, experiential knowledge. It is a compound of attitudes and beliefs, instructional and curriculum knowledge and classroom management skills. It is informed by the teacher's theoretical knowledge about subject matter, child learning and development and
social theory and is acquired and developed in the process of teaching. Teachers use this complex and practically oriented set of understandings to think about and organize teaching. Following an eclectic approach, Elbaz studied one teacher's practical knowledge by means of interviews and observations. She analysed the data according to the following categories to describe the content of her teacher's knowledge: knowledge of self and milieu, subject matter knowledge, knowledge of curriculum and instruction. Her conclusions point out that 1) the teacher's knowledge is a coherent and interrelated body of knowledge which comprises content, some orientations and a certain structure, 2) while there are minor conflicts in her teacher's content knowledge, there is a strong sense of coherence in the way different areas of knowledge are closely tied in with each other and 3) teachers shape the curriculum to fit personal preferences and to suit individual groups of learners, both during planning and instruction.

As we saw in 2.3.2 because they were dissatisfied with the persistent absence of subject matter in research and in TE courses, Shulman and his collaborators at the University of Stanford School of Education set up a research programme, Teachers' Knowledge Growth, to explore the relationship between subject matter knowledge and pedagogy, in other words, how the subject matter knowledge student teachers have acquired during under-graduate courses modifies and guides teaching practice. The emphasis is on how content knowledge becomes pedagogical content knowledge in practice and how the new understanding influences teaching. Their data was collected, without a previous theoretical framework, by a series of wide ranging interviews and classroom observations. They based their research on data gathered with student teachers, first year and experienced teachers. The project began with the student English teachers' year of preparation and the researchers followed some of the student teachers in their first year of teaching. During the first phase, they drew up an intellectual biography to uncover the set of understandings, conceptions and orientations that constituted student teachers' source of comprehension of the subjects they were to teach (Shulman, 1986b). The findings showed that student teachers developed orientations towards their subject matter during undergraduate courses, which may change when they begin to teach different groups of pupils (Grossman et al, 1985). In the second year of the project, they followed some of the student teachers in their first year of teaching. They were interested in the transformation of knowledge or how teachers acquired a new understanding of their discipline for the
purpose of teaching it. During this phase of the study they worked with two experienced literature teachers. The researchers found that the teachers' subject matter background was the origin of their orientations, which were the base they used to restructure their content knowledge into pedagogical content knowledge. Yet it was during practice that teachers "invented" (since there was no indication that they were taught to organize their content in any specific way) teaching methods to deal with content in class (Gudmundsdottir and Shulman, 1987a).

In another paper, Gudmunsdottir and Shulman (1987b) reported social studies expert-novice differences using their Pedagogical Reasoning Model developed in their previous research. They were interested in the ways in which expert teachers knew their subject matter and could do things in the classroom that novice teachers could not. The researchers found that what distinguishes the veteran from the novice while teaching it is a solid body of pedagogical content knowledge. The student teacher's tendency was to draw directly on his content knowledge as he had learned it at college. He employed activities his college professors had used in college classes and he looked for examples in college texts. Most of his knowledge of learning and motivation also came from his college class and he used terms from college class to describe and justify his pedagogical approach. At the end of the year he had developed ideas of his own based on his TE classes which were flavoured by the teaching experience.

According to this body of research, what seems to be essential is the way in which existing knowledge (subject matter and its orientations) is transformed during practice into a different kind of knowledge which is relevant for teaching. In this respect, Gudmunsdottir (1990) discusses the influential role of teachers' personal educational values in the transformation of content knowledge into pedagogical content knowledge. In his study with four experienced teachers he found that each of the teachers had what he called a personal pedagogical model of teaching. These models are the centre of teachers' pedagogical knowledge. They develop through practice and are made up of values and pedagogical orientations and lead teachers to favour some teaching strategies over others.

Wilson and Wineburg's (1988) research emphasized the way in which the subjects' different disciplinary backgrounds influenced their teaching process and content. Their subjects were six beginning social science teachers with different academic
backgrounds, who had followed the same TE programme and were teaching American History. The researchers found that their different disciplinary backgrounds influenced the teachers' thinking about the subject matter (the conceptions they had about History) and their teaching styles. They argue that subject matter knowledge is knowledge about facts but also beliefs and contend that these conceptions and beliefs from their undergraduate disciplinary backgrounds ran deep and guided their teaching goals and the way they taught.

Similar findings were arrived at by Hashweh (1987). He worked with six experienced science teachers: three specialists and three non-specialists. Since previous work by the Stanford team had focused on knowledge growth rather than on effects of teachers' knowledge on specific aspects of teaching, following a more contrived research design, he aimed to describe teachers' understanding of subject matter and trace its effects on specific teaching activities. The study was designed to assess each teacher's knowledge of two topics, one from physics and the other from biology and their preactive and simulated interactive teaching of each of the topics. Teachers' knowledge was assessed using different techniques. In order to assess teachers' preactive teaching a thinking aloud technique was used to find out how teachers would plan a topic from a textbook, in a simulated setting. Their interactive teaching was simulated by describing critical incidents to the teachers and asking them to react. His findings refer to the composition of teachers' knowledge and the way it influences teaching. He found that teachers' knowledge was composed of topic schemata, non-topic schemata and preconceptions (commonsense and at times inaccurate knowledge). The influence of teachers' prior subject matter and preconceptions was evident in the modifications of textbook subject matter (topic concepts and teaching activities) and in the representations of the subject matter, particularly in relation to the evaluative questions they posed to the students, the way they could detect students preconceptions, and the way they responded to students examination answers and laboratory result. He concludes that teacher prior knowledge of subject matter contributes "greatly to the transformation of the written curriculum into an enactive curriculum, a transformation that starts during preactive teaching and is reinforced and completed during interactive teaching" (:119).

Cooney (1984a, 1984b, and undated) reports and discusses the findings of a study conducted with beginning mathematics teachers. It aimed to establish the
relationships between teachers' beliefs about subject matter, pedagogical orientations and teaching activity. The data comprised interviews (about the nature of mathematics, about how it is learned and taught) and classroom observations. The data show the progression that teachers followed from their pretraining understanding of problem solving to the way they taught. One of the teachers thought that problem solving was the essence of teaching. When he was confronted with the realities of the classroom, this conception changed to being just one aspect of his teaching. The reaction the teacher manifested to the interviews reports after nine weeks of teaching showed a conflict between his beliefs in problem solving and the day-to-day lesson planning and preparation so that he found it difficult to integrate problem solving in his practice. Cooney's findings led him to argue that it is presumptuous to assume that the nature of the learned TE curriculum is synonymous with the intended TE curriculum and that teachers' preconceived notions of teaching influence what they acquire from formal training.

In their discussion of the results of research conducted on beginning teachers, Feiman-Nemser and Parker (1990) see the role of teachers' subject matter knowledge in relation to pupils' learning, to the way of representing it to particular students (explanations and tasks) and to classroom management. Their data were the conversations between mentors and beginning teachers. They tried to see how subject matter concerns entered these conversations. They concluded that subject matter concerns permeated the task of teaching, observing that "despite the widespread influence of generic views of teaching, the fact remains that teachers deal with particular content and particular students in particular settings" (:42).

Brickhouse (1990) reports the research findings of a study of science teachers' beliefs about the nature of science and their relationship to practice. She relates teachers' syntactic subject matter knowledge (teachers' views of scientific theories and scientific processes, growth of scientific knowledge) and the methods teachers use in class to help students construct a knowledge of science. While one of the teachers viewed theories as truths that had to be uncovered through rigorous experimentation, they were thought of as tools to solve problems by the other teacher. These divergent views of the role of theories were consistent with the different educational goals they had for their students. Their inductive or theory-driven views of scientific process guided how the teachers thought children should learn science. A cumulative understanding of scientific process led one of the
teachers to design activities which would foster learning by accumulating and memorizing pieces of information. A revisionary perspective led the other teacher to understand science learning not only as the memorizing of new information, but also as thinking about old information in new ways (Brickhouse, 1990: 59).

Peterson et al (1989) following a more process-product research fashion related teachers' pedagogical content beliefs and teachers' pedagogical knowledge to teaching approaches and students' achievement in mathematics. They developed a Likert scale type questionnaire to assess teachers' beliefs about addition and subtraction and used a structured interview to obtain information about teachers' conceptions of mathematics, curriculum and roles of student and teachers and their goals. The interviewers rated the teachers on a 5-point scale for each construct. As a result of the quantitative analysis of questionnaires, teachers were divided between those who are cognitively based and others who are less cognitively based. The findings suggest that there are positive relationships between teachers' pedagogical beliefs and knowledge, approaches to teaching and student achievement of problem solving abilities in addition and subtraction.

The results arrived at in Thomson's doctoral dissertation (1984) on the content of teachers' conceptions of mathematics and mathematics teaching following a more qualitative perspective show different results. She wrote individual case studies and a cross-sectional analysis based on interview, observational data and five written tasks from three experienced teachers to uncover which conceptions they had about mathematics and teaching and whether these conceptions influenced behaviour. The observations allowed her to infer teachers' conceptions while interviews elicited their professed conceptions. The individual case studies showed different degrees of congruence between the professed beliefs about mathematics and classroom instruction. The degree of congruence was discussed in terms of the 'integratedness of systems of beliefs' which would allow for identification of conflicting views or views and practices and consequently for modification to resolve inconsistencies. The cross-case analysis showed that differences between teachers' planning and instruction and their views about cognitive goals and objectives of mathematics instruction could be related, although not in a simple and unproblematic way, to different conceptions of mathematics.

Borko et al (1987) drawing on the evidence provided by research findings of
expert/novice differences⁸ and the current situation of the knowledge bases for TE⁹, compared student teachers and elementary teachers' conceptions of successful teaching and their teaching behaviour. Their data was composed of participants' written descriptions of successful and unsuccessful lessons, and assessments of their professional development recorded in journals kept during a year-long field experience. The journals contained responses to questions set by the researchers (e.g. select the most successful/ unsuccessful lesson, outline what you attempted to do, comment on how students reacted, indicate why you think it was successful/ unsuccessful and assess your progress). The researchers present their data in relation to stronger and weaker students using themes which were identified by the students as components of successful teaching: uniqueness of instruction, management of instruction, planning and preparation, behaviour management and classroom control, student characteristics and outcomes. They argue that, in contrast with Gulluzzo's (1984) study in which student teachers interactive thinking only made references to learning activities, student learning and attitudes, when student teachers have time to reflect they are more capable of reflecting on other dimensions. They report that while teaching conceptions are similar for stronger and weaker students, the realities of their teaching and the way they use planning were different. The data also provided evidence to support teacher socialization findings, mainly that teachers internalize models of good teaching while they are students and that formal pedagogical preparation does little to modify these models, as the students maintained similar conceptions of teaching throughout the year. These findings support Tabachnick's and Zeichner's (1984) in that, apart from maintaining stable perspectives during TP, student teachers also show stable conceptions of what constitutes successful teaching throughout the year (Borko et al, 1987: 89). Borko et al argue that in this situation the value of field experiences is in helping student teachers transform the declarative knowledge (conceptions of teaching) they have acquired in their school socialization period into procedural knowledge which is compatible with the declarative knowledge fostered by the programme.

Applying the findings of cognitive psychology to a three year study into differences between expert and novice teachers, Leinhardt and Smith reported on the subject matter knowledge of four mathematics expert teachers and four novices in their last year of training. Different kinds of interviews were conducted and extensive classroom observation sessions were video recorded. The researchers were
interested in establishing differences in the content used and how it was communicated by teachers whose performance was superficially similar (in their interview performance, student success rate and textbooks used), but whose knowledge organization was substantially different. By analysing the declarative knowledge, derived from lesson recordings and SR, using semantic nets, they could show the differences among expert teachers' subject matter knowledge, especially in the conceptual information given and how it was presented. These findings are consistent with other research on teacher expertise: experts had more elaborate and deeper categories for various aspects of subject matter knowledge than novices (Leinhardt and Smith, 1985).

Clandinin studied experienced and novice teachers' personal practical knowledge with reference to the cultural and professional contexts, rather than in isolation (1986, 1989). Following an anthropological research tradition and drawing on Elbaz's conceptualization of teachers' practical knowledge, she conducted a study with two primary school teachers adopting a participant observer role. She interviewed teachers and observed them in class. By interpreting the observational and interview material, she reconstructed the teachers' practice as a series of images. She found that different teachers had different images, that images imply different degrees of globality, each containing various kinds of content knowledge, (e.g. of the teachers, of context), that they were the expression of teachers' different classroom practices, that images held by the same teacher may be conflicting and that similar teaching practices may respond to different curricular environments.

Her second study was also based on the assumption that experienced teachers hold a special kind of knowledge which is practical, non propositional, experiential and shaped by the teacher's purposes and values. This time she explored how this knowledge develops. She found that the transition from being a novice to being experienced is the result of finding solutions to a series of dilemmas which occur when novice teachers try to realize their teaching images in specific contexts. By a combination of different methods (biographical data, journal material, interviews, filed notes), she composed a narrative reconstruction of the novice teacher's classroom practice around the image of 'teaching as relating to children'. This image seems to emerge both from personal and professional experiences and finds its expression in practice. Yet it is not devoid of propositional knowledge learned
during TE courses. At the heart of the teachers' process of learning to teach there are a series of conflicts between their images-in-practice, school contexts and reconstructions of their experience in order to regain balance. Understanding the process of learning to teach involves the narrative reconstruction of a teachers experience as personal practical knowledge is shaped through its expression in practical situations.

The researchers at the learning Research and Development Center at the University of Pittsburgh have been conducting research with mathematics expert teachers which could integrate the content and the structure of teachers' knowledge. As defined by Leinhart and Smith (1985), lesson structure knowledge includes the skills needed to plan and run a lesson smoothly, to pass easily from one segment to another and to explain the material clearly. Subject matter knowledge includes concepts, operations and connections between different procedures, understanding of student errors, and curriculum presentations. It supports lesson structure and acts as a source of examples, explanations and demonstrations. The content of the lesson influences the way it is to be taught (247). Leinhart and Fienberg (1989) conducted such an integrative study with four expert teachers, to analyse how general pedagogical knowledge (knowledge of the lesson structure) related to teachers' subject matter knowledge. Interview and observation data were analysed in semantic and planning nets. The first one aimed to identify specific concepts being taught and their interconnections and the second to analyse the structure of the lesson, its goals and actions. Their focus was on the presentation segment of the lesson and the content presented. They analysed both aspects separately first, and then in an integrated way, in order to interpret the relationships between knowledge of goals and actions and the teachers' subject matter knowledge. Although their interpretations of the relationships between one sort of knowledge and the other are tentative, the findings suggest that while goals are stable across teachers and lessons topics, action schemes were influenced by the teachers' underlying subject matter knowledge and tended to be unique for each teacher and each event. By a combination of semantic and planning nets, the researchers could show the relationship between declarative and procedural knowledge.

Hollingsworth and colleagues at the University of California, Berkeley, conducted a longitudinal study with preservice teachers in an effort to integrate various research areas: research on pedagogical knowledge and subject matter knowledge.
They studied the knowledge growth of student teachers during the year of their preparation. By a combination of interviews, documents and observation of student teachers, college instructors, supervisors and school teachers, they built a set of data on which they could document the relationship between preprogramme and post programme beliefs, between preprogramme beliefs and pedagogical knowledge growth, and between subject specific content and pedagogical knowledge. Their more relevant findings point to the critical role of pre-programme beliefs and the importance of understanding prior beliefs for supervision and TE course design. Preprogramme beliefs interact dynamically with programme content and classroom understandings. They serve as filters for processing programme content and making sense of classroom contexts (Hollingsworth, 1989: 168). Understanding subject matter specific content and pedagogy is necessary but not sufficient for learning to teach. Only successful student teachers managed to routinise classroom management and integrate management routines into subject specific knowledge which allowed them to understand pupils' learning.

2.3.5 Research on language teachers' knowledge

While a considerable amount of FL research has been carried out on the underlying assumption that learners do make a difference in the learning process as they are active agents, in other words, that learning is learner-mediated and that the "crucial factor in the success of learning anything depends on what the learners themselves bring to the learning situation" (Wallace, 1991: 3) the same has not occurred to any significant extent in the education of language teachers. Although it is widely accepted that language learners (e.g. who they are, what they know, what their learning styles are) are at the centre of the learning processes, student teachers have been left out of their own processes of learning how to teach. TE courses are designed without much concern for the teacher-learners and their learning processes, while at the same time they are exposed to learner-centered philosophies of classroom teaching and learning. Teacher educators seem to be more concerned with the distribution of some kind of preestablished practice to which student teachers are expected to conform, which consists basically of a set of external behaviours. At the same time that research has not been conducted to uncover the pre-training knowledge of foreign language student teachers, TE courses, more often than not, ask student teachers to leave behind all they know about teaching, and about their own process of learning in order to be trained in specific
methodologies. This section will make apparent the continuous absence of research on the knowledge and knowledge growth of FL teachers and student teachers pointed out before. Some exceptions, apart from the contributions discussed in 2.3.3, to this situation are presented next.

Horwitz (1985) discusses two instruments for eliciting student teachers' beliefs about language learning and teaching: FLAS (Foreign Language Survey) and BALLI (Beliefs about Language Learning Inventory) with reference to TE. BALLI is a Likert type questionnaire devised for research and training purposes. The inventory is used to document relationships between teachers' beliefs and teaching practice and teachers' beliefs and those of their students. The questionnaire, developed by a free-recall task with four different groups of teachers, assesses beliefs in four main areas: foreign language aptitude, difficulty of language learning, nature of language learning and appropriate learning strategies. The author discusses some of the typical beliefs of student teachers regarding learning and teaching languages. She also uses the questionnaire as a first activity in her methods course to uncover student teachers' beliefs as a guide to organize the course content and method in a way that her assumptions would not conflict with the student teachers'.

Long (1983) reported part of the analysis of a study he and Sato had conducted with teachers. Although it is classroom oriented research, their analysis of the teachers' use of questions is nevertheless relevant to studies of teachers' knowledge. They conducted a study with 6 teachers who had followed communicative oriented MA TE courses and who professed a belief in communicative methodology in conversations with the researchers. The fact that 51% of teachers' questions were display questions (ie. non communicative), may suggest that the TE courses did not produce the expected change.

Woods (1990) examines the nature of experienced ESL teachers' decision-making process at three levels: course design, lesson planning and interactive thought processes. Methodologically he combined three complementary qualitative data collection methods (open-ended interviews, observations and SR). His data generated a series of recurring themes, namely, planning, planning behaviour, and background knowledge. The findings suggest a conceptualization of decision-making as a complex process with a hierarchical and sequential nature which is the
same in planning and implementing. This challenges previous models by Anthony (1963) and Richards and Rogers (1986). The more relevant findings for this discussion are the coherence between the way teachers organize their course and lessons and their underlying knowledge. Teachers with different approaches show remarkable differences in decision making.

López Arenas (1989) wrote his doctoral dissertation about expert and novice EFL teachers' knowledge. From a qualitative perspective, he collected data by observation and interviews with four expert teachers (TP tutors) and their student teacher tutees (novices). His analysis of the interview and observational material gave him a picture of the mediating role of teachers' knowledge in practice, which included the following dimensions: subject matter knowledge or language proficiency, knowledge of approaches and paradigms (espoused and in use), methods and techniques, practical pedagogical content knowledge (explanations and examples) and activity variation. He presented these data in a case study and cross-case study format. Some findings across case studies, point out that both groups of teachers considered they had an inadequate subject matter (methodology) and general pedagogical knowledge. In general, although there was a contradiction between teachers' espoused theory and their practice, there was a relationship between their language competence and explanations. Some of the differences between experts and novices relate to activity variation, language proficiency, the way they explain and give examples, and the fact that experienced teachers are more flexible in their lesson plans implementation.

Lynch (1989) reports the findings of a study which aimed "to investigate the common belief that teachers' decisions to adopt specific classroom procedural options depend on the learners' level" (:119). His data on the different decisions teachers make in order to deal with students' unfamiliar lexis illustrates that these are guided by the teachers' beliefs about language learning, rather than by the teachers' awareness of students' level of proficiency and that in fact teachers perceptions of what is happening may be rather different from the pupils' (:122).

A different sort of studies has tried to study the relationship between teachers' academic performance, basic skills, subject matter knowledge, and teaching skills. For a review of this kind of studies see Gayton and Farokhi (1987). The study they carried out was quantitatively oriented, based on the performance of student
teachers in different tests (TCT, TPAI, Regents' Test). They concluded that a mastery of basic skills does not appear to be related to teacher performance and that a person well grounded in an academic discipline would be unable to teach well with little or no pedagogical education.

In the following section, I explore some issues (origins, content and effects) of student teachers' knowledge.

2.4 Student teachers' knowledge. Origins, effects and content

The careers of people who have chosen to become specialist in another language and culture is inevitably bound up with the history of their relationships with that language and that culture. (Evans, 1988:96)

Following the general assumption of the teacher thinking paradigm, that teachers are rational beings who base their teaching activity on their beliefs about their subject matter and about teaching and learning, and that teachers' activity is viewed not only as the behaviour they display but also as teachers' underlying personal conceptions and theories, the emphasis of research on teaching has shifted from investigating what teachers do to investigating the knowledge teachers hold (Barnes, 1989: 14). This kind of research, which originally was conducted with experienced teachers, has stimulated a growing interest in exploring student teachers' knowledge and knowledge growth. To address these issues three different aspects of student teachers' knowledge will be discussed: origin, content and effects.

2.4.1 Origins

The body of literature relevant for analysing the origins of student teachers' knowledge is mainly generated by research into the socialization of teachers. These studies investigate prospective teachers at different stages of their professional development. There are different models of teacher socialisation. For example, Van Fleet (1979) argues that teachers go through the following process: enculturation (during school years), schooling (in teacher training institutions) and education (in classroom teaching and interaction with teachers). With more specific reference to language teachers, Widdowson (1990) understands teachers'
development in two stages (pre- and inservice). This model seems to acknowledge that it is when student teachers enter a formal programme that they become socialized in the profession and are initiated into both craft and culture of pedagogy. As Widdowson says, in this view of teacher's socialization (which does not take into account the fact that student teachers have been socialized, at least partly, by the hundreds of hours spent in formal and informal learning contexts), it seems clear that preservice needs to pay particular attention to training.

The model I will adapt in this study understands teachers' professional development from a wider perspective. Like Zeichner and Gore (1990) and Feiman-Nemser (1983), I understand TE as a four phase process: pretraining, initial training, induction and inservice. More specifically the model I follow represents an attempt to understand student teachers' knowledge growth in relation to personal contexts. Thus preservice TE (pre- and initial training) would include pretraining knowledge, clarification/modification of that knowledge during college TE and TP. Next I will review studies which explore these different sources of student teachers' knowledge, particularly the first two, since TP is viewed in this project as the context where student teachers relate their knowledge to practice. The contours of the project did not allow for the analysis of the contribution of TP to student teachers' knowledge growth.

2.4.1.1 Pretraining

Feiman-Nemser (1983) and Zeichner et al (1987) provide a summary of the different explanations that have been found to account for the powerful influence of early school experiences on learning to teach (evolutionary, psychoanalytical and sociological). It is the last one, based on Lortie's work, which has been more frequently referred to in the literature. In other words, students have internalized models of teaching by apprenticeship of observation during the school years and these are activated when they become teachers (Feiman-Nemser, 1983). Bush (quoted by Cooney, 1984a) found that the enculturation period in the socialisation of teachers was far more of an influencing factor than the schooling (TE) stage. It was reported that preservice teachers had many well-formed beliefs about teaching before they began their formal programmes of TE and that teaching behaviour was rooted in experiences that predated formal TE activities. But it is not only the time spent "watching teachers" at school on which student teachers have based their
knowledge. As Horwitz (1985) argues, student teachers have had individual language learning experiences which they have made sense of in different ways, and to which they have assigned different meanings.

Further, constructivists argue that students come to any learning situation with previously constructed ideas that help them make sense of new information (Hollingsworth, 1989; Zeichner, 1985). Accordingly student teachers are not blank slates, they come to the professional courses with knowledge which will affect their own learning to teach (Feiman-Nemser, 1983) and their future classroom activity. From a kellyian personal construct theory, individual past histories are seen as playing a crucial function in the process of teachers' development (Ben-Peretz, 1984). The concepts and ideas presented on college courses need to be transformed and assimilated by the student teachers into their own frames of reference. Because these may be resistant to change, giving student teachers facts about alternative teaching models may not be sufficient. Only when encouraged to explore them may student teachers become aware of their initial epistemologies and then be in a position to challenge them and explore the potential of alternative views (Pope and Scott, 1984).

A further argument for looking into what students bring with them is provided by biographical studies. From this view, teaching is a highly personal enterprise and knowledge is not an object to be mastered but something which is built in an interactive process. We can say that there are as many different ways of approaching teaching in a school as the number of classrooms, despite the fact that some of the teachers might have attended the same education programmes. Their classes may differ in many different aspects. This leads one to conclude that the different teaching approaches have to do with the way different teachers relate their own personal experiences to the way they were educated. It seems logical, then, that initial TE should provide ways to help student teachers look into their biographies, to see how that accumulated history makes them see, perceive things, and act in different ways (Giroux, 1987).

In his study of teacher socialization, one of the themes Lortie (1975) identified was 'continuity'. This theme was found to be responsible for the choice of career and for the conservative schooling practices which teachers tend to perpetuate in the profession, if they have not been challenged during training courses. His
questionnaire and interview data suggests that TE courses (method courses and TP) have a low impact on student teachers because, although the apprenticeship of observation during their own schooling is limited to a personal, intuitive, non-analytical point of view rather than guided by pedagogical principles, the assumptions it generates are very powerful. So much so that student teachers enter training with strong preconceptions about teaching. TP can emphasize, rather than challenge these conservative, individualistic assumptions. Lortie's data shows that there is no difference between what the subjects understood as good teaching before or after the course and that a high percentage of his teachers volunteered connections between their own best teachers and their current practice, granting only a limited influence to TE. The same results were confirmed when Lacey (1977) conducted a study with a group of PGCE students at the University of Sussex.

Pennington (1990) argues that uncovering the attitudes that prospective FL teachers hold about learning and teaching can capitalize on the candidates' prior experience as students and we can use this experience as a starting point for examining beliefs about language teaching and learning. She describes different exercises to uncover these previous ideas.

Zeichner and Grant (1981) explored the degree of change in the construct 'pupil-control-ideology' and Tabachnick and Zeichner (1984) focused on student teachers' perspectives about knowledge and curriculum, the teacher role, teacher-pupil relationships and student diversity. None of these studies offers conclusive results in terms of the changes which took place in student teachers' ideology regarding pupil-control nor in relation to their cooperating teachers, nor in the homogenisation of student teachers' perspectives. The results could not provide negative evidence against the idea of pretraining experience and its powerful socializing influence, since they found that, to a large extent, students entered the programmes with different teaching perspectives and significant differences remained at the end of the course. This led to the conclusion that, in fact, student teaching did not significantly alter the student teachers' views about teaching (Zeichner and Liston, 1987). Even a longitudinal study of the first year of teaching provided very tentative results: those who leave TP with a craft perspective maintain that perspective throughout the first year under certain conditions (Zeichner and Liston, 1987; Zeichner et al, 1987). Yet, a final analysis of the data led the authors to
advocate a more critical, interactive model of socialization which sees the biographical and the institutional (schools) contexts as producing changes during TP.

But it is not only teaching which is affected by student teachers' incoming knowledge, as Feiman-Nemser and Buchmann (1986a) found out, it also affects their perception and interpretation of teaching. The authors conceive 'first hand experience' during preservice as a series of pitfalls. The 'familiarity pitfall' stems from the tendency to trust what is most memorable in personal experience. When student teachers approach field experiences they already have preconceptions about what classrooms are like and what teachers do. So their images and ideas of classrooms and teachers formed by many years of schooling provide the framework for viewing and judging what they see. To overcome this pitfall student teachers need help in seeing how their personal history and experience of schooling influence their perceptions of classrooms in a way that makes it difficult to appreciate alternatives (:71).

Similarly, Calderhead and Robson (1988) conducted a study with seven B. Ed first year student teachers to analyze their understanding of teaching, learning, curriculum, professional development, and how these ideas related to their reactions to the course and their interpretations of their practice and others'. They interviewed the students at the beginning of the year and three times during the year. Students were also asked to react to video recordings of two different teaching models, to a video of a creative writing class after they had been asked their own ideas on creative writing, and finally were asked to describe what they would do in an imaginary teaching situation. They found that student teachers had different kinds of images (particular, general, negative and positive) and that they are powerful organizing frameworks for their interpretations of the video material, of their supervising teachers' practice and of their own teaching. Images are characterized by their inflexible, recipe-like nature which makes them insensitive to different contexts and learners. These findings are similar to the ones generated by expert-novice studies which show that the novice's knowledge of classroom practice is rather scant, disorganized and not readily related to action (Calderhead, and Robson, 1988: 2). The researchers seem to suggest that a different kind of knowledge is needed so that these powerful images can be challenged and modified to fit different contexts.
Weinstein carried out two studies with preservice primary and secondary student teachers. The first one, reported in Weinstein (1989), found that preservice students showed an 'unrealistic optimism' in the areas she wanted to explore: instructions, organization and management, and interpersonal relationships. She replicated the findings in a later study. Based on a questionnaire it explored the possible reasons for the optimistic bias by examining students' explanations for their self-ratings. She also explored student teachers conceptions of 'a really good teacher' in comparison with those of their cooperating teachers. She found that some of the characteristics they attached to good teaching, were the same ones they found in themselves. Student teachers' optimism is attributed to 'self-serving biases' rather than to previous socialization experiences.

Besides influencing student teachers' interpretations of practice, the incoming ideas also affect student teachers' interpretations of the training process. For example, in an attempt to give a more global understanding of learning to be a teacher, Feiman-Nemser and Buchmann (1989) provide data from a longitudinal study of teacher preparation and learning to teach, proposing a model which includes: the student teachers' previous ideas, TE courses, and teaching practice. Their case studies show that the student teachers interpret their courses and field experiences through the ideas they bring to teacher preparation, and that if those beliefs are left unchallenged, opportunities to learn are reduced. If teacher educators want to promote conceptual change they must pay attention to these incoming beliefs (:375).

With a focus on the assumptions and interpretations student teachers have of their process of learning to teach and of the way they view the relationship between theory and practice, a Canadian team is researching teachers' professional knowledge. They use the concept of image to describe teachers' practical knowledge. Russell (1988) reports on some of the data which arose from this research programme at Queens' University, Ontario. The researchers draw on Schön's idea of 'reflection-in-action' to study how teachers learn practical professional knowledge. The 15 participants in the project include student teachers, first year and experienced teachers. By means of interviews after a period of classroom observation, they documented the teachers' view of their work and how it changed as a result of practice. The findings show that learning-to-teach is not a two stage process of learning theory and then putting it into practice. The relationship is, to say the least, problematic. The participants emphasize that
experience makes an important contribution not only to learning about the practical aspects but also to learning 'the theory' of teaching. They found that the student teachers' transition from university theory to classroom practice was difficult. Russell argues that it is difficult to take in the full meaning of theory without experience. So it is important to help preservice teachers examine and reshape their assumptions about theory and practice, to heighten their awareness and enhance their interpretations of their own process of learning to teach. As he states,

> the images one holds of the relationship between theory and practice can significantly influence understanding of the personal learning process, at every stage in one's development of professional knowledge of teaching. (Russell, 1988: 33)

From a collaborative research perspective, researchers at the University of Toronto set up a project to find out as much as possible about the role of personal knowledge that student teachers bring with them to the programme. They related that knowledge and their motivations for teaching with their learning process at college and during TP. They followed student teachers during their preservice education and during the first two years of teaching. Their findings, reported in a case study format, show that "the past is not lost, it is not even past". It mediates what student teachers learn at college and it is used to measure the reality of their classrooms (Aitken and Mildon, 1991).

The socialization studies reviewed above understand socialization from an individual point of view. Others would consider that this initial socialization occurs in a broader cultural context. From this wider socio-political perspective, Britzman (1986) conducted some research with the assumption that teachers' personal histories or biographies interact with common cultural myths (e.g. everything depends on the teacher, the teacher is the expert, teachers are self made), which if not critically evaluated will help maintain the current school status quo and the commonsense perspectives brought to TE. She argues that these implicit institutional biographies, which are the cumulative experience of school lives, inform the knowledge students have. This is a common and image-based knowledge which helps them develop their own self images. So the process of becoming a teacher is seen as a process of integrating past and present knowledge. The article explores how prospective teachers combine their experiences in compulsory education and TE with their student teaching. Making these values
explicit can encourage a critical pedagogy by which student teachers can be empowered through a greater participation in their own processes and move beyond established and conservative cultural myths.

The studies reviewed in this section\textsuperscript{11}, emphasize the fact that what teachers bring with them is the most important factor in the socialization of teachers. And this is so in different ways. Firstly, as Calderhead (1988b) and Francis (1985) argue, the formative impressions of schooling are a powerful influence in shaping the beginning teachers' classroom practice. Secondly, teachers draw on what they bring with them and this may influence their training in different ways, for example, it may conflict with the new ideas they are exposed to in TE courses (Anderson 1989). Student teachers enter TE programmes with, for example, a high level of confidence and a conviction that they already possess the characteristics needed for teaching, so that they may undervalue their need for professional knowledge (Weinstein, 1989). (See also Cooney in 2.3.4). This knowledge, if cleverly utilized, both facilitates and accelerates acquisition of the given knowledge because it enables teacher candidates to understand it with regard to their previous experience (Hellgren 1988: 96). Calderhead and Robson observe that "the growth of student teachers' knowledge about teaching may require teacher educators to consider how best to design training activities in which students' existing knowledge is scrutinized and challenged, and to monitor the effectiveness of these activities" (1988: 14). Because as Lortie (1975) argues, unless future teachers are helped to examine their past and to see how it shapes their beliefs and unless future teachers get some cognitive control over their previous school experiences, these may influence their teaching unconsciously and contribute to the perpetuation of conservative school practices. Furthermore, it seems that a detailed discussion among the different participants in TE programmes ought to exist in order to clarify everyone's perceptions of expectations and behaviour in school settings (Aitken and Mildon, 1991).

In the next section I present a more detailed account of the effects that pretraining knowledge has been found to have in preservive TE.

**Effects of pre-training knowledge on initial TE**

The studies reviewed suggest that the personal context strongly influences the
education of student teachers in the following ways:

- **The choice of career:** Lortie (1975) argues that, in their decision to become teachers, it is the familiarity with teaching that leads students to opt for a career which they feel is well known to them. In contrast with school-leavers entering a Law degree, for example, who do not have a body of knowledge or experience of what goes on in a courtroom, of the appropriate discourse, roles and relationships, etc, students who opt for a teaching certificate know what their role is going to be and what is required of them to a certain extent.

- **Student teachers' overconfidence:** Book, Byers and Freeman (1983) found that the 'apprenticeship of observation' or the 'teacher-watcher stage' is responsible for the widespread, simplistic idea that 'any one can teach', in other words, anyone who has been a student is equipped to teach and this explains the fact that student teachers approach teaching with an unquestioning confidence and underestimation of the difficulties they will encounter with their subsequent disregard for pedagogical courses. Prospective teachers' expectations for the profession are acquired indirectly from early encounters with teachers. These expectations reflect a view of TE as easy to enter and not very intellectually demanding. So the low expectations for professional knowledge in the teaching profession and the devaluation of the need for professional preparation may be due to the apprenticeship of observation (Lanier and Little, 1986; Weinstein, 1989).

- **Learning-to-teach:** There seems to be a general assumption that student teachers' knowledge is of a 'patchy', personal, inadequate and conservative nature, so TE courses should try to challenge it. Calderhead (1988c) reports that this patchy and general knowledge only survives the first year of a B Ed. and Hellgren (1988) argues that knowledge by experience can be expanded by education. Buchmann (1987), on the contrary, argues that professional courses tend to confirm these previous ideas as they are also of a commonsense nature or too theoretical.

Regardless of the nature of this knowledge, this partial understanding of teaching is held responsible for student teachers preference for a practically oriented content and for the way they see their learning process, mainly that experience is the best teacher, so on-the-job training and supervised teaching experience are the best ways to learn the profession (Britzman, 1986). At a different level, as Lanier and Little
state, the views that prospective teachers hold about learning to teach affect their involvement in the TE programme and their work with one another, and they conclude that in fact the expressed views of teachers that teaching is mastered on the job are more consistent and less diverse than the interpretations offered by researchers (Lanier and Little, 1986: 542). These perceptions of the profession and of professional learning will mediate the way they learn (Calderhead, 1990a). Ross, Ashton and Mentonelli's (1989) study confirms the idea that TE programmes have little impact on many student teachers. According to the authors, student teachers use their perspectives to select from their programme ideas and practices which would support their entering ideas.

*Classroom practice:* It is argued that previous ideas are powerful influences on teachers' classroom practice. Their powerful socializing nature washes out the effects of training (e.g. Calderhead, 1988c; Calderhead and Robson, 1988; Tabachnick and Zeichner, 1984; Lacey, 1977; Lortie, 1975). As Buchmann (1987) says the 'folkways' students lived with will be taken on faith and activated in practice. They become ready-made recipes for action and interpretation that do not require testing or analysis while promising familiar, safe results in normal situations. Hollingsworth (1989) also offers evidence of how pre-programme beliefs served as filters for processing new content and making sense of classroom contexts.

2.4.1.2 Initial Training: College

Research into the formal education of student teachers is very limited. By way of illustration, Tisher's and Wideen's (1990) edition of papers shows an international state of the art and how preservice TE research concerns revolve, to a considerable extent, around general characteristics of student teachers and their socialization experiences during TP. Villar Angulo (1990) also points out that socialization studies have been centered mainly on the influence of schools during TP periods and he argues that the college context, content and process should also be studied. He quotes Zeichner and Tabachnick (1981:10) who also point out the dearth of studies which analyse the role that content and process at colleges of education have played in the change of perspectives of the student teachers. When studies have been conducted about the college component, the results seem to be of a less tentative and contradictory nature than those which study the practicum component,
basically that formal education is not particularly relevant in the process of learning to teach (Wideen and Holborn, 1990; Klinzing, 1990).

Lanier and Little (1986) have explained the lack of research on TE courses by the fact that students are more tangible than the curriculum and less threatening to study than their teachers. They also point out that research on teaching teachers stands in stark contrast to research on teaching children. When teaching is studied in elementary and secondary schools, teachers are considered too important to overlook. But teachers of teachers, what they are like, what they do and what they think, are typically overlooked in studies of TE (Lanier and Little, 1986: 528). Katz and Raths (1990: 249) observe that the neglect of the characteristics of teacher educators "seems unlikely to be due to the failure to perceive staff as major contributions to the quality of TE programs". Although some studies have been conducted on the supervision of TP, curriculum courses remain under-researched. These few studies have not provided much information about the substance of pre-service preparation beyond descriptions of courses and credit distributions (Zeichner et al., 1987). Examples in FL are: Alatis (1983), Geiger (1981) Larsen-Freeman (1983) or Moeller (1989).

An exception is the study conducted by Feiman-Nemser and Buchmann (1986b, 1989) which tried to understand the process of learning to teach from an integrative perspective. To overcome the limitations of other models (e.g. socialization or training) which emphasized a single source of influence on teachers' learning, they developed a model of teachers' learning, which could account for the student teachers' personal contributions and TE curriculum to the education of teachers. In response to a felt need for more systematic and integrative knowledge about the preservice curriculum and how student teachers make sense of it, Feiman-Nemser and Buchmann (1989) present the findings of a longitudinal study which integrates an analysis of the teacher preparation programme with that of the process of learning to teach by gathering data from elementary student teachers.

Three students, enrolled in two contrasting programmes, were interviewed about what they were learning and how they thought it would help them in teaching and learning to teach. Observations of a core course were conducted: the researchers took field notes about the content, activities and interactions. Classroom observations were carried out during TP in which student teachers' activities were
recorded. The findings relating to student teachers' psychological context or personal contribution to the way they learn suggest that students combined past personal experiences with ideas encountered in the formal preparation, or that "in making a transition to pedagogical thinking, prospective teachers not only acquire new understanding and ways of working; they also change old ways of thinking" (:375). The process is interactive for student teachers also interpret their courses and field experiences through the ideas they bring to TE.

Left unchallenged, those entering beliefs can lead to mislearning or missed opportunities to learn. To promote the kind of conceptual change entailed in the transition to pedagogical thinking, teacher educators must pay attention to the incoming beliefs and attitudes of their students. Teacher candidates are not blank slates; what they learn during teacher preparation and what they encounter in courses and field experiences is related to what they bring to their professional studies (Feiman-Nemser and Buchmann, 1989: 375-376). In becoming a teacher very little normative correct learning can be trusted to come about without instruction that takes the preconceptions of future teachers into account so that student teachers do not incorporate new information into old unchallenged frameworks (Feiman-Nemser and Buchmann, 1986b; Hollingsworth, 1989). As Feiman-Nemser (1983) observes, we still know little about what TE courses are like, and particularly about how student teachers make sense of them. They also argue that without understanding what is taught and learned in TE and field experiences we cannot understand what professional education contributes to teachers' learning (Feiman-Nemser and Buchmann, 1986b, 1987, 1989).

Their model rests on the assumption that learning to teach is a transitional process to *pedagogical thinking*. This involves more than the acquisition of subject matter knowledge and technical skills. This model can identify major influences on teachers' learning (personal contexts, preservice TE curriculum and TP) and how these affect the transition to pedagogical thinking. The findings show that the source of student teachers' knowledge change include personal capacities, dispositions, entering beliefs and opportunities to learn during the course, particularly during TP. They highlight the difficulties student teachers have in making the transition to pedagogical thinking, particularly how to fit general notions to particular situations.
The relatively little impact TE courses have on how teachers think about their work is related to the influences of what teachers bring with them, shaped by their years as 'teacher-watchers' and yet, as Barnes argues,

rarely is this tacit view of teaching ever confronted in TE programs. As a result decisions are made about what beginning teachers need to know without taking into account their prior conceptions of teaching, learning, learners, subject matter, and other common places of teaching. Just as school science curricula that ignores pupils' preconceptions [...] teacher education curricula that do not address students' conceptions of teaching and learning may also fail. (1989: 14)

As a way of summary, TE courses are granted little responsibility for preparing teachers for real classrooms, or in altering pre-training 'common sense understanding' and they probably tend to confirm existing perspectives of what teaching is about. So it seems that if TE courses aim to have an impact on these previous theories, teacher educators must organize the new content in a conceptually meaningful way. Whether or not TE courses are sources of knowledge for new teachers, the origin of teachers' knowledge, to a large extent, is located both in the experiences teachers had during their school years and later on in their practice.

2.4.1.3 Initial Training: Teaching Practice

This research does not focus on the knowledge which is generated in practice, yet, I will refer to a few studies which have dealt with this aspect12 to offer a more complete map of the different sources of student teachers' knowledge.

From a negotiated and interactive view of the teacher-socialization process, Zeichner et al (1987) and Tabachnick and Zeichner (1984) conducted a study with student teachers to find out what the contributions of field experiences are to the socialization of teachers. Although their findings support the idea that students' previous formative ideas are important in the socialization process, they conclude that they are nevertheless tempered by the student teaching experiences. So although their study generally supports Lortie's position, they argue that student teacher socialization is more negotiated and interactive and that the personal contexts do not totally determine the outcome of the socializing process. The latent culture plays only a relatively minor role and interacts with TP which is the predominant factor. In their analysis of the relationship between perspectives and classroom practice, they found that student teachers faced a number of dilemmas because the
way they behaved in class did not, at times, fit their own educational perspectives. To solve these conflicts they used different strategies. In some cases they accommodated their actions to their perspectives while in others they justified practice. Marcelo (1987) argues that conflicts between educational beliefs and classroom behaviour is usually solved in favour of classroom behaviour. Accordingly, beliefs and ideas which student teachers have acquired in the training institutions are transformed and modified to justify practice.

Richards and Crookes (1988) emphasize the TP component as the major opportunity for student teachers to acquire the practical skills and knowledge which they require to function as effective teachers.

On this side of the Atlantic, Calderhead and Miller (1985) conducted a study with eight primary student teachers during the last period of TP of a PGCE junior course to analyse how their subject matter knowledge influenced their teaching. Their data included student teachers' beliefs and predispositions about teaching (e.g. aims of teaching, teachers' roles, important experiences which contributed to their teaching, attitudes to school curriculum), lesson planning protocols, thinking aloud, SR on classroom recordings and students' assessment of pupils. The authors conclude that student teachers had subject matter strengths and weaknesses, but that they all faced problems when drawing on their available subject matter knowledge to plan, organize and implement activities or evaluate pupils' learning. They speculate that to capitalize on subject matter knowledge student teachers have to be provided with opportunities to translate this knowledge into more action-relevant or practical knowledge. It was in the evaluations of their lessons that student teachers seemed to integrate their knowledge of subject matter and pupils with classroom activities. In general, it was found that although student teachers value their subject matter knowledge, the accounts of their teaching and planning suggested that their thinking about teaching was based upon their own practical experience in the classroom and their observation of, and discussion with other teachers (Calderhead and Miller, 1985: 26).

2.4.2 The content of student teachers' pretraining knowledge and relationship to practice

We have already seen in a previous section how different researchers have chosen
to focus on different aspects of teachers' knowledge (e.g. attitudes, academic knowledge, general pedagogical knowledge, subject matter knowledge). In this sections I will only refer to the few studies which have been conducted on the content of student teachers' knowledge and that make apparent the content of student teachers' knowledge.

Different reviews on research on student teachers show that their knowledge has been defined as a compound of general attitudes, personality characteristics, academic ability, values, expectations and motivations to become teachers (Tisher and Wideen 1990; Lanier and Little, 1986). More specific professional knowledge has also been the focus of research, for example Lortie (1975) presents the content of student teachers' knowledge as being of a general nature and refers to: discipline, being strict/being kind/being interesting, teaching techniques and motivation.

Hollingsworth (1989), in a longitudinal study to document knowledge and belief changes in a preservice TE course about reading, offers data which suggest that student teachers begin with loosely formulated philosophies of education (about what teachers do and how children learn), and that these preprogramme beliefs serve as filters for processing the programme content and making sense of classroom contexts. She argues that preservice educators should understand student teachers' incoming beliefs in order to choose their placement in school settings, inform their supervision, and understand their learning (:186).

Ball (1990) tries to challenge three common assumptions about learning to teach mathematics in the light of the data collected in a longitudinal study underway at the National Research Center on TE at Michigan State University, via questionnaires distributed among 252 student teachers and some intensive interviews with a reduced sample. She found that the subject matter knowledge teachers bring with them from school and college experiences is not adequate to teach with. This shows that, in fact, subject matter knowledge for teaching will not necessarily produce changes in their ideas and feelings about mathematics. In line with these findings, she revises the conception of subject matter for teaching as being a compound of substantive knowledge interrelated with knowledge about mathematics (ways of thinking about it, ideas and beliefs) and feelings. It is the interrelation of these aspects which jointly affected student teachers' responses. Her reflection that in order to help someone else understand and do mathematics it
is not enough to be able to do it oneself is particularly relevant to language teachers.

Calderhead and Miller (1985) in a study which aimed to investigate how subject matter knowledge informs classroom practice, explored the kinds of knowledge that student teachers use and how it is integrated into their professional thoughts and actions. They concluded that student teachers have certain predispositions about teaching (educational beliefs and values, conceptions of teachers role, expectations of their profession) and that the origins of those beliefs are the school years. In a study of 12 student primary teachers followed during the first year of a B Ed. course, Calderhead (1988c) and Calderhead and Robson (1988) tried to identify the conceptions student teachers had about teaching, learning, the curriculum and their professional training on entry to the course. They analysed how these conceptions had affected students' own learning process and how they related to the interpretations of their own and other's practice. Interviews and video elicitation were used to gain access to student teachers' thinking. They found that students start TE with different images\textsuperscript{13} of teaching and of their own professional development. These images are seen as powerful influences on students developing practice. Together with these kinds of knowledge (images, metacognitive), student teachers bring with them subject matter knowledge, psychological theories of learning and theoretical knowledge about the curriculum. The difference between these different types of knowledge is that while images are readily accessible and applicable to real life situations, the more academically oriented subject matter knowledge is not readily translated into classroom action.

In fact, student teachers with a well developed subject matter knowledge base have been found when planning and teaching in this subject area, still to draw upon the observed practices of their supervisory teacher rather than their own store of subject matter knowledge. This isn't to say that these other knowledge bases can't inform teaching, but it is more difficult and time consuming, and students coping with immediate time constraints, will rely more on readily available images rather than a distant and abstract knowledge base. (Calderhead, 1988c: 57)

Calderhead's conceptualization of students' initial baggage of knowledge is, so far, the most sophisticated, and includes images about teaching, metacognition and academic knowledge.

From a symbolic interactionist perspective, Alder's doctoral thesis aimed at finding
out what kinds of meanings and purposes practitioners, as opposed to scholars, gave to social studies and how these meanings directed classroom practice. She conducted an in-depth study with four student primary teachers whom she observed and interviewed during their teaching practice. The structured interviews at the beginning and end of the semester were directed at probing student teachers' understanding of the rationale for teaching social studies and what they thought ought to be included in the social studies classroom. She found that the beliefs and abstract ideas which student teachers expressed about social studies often seemed to have little effect on their classroom practice. So to understand the meanings teachers give to social studies, she argues, it is not enough to look at abstract ideas. Ideas have to be viewed in the context of practice. To explore this context, she found the notion of perspectives adequate, since they are set in the concrete world of actual, specific situations, make reference to particular behaviour and are developed out of past experiences (Adler, 1984). She concluded that social studies teaching was best understood in the context of general perspectives towards teaching and more specific perspectives towards social studies. She analysed the relationships between perspectives and classroom activity using the language of dilemmas, which allowed her to analyse the interconnected-ness and contradictions between teachers' beliefs and observed actions.

Following the new focus of research on teachers' knowledge and particularly on subject matter knowledge (see also 2.3.2 and 2.3.4), researchers have focused on specific curricular subjects, for example, Porlán Ariza (1986) aimed to gather information about ideas and beliefs that student science teachers have. The basic assumption underlying this study is that school years foster an implicit learning of representation, old fashioned scientific and pedagogical theories and elementary ideas about classroom events and the teachers' roles which influence student teachers' pre-active, and interactive classroom decision making. These ideas, due to their hidden nature and because they are contradictory to daily practice, resist modification and change. His interview and observation data suggests that there are certain common beliefs (about the nature of science, teaching and learning) shared by the majority of the students (e.g. teaching is centered on the search for efficient methods, science is the objective study of reality, mechanically following the steps of observation-hypothesis-theory, the child's mind is an empty vessel, teaching methods are either forms of conveying content or means for achieving objectives). This data confirms Porlan's initial assumption that student teachers have
conceptualized their own learning experience in an old-fashioned and conservative way. So TE courses should try to change those ideas.

Sánchez García (1989) studied mathematics student teachers' constructs about mathematics and mathematics teaching, using Kelly's Personal Construct framework. Her aim was to analyse the interaction between conceptions about mathematics and practice during TP. An analysis of two of the student teachers shows that they have different personal and professional conceptions about mathematics (subject matter knowledge, pedagogical knowledge and curricular knowledge) which influences the way they perceive their experience during TP and consequently TP influences their previous conceptions differently.

Borko et al (1988) studied pre-service teachers' planning and post-lesson reflections during TP and the factors that influenced them. The student teachers attended two different secondary and primary school TE programmes. Student teachers were observed on two consecutive days and interviewed after each observation. The recorded interviews were coded according to categories derived from the interview questions which looked at preactive decisions, changes in plans while teaching, and reflections after teaching. Some of the findings point to the existence of a relationship between subject matter knowledge, pedagogical knowledge and differences in planning.

Cooney, drawing on his study with mathematics teachers (see 2.3.4) conducted at the university of Georgia (USA) concluded that we are still naive about the meanings teachers hold about mathematics and teaching and how these conceptions influence their classroom teaching.

MacDiarmid et al (1989) assert that if TE is going to prepare teachers to teach subject matter understanding and not merely information accruing, it needs first to help teachers develop their own understanding of the subject matter. The authors assume that student teachers bring to the TE programmes a lot of old ideas, due to the years of instruction in an information-accruing model, and that the training institution enjoys the most innovative and updated ideas about learning and about teaching, in that way. They observe that,

unless teacher educators address TE students' initial conceptions of what it means to teach and learn subject matter, to challenge the prevailing view that teaching
means telling and learning means remembering, we are likely to see the perpetuation of the telling-accrual model of teaching. (MacDiarmid et al. 1989: 201)

A lot of the studies on pre-training knowledge suggest that school experience has equipped teachers with a baggage of old-fashioned, conservative and inadequate ideas about schools, teachers and learning. As Lortie observes,

They are not likely to make useful linkages between teaching objectives and teacher actions, they will not perceive the teacher as someone making choices among teaching strategies. There is ample indication of affective responses of liking and disliking, identifying and rejecting, but there seems relatively little basis for assuming that students make cognitive differentiations and thoughtful assessments of the quality of teaching performance. (Lortie, 1975: 63)

The assumption that the knowledge student teachers bring with them tends to be more conservative than what they get at college is far from surprising. The way in which they were taught and on which they base their knowledge have, no doubt, been revised, modified, and replaced by new ideas in education. The obvious corollary would be that the training institutions would have to bring up, challenge, and replace these beliefs with a knowledge of more updated, progressive and articulated learning theories and teaching procedures common in TE, so that the student teachers pre-training knowledge does not perpetuate itself in practice. If pretraining knowledge is not made explicit TE courses will be irrelevant in producing change, and the new knowledge will have to compete with first hand experience. But there is a possibility that not all students have been socialized in dated ideas and methods, that the conceptualizations students have made of their traditional schooling experiences are not traditional or that not all educational institutions are progressive. Tabachnick, Popkewitz and Zeichner (1980) reported that University seminars which accompany student teaching reinforce the tendency to concentrate on mastery of technique and management rather than to encourage careful examination of experience (quoted by Lanier and Little, 1986: 551).

Hollingsworth (1989) also suggests that TE programmes should be designed (both in terms of content and methodologically) to capitalize on the preexisting knowledge so that the status quo is not upset, and it perpetuates in a way that limits the learning experiences TE courses provide.
2.4.3 Relevance of these findings for TE programmes

Despite this widely recognized influence of pretraining knowledge on student teachers, TE courses normally take little account of their preconceptions about teaching, about learning or the classroom context (Calderhead, 1987d: 17) and despite the current consensus about the important contribution of the learner to the learning process, there are not many reports on TE programmes which had made provisions to integrate it with the TE curriculum.

Some exceptions are McDiarmid (1990) and Hüber (1989a). McDiarmid devised a kind of early field experience that 'forced' student teachers to identify and challenge their existing assumptions about the teacher's role, pedagogy, learning and learners, subject matter content and learning to teach, asking them to report their beliefs (e.g. about negative and positive numbers) and then observed a class where the same topic was being discussed. His reflections point out that many of the students came to realize that their previous knowledge was inadequate and that they expected that their future course would teach them what they didn't know. Yet although many future teachers started to understand that these initial beliefs and orientations are unreflective and damaging, the author maintains a sceptical attitude about the effects the courses may have, because of the powerful nature of these beliefs.

Hüber tried to implement in-service teacher training programmes (a distance learning and a self-help course) using the paradigm of tacit theories, which aimed at making implicit theories explicit and accessible and seeking behavioural modification, in two areas: conflict and how to cope with conflict. He elicits the implicit theories using a booklet which contains a case description of a specific problem in the classroom. Teachers are asked to relate it to their own experiences. He justifies the need to analyse implicit theories prior to any teacher training programme on the basis that the first stage in behavioural change is teachers' acknowledgement of their implicit theories (Hüber, 1989c). They substantially influence learning and instruction, are action-regulating, and if not subject to scrutiny, are not altered.
2.5 Summary of chapter and conclusions.

This broad review of literature has meant attempting to resolve the dilemma of how much research needed to be reviewed from areas other than languages. It needed to show the contours of the general theoretical framework while at the same time remaining relevant to foreign languages. In the light of this, this chapter has brought together the three different research areas (teachers' thinking, teachers' knowledge and teachers' socialization) which are essential to an understanding of the theoretical bases of this project. I will now try to bring forward the threads of the main arguments drawn from these different areas.

1.- From the perspective of teachers' thinking research, it is assumed, that teachers are rational beings and that their psychological contexts are highly determinant of their teaching activity.

2.- From a socialization perspective it is argued that the years student teachers have been in classrooms can be conceived of as the first stage in TE. This is supported by a constructivist point of view. Learners interpret and make sense of new information in relation to old knowledge.

3.- From research on teachers' knowledge, it was widely documented that when teachers and student teachers plan and implement their plans, they draw on different kinds of knowledge with different origins.

The review of the literature has also pointed out the areas which were in need of research. For example, it shows that most of the research is about experienced teachers and that there is a persistent neglect of language teachers. So the review had to address literature in areas other than FLs. Consequently, it seems that research on the process of TE should analyse how, for example, different knowledge domains and origins contribute to teachers' development. Although studies on the personal and institutional contexts of learning to teach have already provided important information about the way these contexts contribute to the student teachers' learning process, a more longitudinal, global inquiry into the process is needed since most existing studies only focus on one or other of the stages of training (either the biographical context or TP).
Finally, I hope that this literature review has provided both an insight into the way different researchers have conceptualized and done research on different aspects of teachers' knowledge (its content, structure and origins) and the theoretical grounding for the way I define and use the concept of student teachers knowledge in this project. The term knowledge seems to provide room for different kinds of content (subject matter knowledge, knowledge about teaching, knowledge about learners and learning and about student teachers' own professional learning) and can show the way it develops and can be related to action.

Notes
1. For recent reviews of second language classroom-based research see Long (1980); Rees (1989); Allwright (1988); Nunan (1989); Chaudron (1988); Richards and Nunan (1990); Richards (1990) and Spada (1990); van Lier (1988) offers an ethnographic perspective of classroom research.


3. See, for example Cohen and Manion (1980) for a summary of the differences between the interpretive and normative modes of research, and also chapters one and three of this report.

4. Research on teacher effectiveness was primarily concerned with general teaching procedures (McNamara, 1991). Despite evidence provided by cognitive research on learning about the importance of specific knowledge in problem solving, for example, research on teachers' decision-making and planning has focused mainly on general thinking processes, without reference to specific content (Hashweh, 1987). An example of the application of generic characteristics of teaching to Teacher Education is Gerlach and Millward (1989). There is no explicit or implicit indication that the student teachers are language teachers. They identify 13 skill dimensions important for teaching: planning and organizing, leadership, sensitivity, problem analysis, strategic decision making, oral communication, oral presentation, written communication, innovativeness, tolerance for stress, and initiative.

5. For a description and discussion of the use of semantic and planning nets and how they are constructed see Leinhart and Smith (1985).

6. An important contribution to teachers' knowledge research comes from researchers who have discarded the idea of making clear cut distinctions within teachers' knowledge and have adopted more global terms which may capture both the content and the structure of teachers' knowledge. For example, Calderhead and Robson (1988) and Clandinin (1986, 1989) have found that the
concept of \textit{image} is particularly useful to describe teachers' personal knowledge. Clarke (1983) has also proposed the term \textit{images} to describe knowledge about language teaching instead of the conventional three-layered model as typified by Anthony (1963).

7. The personal attributes of the trainee include the characteristics of the 'ideal' language teacher: personal qualities, technical abilities and professional understanding. The situational elements include the individual and group attributes of the pupils, the nature of the educational process, the target situation and the training possibilities.

8. Research on expert/novice differences suggests that attempts to educate novice teachers by presenting them with information about how expert teachers think or act and asking them to adopt the routines or actions of experts may not be sufficient, since the thinking processes of the two groups have been documented as different. Instead, educational programmes which take into account what is known about the thinking and action of novices and the process by which novice become experts might be useful (Borko et al, 1987: 78).

9. Recommendations for TE have usually been based on what we know about how experienced teachers teach rather than on what we know about how they learn (Borko et al, 1987).


11. Research on teachers' subject matter knowledge (see 2.3.4) also confirms the idea that student teachers acquire it and their orientations towards it during undergraduate courses. Borko et al (1987), in (2.3.4) confirm that student teachers have internalized models of teaching during schooling.


13. This concept makes reference to the way knowledge is actually held. Images seems to cut across other divisions of practitioner's knowledge (procedural and declarative, for example), provides an indicator of teachers' knowledge, allows us to examine knowledge growth attributable to different training experiences and the relationships between knowledge and observed practice (Calderhead and Robson, 1988: 5). As seen in previous sections the term has already been used to describe teachers' knowledge (Clandinin 1986, Morine-Dershimer, 1989, among others). The images student teachers hold when they enter their training programmes have been developed from their recollections of their own teachers. They can be ideal or negative, general or specific, but they are seen as acting as powerful influences on student teachers' developing practice.
CHAPTER 3. Methodological Process and Procedures

3.1 Introduction

This chapter presents the actual research process. It is hoped that it will give a practical dimension to some of the theoretical and epistemological issues discussed in the first chapter. Methodology is understood as a personal process rather than a set of mandates to follow dogmatically. As Stanley and Wise (1983: 150) observe, what happens in practice is idiosyncratic and redolent with 'mistakes' and 'confusions' and almost invariably differs from handbook descriptions. This process needs to be described because researchers and their methodological decisions have an effect on the setting, the participants, the data and the interpretation of data (Hammersley, 1984). As Burgess argues,

There are specific problems associated with observing in classrooms, interviewing teachers and pupils [...] Yet there appears to be relatively little that has been produced in Britain about the content of educational research ... The result is that researchers who wish to use a qualitative approach [...] are forced to turn to anthropological accounts [...] and sociological accounts [...]. Egglestone has argued that we need further firsthand accounts of research projects in the field of education similar to those that were collected by Shipman (76). [...] We lack first-hand autobiographical accounts on qualitative research in educational settings which highlight the principles and processes involved in the actual conduct of social research. (Burgess, 1984b: 7-8)

In response to that I will try to offer an account of the way the research was conducted.
The chapter is divided into nine main sections which deal with issues about the research design, ethics, the research context and the research participants, pre-field work, the data collection stage, the post-data collection stage, modifications to the original design and analysis.

As argued in 1.5.1, the choice of the research problem, research methods and the actual research process was all guided and determined by the epistemological assumptions of the naturalistic paradigm which assumes a qualitative methodology (1.5.4) as well as by theoretical considerations of the research area (chapter two) and the interaction between the researcher and the researched. It was assumed that a qualitative research methodology and teacher thinking research will make important contributions to FLTE since they provide us with a framework and a methodology to gain access to and examine issues of teachers' work previously hidden. As Guba and Lincoln observe,

>This search for meaning is a search for multiple realities, truths, and perceptions. Those multiple realities are contained in the unique, the singular, the idiosyncratic, the deviant, the exceptional, the unusual, the divergent perceptions of individuals, as they love or lived the experience. (Guba and Lincoln, 1981: 157)

This perspective will enable me to analyse student teachers' knowledge and practice from their point of view.

3.2 Design as "an evolving process"

As most qualitative researchers argue, for example Bogdan and Bikle (1982), there is no such thing as a project without some kind of previous design. This notion of design, however, is very different from the linear notion which quantitative researchers or more traditional participant observers postulate (for example, Black and Champion, 1976). A qualitative study is guided by a set of theoretical principles (1.5.4), but the specific research process and the questions to be asked may develop and change along the way (Burgess 1984c). Thus this research design was intended to be flexible without a rigid framework, since as Murphy-O'Dwyer observes, the investigator should try to describe how the world is experienced and perceived by those involved in the research (1983: 2). This degree of flexibility should not lead us to believe that there are no research interests and questions researchers start off with. For example, trying to tap the knowledge
student teachers bring with them to the training situation, how it develops during TE and how knowledge relates to practice provided the general focus of this study. But change and redirection of research procedures can happen in different ways, for example, due to interaction and negotiation with research subjects and 'gatekeepers'. Or although the basic research methods were determined before the collection of data, there were issues like means of recording classroom observations which were open to negotiation with the research participants (see 3.5).

Along these lines, van Lier comments that

Classroom researchers start out with certain ideas, values, assumptions of significance and relevance, a set of preferred procedures, and hopes for certain results. Out of all this initial baggage, which we may loosely call the researcher's assumptions, a framework of reference grows, and a research framework is constructed. How much of this we see in the final report varies, but very often a great deal remains implicit and unreported. Of course, the researcher's assumptions do not stop the moment the research begins, rather they change and mature as the study progresses. (van Lier, 1988: 3)

3.3 The research context

3.3.1 The PGCE programme.

The hectic rhythm with which the research process had to be conducted was determined by the context in which it was carried out: a PGCE course of nine months of duration. So while most qualitative researchers (e.g. Bogdan and Taylor, 1984) would suggest spending the first days getting acquainted with the field, the specific constraints of this course did not allow for much of this initial 'getting to know' and 'feeling out'. Furthermore, the initial interviews had to be conducted as soon as possible, since the aim was to try and find out what knowledge students brought with them to the training situation.

Although the emphasis was on the individual learning processes student teachers following a professional course went through, it was considered important to refer this experience to the wider context in which it took place. This was thought of as that provided by the student teachers' tutors. So initially the same interviews that were conducted with the students were expected to be carried out with tutors. Another valuable source of information about the context would have been observation of what the department's views actually looked like in tutorials and
seminars. Initially I had hoped to conduct observations of seminars. Constraints of different nature - mainly time - proved the task of conducting interviews, maintaining contacts with tutors and observing seminars impossible. Two different documents from the institution were used instead: *the Postgraduate Certificate of Education Handbook, Modern Language Department: 1990-1991* and *A TP Guide* used by tutors during TP. References to this 'elusive context' were also made by the students in their interviews and journal entries. But if I had had the opportunity to listen to the views tutors had about language, language learning and teaching and about TE, the research would have offered a deeper understanding of the developmental processes student teachers followed when learning to teach their subjects and it would have helped to point out more accurately the origin of the changes and development of their knowledge.

3.3.2 Teaching Practice schools

Students were assigned different schools by the university institution. The London schools in which students did their TP differed widely (e.g. coeducational, single sex, multiracial) although they all were comprehensive state schools.

3.4 The research participants

The selection criteria were to enable me to study a group of student teachers who would teach a language other than their mother tongue, preferably Spanish, since it was thought that not having a good command of French or German on my part would hamper the data collection process, mainly during classroom observations. Consequently, the best candidates were student teachers following a PGCE course on foreign language teaching. The sample of students was composed of seven students. Five of them did Spanish as their main subject, the other two did French with some Spanish. Although one of the criteria for selection was that they would be non-native speakers of the language they taught, Rachel was an exception, since she was bilingual, in English and in the language she taught. The research group then represents all students registered in the course in Spanish Modern Languages. All the components of the 'Spanish group' were initially selected (eight), but one of the members communicated her unavailability for the kind of commitment required. They all remained involved all through the project although with different degrees
of personal commitment and involvement. Only four case studies were finally analysed for this project, those from whom I had the more complete sets of data.

As a group, the participants defined themselves as 'successes' of the educational system and good linguists. Their language learning experience, both informally (in the foreign countries where the language was spoken) and formally (in school classrooms and college) was that of 'good language learners'. Evans (1988) describes university language students as 'the cream of the cream, the runners left after the last hurdle'. They had all completed Modern Language Undergraduate Courses successfully and had spent time in the foreign country as assistant teachers.

There are two issues related to this sample. On the one hand, it is too small to be considered representative of student teachers in general so the aims of the study, as suggested in 1.5.4, are not to generalise the results but to see how a group of foreign language PGCE students make sense of the process of becoming language teachers. Whether or not the results are 'transferable' to other contexts would depend on the similarities of different contexts. On the other hand, as Evans (1988) points out, the fact that the number is small allows the researcher to describe and understand the complex and shifting reality more convincingly.

3.5 Ethics: towards a code of conduct for this research

Individual scholars, teams of researchers or research committees engaged in human research are becoming more aware of the risks they may place on individuals who take part in their research projects. By voicing openly their views and perspectives participants may be putting themselves in jeopardy if their opinions are disclosed to people who hold power over them. An acknowledgement of this has led researchers to discuss the issue both from a theoretical perspective and pragmatically in individual research projects. The result is that a wide range of ethical guidelines or principles of procedures has been published in the last few years (e.g. the SAFARI Project's principles, as quoted by Simons, 1989; the American Anthropological Association Ethic Principles; Burgess, 1985a, b, c, 1989; Connelly and Clandinin, 1990; Ball, 1985; Spradley, 1979; Smith, 1975). Although different in terms of degree, depending on the different contingent research situations and precise procedures, they all agree that there should be:
• a balance between the public right to know and the individual's right to privacy
• an awareness that informants are the primary concern, so their rights, interest and sensibilities should come first
• information and negotiation of research objectives and processes, negotiation and consent of participants to use data
• reflection of participants' perception of reality
• participants' improvement of their accounts by additions, deletions or amendments
• availability and negotiation of reports
• protection of participant's privacy

An awareness that the most important actors of the research process are the participants took me to draft a certain code of conduct that established my responsibilities and participants' rights (appendix 1: 310). This would reassure participants of being respected as individuals and shows a commitment not to harm them in any sense. Firstly, informed consent, confidentiality and subjects' rights were contemplated during the research. Although pseudonyms for both people and institutions are used all through the report I am aware that people who were directly or indirectly involved in the project could, perhaps easily, relate some of the data to their owners, but a higher level of anonymity was not possible. Participants were aware of certain sensitive issues in TE as well as of their student status, so although they all appreciated that confidentiality and anonymity were guaranteed (they were given reassurances that their tutors would not have access to their data) when they made comments that they perceived as 'risky', they would say things like: "I hope no one listens to this" in a joking manner. Research participants were also informed of the research aims and processes (appendix 1: 311-312).

Secondly, I always felt that negotiations of procedures concerned basically those who were involved in the research. Some of the tutors had the same attitude, but others felt more protective and zealous about looking after the students' time. Furthermore, as developing a trusting relationship with the research participants was one of the main aims during field work, means of recording the classroom observations were negotiated first of all with the student teachers, rather than with any of their tutors, since, as Burgess (1984c) points out, seeking permission from persons holding positions of authority over the research subjects raises questions about the trust "teachers might put in a researcher who enters the school via the head teacher" (Burgess 1984c: 39). Nevertheless, I later found out these
negotiations involved a much more complicated and painful process than I could ever have foretold, since people other than the research participants were involved in this decision.

Finally, it is vital to keep the research project within the same framework as initially agreed, especially in issues of confidentiality and respect for participants' ideas and decisions.

3.6 Pre-field work: process and activities

The pre-field activities involved an interactive process of charting the methodological and theoretical areas, as presented in chapters one and two. This then led to decisions and processes which had to do with access, rapport, roles and methods of data collection.

3.6.1 Access, getting in contact with, relationships with research participants and with gatekeepers

Gaining access to research participants

Most qualitative researchers have sketched guidelines and suggestions to conduct successful access and entry to research settings, (e.g. Agar, 1980; Bogdan and Biklen, 1982; among others, Burguess (1985b) provides an account of some of the problems he encountered during his research in Bishop McGregor. However, they all admit that due to the variability of human groups, the task of gaining access must be kept flexible to accommodate the particular idiosyncrasies of the group under study, as doing research is not a mechanical operation but a social encounter where prescriptive rules are of not much use (Hammersley, 1984). So negotiating access is not a simple, straightforward process (Erickson, 1986). Next I will present an account of the way this was done for this particular project.

Getting in touch with the participants of the research followed two different stages and involved different gatekeepers which meant different relationships with them. The initial negotiation to gain access to the research participants was through personal contact with one of the tutors in the PGCE Modern Language Programme. This contact was unproblematic and the research process was seen as related to her
own training activity. A second negotiation had to take place due to a departmental restructuring of the groups tutors were assigned to, which meant that the Spanish group was assigned a different tutor and so the negotiation process had to be repeated. This time at least three different problems arose. Firstly, it was much more demanding than the first one and entailed a communication of the objectives of the study, a presentation and discussion of a summary of the project (appendix 1: 314-315), and an informal discussion of the underlying epistemology. Bogdan and Taylor (1984) define this process as very sensitive, as one which should be approached truthfully but vaguely and imprecisely. The vagueness and lack of precision of my communications in these initial encounters were honest reflections of my project at this stage. Nevertheless, after these first encounters it was accepted that I could conduct the study with this group.

The second problem was the objection made about the study. It referred particularly to the hectic and demanding nature of the PGCE course, so the research activities were seen as an extra-burden for the students and interfering with the tutors' task of educating the student teachers. This kind of objection is reported among the standard objections to participant observation (Bogdan and Taylor, 1984: 26). As a result of some of the tutors' concerns with the taxing nature of the course and the fact that research activities were not seen as part of the education process, it was made clear that my times spent with students and the activities they were to do with me should be kept to a minimum so that I would not place more pressure on them. Consequently, the research process which was originally conceived of as linked to the student teachers' processes of learning was written off as a rival activity which would steal the little precious time student teachers had available to do the course. Reactions from the student teachers confirmed that they had very different views. They saw the two activities as complementary and took the research activities as a way to explore, reflect upon their own professional education and thus further their learning. Melani comments that interviewing made her do something which she could have never done, "which is to take the time to bring it all up again, and talk about it to someone [...] made it all clear in my mind" (appendix 2: 351).

Meeting individual students

I wrote individual letters, which the PGCE office addressed and posted, (appendix
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1: 311) to student teachers before the beginning of term. They did not prove to be very successful in terms of arranging meetings. The hectic nature of the first few days was grossly underestimated. I soon found out the sheer amount of new information student teachers are exposed to in these first few days. My letter, on top of all that, was understandably not their main concern. So, I went back to tutors in an attempt to find out timetables, but it was not till I got to know one of the students whom I used to introduce me to the rest of the Spanish group, that I finally met them.

This process is by no means comfortable for the researcher, especially the beginning researcher. One senses that too much is at stake and feelings of self-doubt, uncertainty and frustration are commonly reported among most ethnographers (Bogdan and Taylor, 1984; Ball, 1984). Any previous methodological preparation (I had been reading methodology during the summer and I was sitting in on the qualitative methods module of the Curriculum Studies Department) does not seem to render the process less daunting, since most of the problems one faces have to do with the contingent nature of the process and the relationships with the context, which makes each field experience rather personal and unique.

Relationship with participants

Even if a good relationship is developed during the period of data collection, this will always be of a transitory nature. Similarly to the way that one of the student teachers was talking about her relationships and friendships with Spanish speakers, research relationships are also pragmatic and instrumental. Cátedra (1991) labels these research relationships as 'selfish', since it is the researchers who decide unilaterally to use a group of people as source of information, while they do not choose to be studied. What all this means is that the relationship is not one of friendship, but one of rapport which will nevertheless affect the quality of the data. So despite the ephemeral nature of the relationships, their characteristics makes them a very intense affair since they are fragile and could be shattered if one is not extremely careful (Burgess, 1985b). Spradley observes that

Probably the only universal characteristic of rapport is that it changes and fluctuates over time. On first encounter a potential informant may appear eager and cooperative. During the first interview the same informant appears
uncomfortable, anxious, and even defensive... Although sometimes unpredictable, rapport frequently develops in a patterned way. (Spradley, 1979: 78)

Relationships with the researched, degree of involvement with them and rapport has been amply discussed and defined in different ways (Bogdan and Taylor, 1984; Stanley and Wise, 1983). Basically it means achieving a kind of relationship with the research participants in which they do not feel threatened and they trust researchers to feel free to confide their ideas and points of view (Erickson, 1986). More recently Glesne (1989) discusses the differences and implication in ethnographic research of rapport and friendship. Rapport is mainly thought of as having an instrumental dimension defined in the researcher's terms. Friendship, on the contrary, is mutual and is problematic in a research process.

The relationships established with the research participants in this project ran along a continuum and the degree of involvement in the relationships was subject to great variation due to the different personalities and the kinds of situations I shared with them in the research process (An example is provided in Melani's first TP and my first visit to her school: A series of events took place which placed me in a role of confidante. The fact that I shared the difficult events of that day with her triggered a larger degree of involvement. In addition, the fact that this participant was very much a loner in her group made her identify herself with me and with the project to an extent that none of the other participants did). In general, then, the type of relationship maintained with participants in this project was, on the one hand, one of rapport along the lines suggested by Spradley:

> a harmonious relationship between ethnographer and informant. It means that a basic sense of trust has developed that allows for the free flow of information. Both ethnographer and the informant have positive feelings about the interviews, perhaps even enjoy them. (Spradley, 1979: 78)

The fact that I was not directly involved in the TE process granted a high level of freedom for the research participants to decide whether they wanted to participate or not or whether they wanted to abandon the project mid way.
Establishing and maintaining relationships with gatekeepers: a question of epistemological mis/understanding

The issues which were problematic in maintaining a relationship of trust with gatekeepers, in this project, had to do on the one hand, with an "epistemological understanding", in particular, regarding the open nature of the design. Agar (1980: 172) notes that "hypotheses testers" want a precise theoretical and operational definition of variables and a clear statement of the hypothesized covariation before the research begins. In this respect, Bogdan and Taylor (1984) argue that critical questions about the research design usually reflect concerns about the findings. Throughout this project, there were a series of misunderstandings of this kind. This created a loss of trust and gate keepers demanded to take a certain control of the research procedures. In this particular project, gatekeepers decided, for example, how many video-recorded observations I should conduct, who I should and should not record, despite previous agreement with research participants that they were willing to be video-recorded. This is similar to the experience Measor (1985) describes about her work with pupils. Hilary Burgess (1985) records the experience she had with the teachers at her school in terms of the reactions they manifested to transcripts and quotes. Similarly, in this project, some of the gatekeepers demanded that I should hand the questions I was asking the student teachers to him and to the students in advance so that they could think about what they were going to say. Despite the subjects reactions to written transcripts of their interviews, none of them suggested that they should have the questions in advance.

3.6.2 Gaining access to TP schools

The contact with TP schools could not be made at an earlier stage, since it was only shortly before TP that student teachers were assigned to different schools. Even when the schools had been assigned, a few changes took place. Besides, the choice of schools was extraneous to the research and determined by the internal structure and timing of the course.

Generally, the process of gaining access to TP schools was longer and more laborious than I would ever have anticipated and it involved different people and offices (college: university tutors and school relations office; schools: head, deputy head and ML departments -heads of departments and class teachers that were
assigned to student teachers-) who held different degrees of responsibility and with whom negotiations and renegotiations were necessary to gain entry to classrooms.

All these people had to be informed and they all had to grant permission. I wrote a letter explaining the nature of the research and tutors wrote a support letter (appendix 1: 317-318). The student teachers acted as 'gatekeepers' in getting access to schools and it was through them that personal contacts with teachers were made. The level of formality in each one of the schools varied. There were those where I did not need to see the secretary after the first time and I was allowed to go directly to the staff-room where the student teacher would usually wait for me. And there were also those where the same process had to be repeated every time: I could only get to the student teacher after having seen the secretary and the head of the department. In general, the formality required was very different from the situation described by Rees when gaining access to schools in Spain,

the relative informality of the Spanish school where headmasters are elected from among the staff [...] and where teachers come and go throughout the day, [...], means that an oral invitation from the teacher of the class is sufficient to authorize an observation by an outsider. No other formalities were required.
(Rees, 1989: 320)

Nevertheless, in general most schools understood that the research was not about the school or the pupils, and that 'if things went wrong, it would not get back to them'. Thus they kept a polite distance from the research process and from my relationships with the student teachers. One of the schools was an exception where permission to record the student teacher was not granted as teachers felt very apprehensive about having to be responsible if things 'went wrong'.

3.7 Field work. Gathering the data

In effect the fieldwork experience may be thought of as a rite of passage. It involves a personal confrontation with the unknown and requires that the aspirant come to grips with the use of theory and method in the context of a confused, murky, contradictory and emergent reality. (Ball, 1984: 71)

The full period of data collection covered nine months- the length of the PGCE course- during the 1990-1991 academic year.

The methods of data collection include a blend of qualitative techniques: semi-
structured interviews, journals, classroom observations and Stimulated Recall Procedures (for a discussion on triangulation see 1.5.2). One doesn't choose particular methods because they are easy to use. As Melville Danton suggests,

> If a choice were possible, I would naturally prefer simple, rapid, and infallible methods. If I could find such methods, I would avoid the time-consuming, difficult and suspect variants of "participant observation". (Quoted by Bogdan and Taylor, 1975: 13)

Table 3.1 shows the qualitative data gathered by these different methods. The methodology for the research incorporated a number of complementary methods of data collection which were designed to capture student teachers' knowledge about FL teaching (subject matter, knowledge about FL learning processes and FL teaching) and to understand its influence on teaching. In a similar fashion to Woods' study (1990) these methods were designed to gain access to aspects of student teachers' knowledge at two levels (theoretical and classroom activity) during what were assumed to be three stages of their initial professional learning (pre-training stage, previous to TP, TP). At a theoretical level, they aimed at eliciting student teachers' ideas about language and about teaching and learning languages. It was an attempt to gain entry into the conceptual world of the subjects in order to understand how and what meaning they construct around their experiences and actions (Bogdan and Biklen, 1982). At classroom level the methods focused on the activities and learning experiences selected by the teacher in order to achieve learning and how these are used within the teaching/learning process (Richards, 1990) together with the "definitions and process by which they are manufactured" (Bogdan and Biklen, 1982: 33). The results will only be partial accounts of the content of the student teachers' knowledge, defined according to the conceptualizations and the selection of methods used. Using Butt and Raymond's words, as a way of summary, in my case the,
situations. Just observing an event or a phenomenon, even through the eyes of a participant is not sufficient. One needs to go further to understand the relationship among antecedent, subsequent, and consequent events through engaging in dialogue with the teacher. (1987:71)

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Table 3.1 Information gathered during the research
Next I will discuss and describe the different methods of data collection and the way they were conducted.

3.7.1 Interviewing

It is well accepted that the learners' personal context is a powerful influence on the learning process and serves to guide action. Most qualitative researchers and researchers within the teachers' thinking paradigm argue that just observing an event is not enough to understand the complex nature of human activity, as this is highly determined by meanings and personal interpretations (Agar, 1980; Butt and Raymond, 1987; Guba and Lincoln, 1981). So to understand these significant frameworks interaction with the participants is necessary (Guba and Lincoln, 1981; Butt and Raymond, 1987). Yet, this context cannot be observed directly and the methodological obstacles to gaining access have been repeatedly pointed out (Hüber, 1989b; Calderhead and Robson, 1988; Calderhead 1990a). Despite arguments against the efficacy of verbal reports as a way into people's minds (Nisbett and Wilson, quoted by Marcelo, 1987 and Shavelson and Stern, 1983), most researchers in the teachers' thinking paradigm have used a variety of such reports combined with observation in an effort to tap the interpretations that research subjects have of their own experience and activity. Interviewing has enjoyed the greatest level of popularity for those purposes, since it can take us into the mental world of individuals and allow us to glimpse the categories and logic by which they see the world; it gives us the opportunity to step into the mind of other people, to see and experience the world as they do themselves (McCraeken, 1988: 9). As Spradley observes, "if we want to find out what people know, we must get inside their head" (1979: 7-8).

I assumed that student teachers are able to and also willing to articulate their thoughts and so different types of personal reports have been used in this research with the underlying understanding that what I will get is but a partial approximation of the complex mental world of student teachers. Although accessing thinking processes has not proved to be easy or successful (Calderhead, 1990a) I believed that semi-structured interviews rather than a formal question-and-answer session would provide better chances of capturing what is really important for the participants (Bogdan and Bikle, 1982: 43). So during this project, a series of semi-structured interviews were conducted, which I will describe fully, since as Bogdan
and Biklen (1982: 2) state, different qualitative researchers have used different terms (e.g. unstructured, open-ended, non-directive, flexibly structured) to refer to a kind of interview which is characterized by open-ended questions which allow the research subjects to answer from their own frame of reference rather than from one structured by prearranged questions framed in the interviewer's terms. The concept of semi-structured interviews may vary from the interviewer that only suggests a broad area and sits back while the informants talk, to the interviewer who becomes directive and intervenes frequently in an attempt to steer the informant's talk in a particular direction. So interviewing is in the end an individualistic venture. What I discuss here then is the way I carried out the interviewing process in a way which was consistent with the goals of the research, the epistemological and theoretical assumptions and the contextual circumstances.

Consequently, the aim of the interviews was to elicit rich answers about the meanings individual student teachers attached to their language learning experience, TE and TP on which they draw their knowledge. Although with a particular research agenda in mind, the objective was to remain open in the framing of the interviewing procedure. This meant, firstly, that the interviews I conducted were semistructured in that the questions were of a general nature, they were not ordered in a particular way and the wording of the questions could vary from participant to participant in order to elicit the meanings from the participants without forcing them to respond in predefined concepts or categories (Bogdan and Taylor, 1984: 48), (appendix 1: 318-320). Before meeting the respondents I wrote out the list of topics that I was interested in covering. Once they were informed of the issues I wanted them to talk about, it was up to the informants to structure their thinking and to make sense of the questions I was posing. Although the questions were open-ended, a 'concrete experience' on which they could base their comments was given to them. (Their language learning experiences for the initial interviews and their teaching for the interviews which took place during TP). Calderhead insists on the importance of giving student teachers concrete examples to elicit their knowledge (1990a). In the study he conducted with Robson (1988) to explore student teachers' knowledge, they used video-recordings showing different styles of teaching to which student teachers were asked to react and Cooney (1984b and undated) provided his teachers with hypothetical situations to stimulate conversations about the nature of mathematics, teaching and learning. Yet, what remains important is that,
to understand the knowledge that teachers possess, we need to know it in the way that the individual teacher does. More importantly, as outsiders and researchers, we need to understand how teachers evolve, develop, and change their practical knowledge, and how they perceive this experience. [...] a teacher as a unique person, and as a learner who possesses and develops a special type of knowledge, which is significantly influenced and shaped by experiences in various contexts. (Butt and Ryamond, 1989: 405 406)

Secondly, participation during the interview on my part was kept to a minimum. As a result, the interview transcripts are pieces of monologues, only interrupted when I felt that they did not have more to say on a certain topic and I then asked a different question, or else my intervention was used as a means of focusing or clarifying. So the informants controlled the flow of the talk and the shape emerged according to the informant's plan (Agar and Hobbs, 1982: 2). Thirdly, a conversational style was maintained as much as possible, to allow students to be as relaxed as possible. Interviews were conducted at different times during their TE course. I will describe each one of them in the next sub-sections.

Initial interviews

The initial interviews were aimed at eliciting individual student teachers' conceptual frames, with reference to their knowledge about teaching a FL (knowledge about teaching foreign languages, learning foreign languages and about language) which they brought with them to the PGCE course. These were conducted in October 1990. To facilitate access to the theoretical aspects student teachers were asked to refer to and reflect on their concrete language learning experience in formal and informal settings.

One of the recurring perceived problems with interviewing is researcher bias (Brenner et al, 1985), which is mainly conceived as the researcher asking questions which will only confirm his or her own assumptions and hunches. To avoid this as much as possible, questions were not asked, for example, to confirm whether students viewed language as a rule system or else as a system of communication. The interviews were characterized by open-ended questions, which did not provide any clues as to the preferences of the researcher. For example the questions were formulated thus: "what are your ideas about the processes of foreign language learning?" rather than "do you think languages are best learned by memorization of grammar rules?". Three open ended questions
were put to the students and paraphrased to make them clearer, if it was felt necessary:

• **what is language for you? how do you understand language, in general and in the classroom?**

• **how do you understand the process of learning a FL? In the classroom and outside?**

• **what is your idea of teaching FLs?**

### Second interview

The goal of this interview was to tap student teachers' knowledge about the same issues during TE. It was conducted before the student teachers' first block of Teaching Practice. It was expected to trace some of the changes that, after a month at the training institution, might be already taking place. Apart from the general common questions, some more individualized questions were brought up with different participants. This process of individualizing was rooted in issues arising from the first interviews. These specific questions were put to the individual student teachers in these interviews or after having read the journals, when it was thought that further clarification of certain issues would provide deeper insights, for example:

"What do you mean when you say ..." "or could you describe for me what the two presentations look like?"

This shows one of the strengths of interviewing, which is the acknowledgement that communication is a process of negotiating meanings and understandings (Brenner et al, 1985).

### Third Interview

Further interviews were conducted with the students before they started their first period of TP. These aimed at eliciting what ideas, feelings and expectations they had about TP. This was to clarify the broader context in which thinking and practice
would take place, from the participants' points of view.

**Teaching cycle interviews**

In the 'teaching cycle' interviews were conducted before and after observations. The preobservation interview was a 'thinking aloud session' about what the student teacher was going to do in the class. The post observation interview was a debriefing session to find out student teachers' reactions to the lesson. On some occasions, due to their other teaching commitments, preobservation interviews were conducted, even if a bit unnaturally, after the class, and sometimes student teachers wrote their reactions to the class, since occasionally they had another lesson to go to. On two occasions the whole cycle (pre-observation interview, observation and post-observation interview) was video recorded.

**Final interview**

The last interview, was a kind of closing of the learning cycle and I went back to the same questions I had asked them in the first two interviews.

In summary then, I interviewed student teachers on six different occasions. The first two interviews focused on the same topics: subject matter knowledge, knowledge about language learning and knowledge about language teaching. The fourth and fifth were focused on the lesson I was going to observe. These were conducted before and after the lesson. The last returned to the issues of the first interview.

**Place and means of recording**

The interviews, except the third one, were tape recorded. The third one was recorded on field notes. The advantages and disadvantages of both modes of recording had been pointed out in the literature and are well known (e.g. time consuming transcripts, distractions) (see Black and Champion, 1976: 373, for example), so I will not reproduce them here.

The average interview lasted about 45 minutes. The interviews were conducted in different places (office at the university institution, my room) which meant different
degrees of privacy, noise, etc. Although interruptions were not frequent, external and internal noises meant that the quality of the recording, in some of the cases, was not as high as one might have hoped. This had consequences at the time of transcribing them. (For a discussion of the influence of the physical context in the process of interviewing see Burgess, 1988).

**Post-interview work**

All interviews were transcribed verbatim (appendices 2 to 5). Original transcripts of the interviews and written notes were given back to the participants so that they could check the material I was going to analyse and were invited to clarify, elaborate or suggest changes to their original responses. The resulting transcripts produced different kinds of reactions when student teachers read them. This is particularly true of the first transcript. They found it difficult to come to terms with it since it was oral discourse in written form. In most cases the alterations made by respondents were only related to formal aspects. Yet in two cases they elaborated on and changed parts of their transcripts (Melani and Rachel). Tripp, as quoted by Rudduck, elaborates on the relationships between the spoken text of interviews and their written transcripts,

> Tripp also questions the status of the interview transcript [...], suggesting that the conventions of the written word are so different from the conventions of the spoken word in their 'generative and communicative powers' that the one cannot be regarded as unproblematic substitute for the other. The transcript, he says, in fact represents 'a massive transformation of data'. At the very least, one must acknowledge that non-verbal signals and the sense of mutual presence are lost; 'Bald words alone endure translation' says Hull (1984): 'The interactive situation is pressed neatly flat, like a washing from a mangle'. Tripp seeks to replace the literal texts of the interview by what he calls a 'jointly authorized statement' which would represent an agreed account of the meanings that the interviewee wanted to communicate. (Rudduck, 1985: 113)

These comments are very similar to those expressed by Melani about her transcripts,

> I wanted to change the script, because I was reading my own spoken words, which are nothing like my written words and if it had been a piece of writing I couldn't have ... It is not good enough. (Appendix 2: 352)
Advantages and problems of semi-structured interviews

In general, as pointed out by Black and Champion (1976) these open-ended interviews could approximate more closely to the spontaneity of a natural conversation and the central features of the respondent's thinking were identified more readily. Besides, they allowed for less researcher bias, which would have slanted the course of the conversation and restricted the flow of data. Finally there was a greater opportunity to explore various aspects and connections of the themes in an unrestricted manner (Black and Champion, 1976: 365).

Some of the problems I felt during interview work had to do with time and place. Firstly, research participants were subject to a tight timetable, which sometimes kept them busy at break times. This was particularly true during the phases previous to TP. So finding time slots for interviews was not easy. Secondly, finding a quiet place was very difficult. For example, the room to which I was allocated to conduct the interviews faced a main road. Traffic noises intermingled with words in ways that made transcripts at times, time consuming and frustrating. I did not think it was reasonable to ask students to come to my room, on the basis of the limited time they had available (See Black and Champion, 1976: 366). Thirdly, after the initial negotiation with the students, they agreed to have the interviews taped. This, after the initial feeling of discomfort manifested by one of the participants, proved to be less interfering than if I had taken written notes during the interview. This would have stripped the situation of naturalness, since eye contact would have been lost, and research subjects might have been concerned about the number of things they were saying, or whether I had time to record everything they said. Yet an over-reliance on mechanical recordings can be disastrous if something goes wrong with the equipment and, once at home, you find out that you left your informant with only a blank tape. (This happened on two occasions). So perhaps a compromise would yield better outcomes: tape-record but also take notes of the main points to which you can go back and try to reconstruct the interview, in case the interview is not recorded.

For a detailed summary of the shortcomings common to all kind of interview see Black and Champion (1976: 370-71).

To summarize this section, borrowing Burgess' words, the interviews I carried out
were designed "to provide an opportunity for the teachers to talk about their work in their own words, using their own concepts rather than in an abstract way or in response to a set of staccato questions" (Burgess 1988: 144).

3.7.2 Observing

A major purpose of observation is to capture human conduct as it actually happens, to permit us to review behaviour in process. How people respond in an interview [...] does little more than tell us how they felt at a particular moment in time [...] How they behave in actual situations, sometimes modifying their views, sometimes contradicting themselves, but always swayed at least in part by the situation in which they are behaving, is missed. (Black & Champion, 1976: 332)

The next phase of the research aimed to document the relationship between student teachers' knowledge and the way they conducted their teaching activity. Thus video or cassette recorded observations were carried out (two recordings - video or cassette- for each student teacher) during the second block of TP.

Classroom observations allowed me to see how student teachers defined and interpreted foreign language teaching in practice and to compare this to the knowledge they had displayed in interviews. In the present study, both methods are complementary and are used to collect different types of information. The interviews gather implicit knowledge while observation shows explicit behaviour. They are complementary because although directed to gather different types of data, both will, in the end, provide information about how future teachers make sense of and understand the process of teaching and learning FLs.

Observation was used to preserve the natural form of social behaviour (Black and Champion, 1976: 331), provide more graphic descriptions of how a person actually goes about learning to be a teacher during TP, explore student teachers' activity in their own terms and uncover the relationships between student teachers' knowledge and their classroom activity.

Which lesson to observe?

Hammersley (1984) resolved the sampling problem of which lessons to record in what he calls an 'ad hoc fashion'. In this study, it was the student teachers who took the decision about which lessons they wanted observed and recorded since
they had to juggle with personal and contextual restraints.

**What, how much and how often to observe**

The degree to which the researcher can become participant in a situation may be
determined, to a large extent, by the field of study but also the characteristics of the
research situation and the relationship between the researcher and the participants
(Ball, 1985; Burgess, H. 1985). In my case it opened up a complex negotiation
process both with the student teachers and with tutors. Accordingly the number of
observations which were carried out (two for each student) were the most I could
get considering the contextual constraints in which they took place. So, although
this cannot be considered fully participant observation, it was clearly not an
observation in an interaction-analysis fashion. What characterizes participant
observation is an observer's presence with varying degrees of involvement in the
activities of the researched. Systematic observers, on the contrary, try to minimize
their interactions with the participants and try to describe what they see in
predefined and closed systems of categories (Villar Angulo, 1990; Burgess, H.

What determined the frequency of the observation in this project had to do with
constraints coming from the different contexts which conflate in TP. Firstly the
nature of TP (e.g. avoiding clashing with other observers -university tutor, external
examiner, classroom teacher-, not interfering too much with student teachers'
scheme of work). Secondly, the TE context (it was not possible to obtain
permission to observe them more than twice). Thirdly, the school contexts (e.g.
juggling with different school timetables, schools being so far away from each
other that I could not go to more than one school a day). Finally, assuming a
participant role which would involve a certain degree of interaction in the class was
not advisable since it would only have been achieved at the expense of changing the
natural setting to a considerable degree. Yet, although my role was not that of a
participant observer, it is true to say that pre and post observations interviews
permitted a certain level of interaction with the student teachers which did not
interrupt the normal flow of teaching. As Goetz and LeCompte say,

> In conducting studies in school settings, for example, investigators necessarily
interact with the teachers and the pupils under consideration -even if only non-
verbally- and become, to some extent, participants. This need not be a liability;
it simply means that estimated consequences of being a participant must be noted in the research report. (1984: 143)

These set of circumstances did not allow for more continuous participant observation but there was no evidence of the brevity of observation having any detrimental effect on the behaviour under study, since participants got used to it after relatively short periods of time. A more participant role would have been impossible and I estimated that a series of observations as an outsider would provide the necessary data for my research. The length of the observation period for each one of the students was admittedly too brief. Yet McNamara (1980), despite recognizing all the advantages of participant observation over systematic record of teachers' behaviour, warns us of the fact that accounts of classes (after a considerable time of being immersed in them) are banal and lack any relevance for the teachers. This is because classrooms are highly complex, and it is very difficult for a participant observer, still an outsider, to provide satisfactory interpretations of classroom events.

The way the observations were conducted in this study resembles what Goetz and LeCompte (1984) call 'stream-of-behaviour chronicles' in that they direct their attention to a complete recording of observable data. In this project, the only unit of analysis specified previous to recording was the student teacher's activity rather than the pupils, but transcripts of lesson may show some of the pupils responses, behaviours, etc. which shaped or affected the teacher's behaviour. The focus of the observation was broadly determined beforehand as teaching activity but without using a pre-arranged set of criteria. As Jackson observes,

Almost as important as observation per se is the requirement of keeping an open mind about what we see. Our ways of looking at the classroom should not be unnecessarily restricted by prior assumptions about what should be going on there, nor even, as we have seen, by the seemingly logical link between the abstract process of teaching and learning. In short we must be prepared and willing to give up many of our comfortable beliefs about what classroom life is all about. (1968: 176)

To avoid the danger that smaller units of analysis may not be meaningful or shared by the participants, Stimulated Recall techniques were conducted in which participants were asked to describe their teaching activity in their own terms. In that way the description of classroom activity was not externally imposed, as in
systematic observation, but a 'mutual reconstruction of meaning in action' (Connelly and Clandinin, 1985). Pre- and post observation interviews together with SR provided the student teachers' perspectives on their activity as well as a record of their behaviour. The questions in these interviews were open ended. For example: "tell me what you are going to do in the lesson today" or "how did the lesson go?" instead of asking things like "why did/didn't you correct that pupil during the repetition stage?"

The observer at the back of the classroom

Drawing on experience and classroom research, I assumed that most FL learners and teachers, (and this is even more true of student teachers), are familiar with the presence of an observer in the classroom to the extent that they tend to forget the observers' presence to a point that these do not alter the classroom activity significantly. Melani's comments illustrate this,

They [pupils] usually speak a lot more, and a lot more confidently, but, perhaps, again, because this is the first time that there is something absolutely new, they were hesitant, and then having a Spanish person siting there ... but, I don't know, I felt quite happy in the lesson. (Appendix 2: 371)

wonderful, it didn't make the slightest difference. However nervous I got before hand, it was because I was nervous about my Spanish with you there listening, not about the lesson, and you probably noticed from the way I was speaking that I was very nervous, I don't know... but having you there Ok it might have made me nervous, but I didn't feel bad. I actually enjoyed having you there. (Appendix 2: 371)

Black and Champion, (1976: 334) also point out that there is no evidence that the presence of the non-participant observer will have any detrimental effect on the behaviour under study.

Means of recording

There are pragmatic reasons for using mechanical means of recording, for example, it facilitates the task of recording interview and observational data which is multiple and simultaneous and provides a permanent record for later analysis. Van Lier (1988) adds that recording is important as an estrangement device, since the classroom context is familiar rather than exotic, and is laden with a lot of personal
meaning. Thus some mechanical means of recording will allow the sort of detachment necessary to analyse the data. Classroom observations were also recorded to facilitate the stimulated recall activities. In contrast with participant observation where the participant observer takes field-notes in the actual temporal and contextual limits, visually and aurally recorded events allow for repeated searches and in a way for repeated observations of the same events. The advantages and disadvantages of machine recording and participant observation are discussed extensively in Erickson (1986:144-145).

The classroom observations were recorded, due to contextual constraints of different sorts, by a variety of means: video, cassette and field notes. This unintended variety gave way to an informal assessment of means of recording classroom activity and it was felt that cassette recording and running commentaries were more productive than video recordings because they were less intrusive for the student teachers and less burdensome for myself (carrying a video camera along tube stations in the middle of the snow was not particularly an enjoyable experience).

I did not want the video recordings to disrupt the normal process of the class, so instead of asking for expert technical assistance which would have meant a greater deal of interference, I carried out the recordings myself. After a short training course on how to use a video-recording camera, I recorded the classes on VHS cassettes. There were no major technical problems. As the object of the observation was the student teachers, they are in focus while pupils' participation, particularly when they worked in groups, was lost in the recording.

Video-recordings were conducted with two students while the rest were tape recorded, except one on whom I took written notes. Recordings proved to be of invaluable worth for the following phase of data collection (SR), where student teachers were asked to comment on their activity at different levels. Problems associated with recordings are related to the time-consuming task of transcription. Yet, if one balances the advantages (a reliable data collection device and a powerful tool for learning) with the disadvantages, the former outweigh the latter (See Fetterman, 1980).
The process of observation

During the first TP block observations were meant to be initial, exploratory, global and familiarising observations and were not recorded. The objectives were to get familiar with the research participants in the classes where further observations were going to be carried out in the second TP block. Student teachers expected to have the same classes during the second period but some of the students found out that their timetables were not exactly the same as during the first term. This meant that some of the recorded observations were of classes which were new to me.

Throughout all the observing process a crucial analytical distinction in interpretive research was taken into consideration: basically, that we cannot interpret the teaching activity as only behaviour, devoid of the meaning the actors give or the sense they make of the behaviour. An alternative concept which would be more appropriate to describe teaching is 'action': "the physical behaviour plus the meaning interpretations held by the actor and those with whom the actor is engaged in the interaction" (Erickson, 1986: 126-127). Actions can only be described by self-reports. The SR and interviews prior to observations and after observations conducted in this project were conducted in that spirit. What I am saying is that behaviour should be and is interpreted according to the framework of the teachers because it is important to arrive at the meanings they attach to it, but I am not saying that that is the only interpretation. For years the teachers have been left out when interpreting their own behaviour and their view perhaps differs substantially from the way an external observer will understand it.

3.7.3 Student teachers' Journals

As in many other qualitative studies, sources of data were triangulated in order to gain credibility (see 1.5.2). This was achieved by combining interviews, observations and personal written logs. So parallel to the two methods described previously, in which the presence of the researcher was necessary, data was also gathered by student teachers' diaries. My method was similar to that described by Goetz and LeCompte:

As a record of teacher concerns and perceptions, the diary was triangulated with other data- observations, interviews, and the teacher records kept for the school- to discover and substantiate the content of teacher meanings and values. (1984: 159)
Diaries provide first-hand accounts of situations where researchers have no direct access and also provide an insider's account of a situation, without the presence of the researcher (Burgess, 1984c: 135).

Student teachers were asked to keep a journal describing their reactions to what they were doing both during their time at the University Institution and when they were out in schools during TP. This data collection method was included to try and capture the more personal, daily experience of the participants. The first time they were asked to write journals specific directions were given to them. The second time, before they went away for their TP, a more detailed guideline was given (see appendix 1: 321-324).

Although I didn't ask them for their journal at specific times, since I was reminded continually by their tutors of the pressure students go through in this course, the level of participation in this activity was rather low and disappointing. Only three students wrote in their diaries on a regular basis, two wrote sporadic entries and two did not keep a diary at all. In general, they found writing too time-consuming.

Honesty is one of the most important criteria that researchers making use of logs expect in the accounts. Honesty and openness are related to the degree of confidentiality subjects know their accounts would be given (Murphy-ODwyer, 1983). The diaries in this project were only kept for the study and all the student teachers knew that I would keep them confidential. The level of honesty is manifested in the, at times, risky commentaries they make about their experiences.

Besides the research aims of providing information, the process of writing has innumerable spin-offs in teacher development. As has been repeatedly documented it is a very effective way of learning about the profession. (Villar Angulo 1990; O'Hanlon, 1990; Bailey, 1990; Porter et al, 1990).

3.7.4 Stimulated Recall

In line with the assumption that teaching is more than just observable behaviour, that to be able to understand it fully we must place it in the psychological context of teachers themselves, more methods of introspection were used. This contrasts with observational scales which had dominated research focused on the external aspects
its versatility. It has been used in different ways and using different techniques in different contexts. The common underlying assumption being that,

the cues provided by the recording (audio or video) will enable the participant to 'relive' the episode to the extent of being able to provide, in retrospect, an accurate verbalised account of his original thought processes. (Calderhead, 1981: 212)

It should be pointed out that what I have been labelling SR modifies the traditional Stimulated Recall Interview (see the way it is described, as used in research in teacher thinking, by Marcelo, 1987; Calderhead, 1981; Clark and Yinger, 1977; Clark, 1980; Clark and Peterson, 1986) in the following ways:

1.- It is not always an interview, since the researcher is not present in some cases. It was thought that giving research subjects their own recordings and asking them to record different reactions in different ways (explained below) would not restrict what they had to say in any way (e.g. because of time or because of researcher constraints). As Munby (1982) argues, the selection of questions and the analysis of responses in data collected by SR is a difficult venture. What makes it especially difficult is the fact that it is easy to impose the researcher's assumptions on both the kind of questions asked (leading questions, designed to seek particular answers, for example) and the analytical process which would lead most probably to confirmation of previous assumptions, imposing them on the data.

2.- Some of the participants did the recordings in written mode, rather than in the traditional oral-recording while others audio-recorded their commentaries. This method was negotiated with the students, and each found the most comfortable mode to express and record their thoughts.

3.- The activity was done at three different times with a different task each time:

- participants were firstly asked to record their recollections of what was going on in their minds during their classroom activity in order to find the content of their thinking while teaching,

- participants were next asked to record a descriptive account of the teaching activity, as it was important to see the activity described in student teachers' own
of teaching. If access to the mental processes had to be gained, despite their
detractors, self-reports seem to be the only way. There is no doubt that if, as Butt
(1984) states, the purpose is to understand teacher knowledge and its influence in
their actions, the proper subject of inquiry is teaching as experienced by teachers
themselves. So a series of SR conducted after TP will provide this emic
perspective about teaching.

The interviews conducted in the last phase of data collection were stimulated by the
classroom observation recordings (see appendix 1: 324-326, for the structuring and
the specific direction research participants were given). The interviews were of an
open-ended nature in a similar fashion to Marland's (1977), as quoted by Munby
(1982) or to Calderhead (1981) who conducted SR with a group of primary school
teachers, where instructions were of the following kind, "comment on the kinds of
thoughts that were going through your mind during your activity". In consonance
with the research aims, I thought that to have the participants' interpretations of
their teaching was paramount to understanding their knowledge. So the traditional
technique of SR was extended to asking them to listen to or to view their recordings
two more times during which they had to describe the activity and to relate it to their
knowledge. The student teachers were in control of when to stop the recordings
and when to report on their thinking. So SR was used:

1.- As a stimulus to bring out the thoughts that were taking place while the student
teachers were conducting their lessons.

2.- As a stimulus for a descriptive commentary of what they see/hear in the
recordings.

3.- As a stimulus for more theoretical thinking in order to see what kinds of
connections they made between their knowledge and their actions.

The reason for this triple aim is that these activities would tap student teachers
knowledge more effectively than a traditional ST because it would be a way of
gaining access to the student teachers' own descriptions and interpretations of their
lessons.

One of the characteristics of the technique, similar to interviewing and observing, is
terms,

- participants were finally asked to reflect on the three main questions that were considered during the project while listening to or watching their lesson recordings and relate them to what they were doing. This offered a way of focusing their reflective thoughts in the hope that they would relate the actual teaching activity to their knowledge. Since it was assumed that both cognitive and behavioural activity is guided by the student teachers' psychological context, I wanted to see how the students themselves made the connections and saw the relationship between their classroom activity and their knowledge.

4.- The last modification of the technique is the fact that students recorded their comments at their own pace and in their own time, since I was aware that time constraints were a pressure on students. Arranging times with each of them would have been more difficult. The means of recording was negotiated with the research participants and they all expressed a wish to produce written accounts of the content of their thinking initially, but later on as they found time was running short some decided to tape-record their comments.

A definition of SR, as used in this project is, then, written or spoken comments and reactions that student teachers make when, being completely in control over when to stop the recording of their complete lesson, they describe their own teaching activity while listening to or viewing a tape of their own classroom performance, recall and verbalise their interactive thinking occurring during actual performance while viewing or listening to a recording of their own performance and try to relate their activity in the class to their knowledge.

The broad aim of this activity was to gain access to the participants' own accounts as the first step in trying to understand their teaching activity (Hammersley et al, 1985). The procedure was aimed to elicit as much as possible a participant perspective in as much detail as possible.

3.7.5 Assessment of data collection methods

In summary, field work was a process of investigating the meanings of experience and actions as perceived by participants, using different kinds of 'self-reports' and
observations. This cross-reference of data collection sources was of great value when it came to data analysis, since it allowed for cross-checking data to validate analytical themes.

These different research activities turned out to be a learning experience for the participants as well as for myself. They appreciated the opportunity to have some time to think aloud and express their thoughts in writing, without feeling under a judgmental eye. Also they did not see them as divorced from or antagonistic to their teacher education activities.

3.8 Post field work. Analysis: transcribing, coding and interpretation.

The data for this project consists of transcribed interviews, journals, transcribed classroom recordings and documents (e.g. planning protocols, photocopies of classroom materials used during the lessons) as shown in tables 3.1 and 3.2. Apart from the information they provide about the substantive research issues, they also yield insights about the way research participants reacted towards the research process (e.g. their reactions to the different research activities, relationships with the researcher, effect of an observer in their classes).

3.8.1 Transcripts

The time between the different stages of data collection, was spent transcribing recordings. Verbatim transcripts of interviews, lesson recordings and SR were done, since it was felt that, as Goetz and Lecompte (1984: 142) suggest, any paraphrasing may mask, distort, or replace connotations intended or assumed by respondent and thus misinterpret the data.

The transcripts of the interviews were given back to the research participants so that they could change and add comments, or decide which things they wanted eliminated. The transcripts of the lessons together with the recordings were given to the student teachers for the next phase of data collection (SR). The following conventions are used when transcribing:
To guarantee that it is easy to go back to the original recordings, counter numbers are included every so often in the transcripts.

When something was not understood, question marks are included.

Initials are used when people or institutions are referred to.

In the transcripts of lessons, the student teacher is identified by her/his initial and the pupils either by initials or a general p, for individual pupils, pp, when more than one pupil but not the whole class was involved and c when the whole class was involved. Italics are used when the language used in the classroom is the FL as opposed to English.

To respect the flow of oral discourse some features of spoken language are not cut out (e.g. repetitions, false starts, mms, ahs, etc), although most of them were not included in the quotations which illustrate the analysis.

3.8.2 Coding

After repeated readings of the transcripts initial analysis consisted of, firstly, coding one of the student teachers' data (Melani) by both deductively by using the general categories derived from the literature, which also derived from the research questions and inductively by identifying the concepts which formed these categories as they emerged from the data and which summarized Melani's way of thinking about teaching and learning languages. These categories and accompanying concepts became the organizing themes of the case studies. The coding used three major categories: knowledge about language, knowledge about language learning and knowledge about language teaching. The categories of learning and teaching are so interrelated that at times it was difficult to separate them and they overlap in the analysis. For example "the social context" in 4.1.1.2. is coded under learning, but it could also be one of the dimensions of teaching. At other times themes have been included both in the categories of teaching and learning. Yet the criteria was to code data under teaching when they were more related to the options the teacher has and to learning when they were more related to the way they may influence the learning process.
Coding was done by highlighting the manuscripts using different colours for different chunks of transcripts which seemed to belong to the same category. At times the same chunk was double-coloured. The fact that the same chunks of data can be coded in different colours shows that things do interrelate and that there is no neat fit between "categories" no matter how broad and well defined. Data do not fit categories neatly because human consciousness is far from neat and has all sorts of implicit and ill defined connections. Different coding, modifications and expansions of codes took place throughout the process till the material was finally arranged in a meaningful way (see appendix 1: 328-333).

At a later stage, and in order to break the linearity of the transcripts, I decided to transfer Melani's interviews and journal data to coloured index cards. This allowed for a greater degree of flexibility, especially since I could easily bundle together the chunks which had been coded in the same colour.

A second analytical stage was an inductive process of defining and redefining the initial broad categories, after a new reading of the cards. As I was reading I was jotting down the ideas and concepts which each one of the cards seemed to suggest. These were to constitute the different concepts, and themes of each one of the categories, for example 'language and culture', 'two different language learning processes', 'means of expression'. Analytic induction or a lack of definition of categories prior to data collection, as Znaniecki and Goetz and LeCompte (1981) suggest, aims "to 'preserve plasticity' by avoiding prior categorization" (quoted by Burgess, 1990: 41). Thirdly a definition of the categories was written out (appendix 1: 328).

Fourthly I revised and modified the previous coding categories. Following the traditional 'cut and paste' technique I gathered all the chunks of data belonging to the same category together. This was completed by written summaries of each different category, similarly to Hewson and Hewson, 1989 (appendix 1: 328-333). Fifthly, a comparison of the different themes with one another identifying to what point they changed along the TE process followed.

Sixthly, because theoretically it was assumed that teaching is more than observable behaviour and methodologically it was assumed that an external observer may not be fully aware of the personal dimensions of teaching, the analysis of the lessons
was based on observations and interviews. First teaching behaviour was analysed, second, relationships were established to find out which knowledge student teachers drew on when they taught.

And finally, the same process was followed with the rest of the student teachers. This served as a way to validate the categories and themes which emerged from Melani's data.

3.8.3 Interpretation

Different themes were identified which described student teachers' knowledge, how it developed, and the relationships between knowledge and teaching. In analysing the data it is only fair to say that the perceptions of the researcher don't have to be necessarily the same as those of the research subjects. And it must also be pointed out that other researchers, with different beliefs and understanding may well have made a different interpretation of the data.

The data was organized using the following themes:

- pretraining knowledge
- TE knowledge
- relationship between knowledge and practice

The final stage in the analysis was the development of individual profiles in case studies that attempted to describe the most salient features of each student teacher's knowledge about language teaching and its influence in practice. In the next chapter I will present the four case studies and a cross-case study which focus on some of the issues which form the student teachers' knowledge and the way it related to practice.

3.9 Modifications to the original research design

Studies may be designed and redesigned. All the methods associated with qualitative research are characterized by their flexibility... Researchers can, therefore, formulate and reformulate their work, may be less committed to perspectives which may have been misconceptualized at the beginning of a project and may modify concepts as the data collection and the analysis of data
As Burgess points out, modifications and reformulations may occur when carrying out fieldwork. In my work these modifications took place at different levels. I will mention the most significant ones. Firstly conceptual modifications and focusing. A study of how student teachers learn how to teach FLs was, after the first stage of data analysis, defined as student teachers' pre-training knowledge, how it changes and the relationships between knowledge and teaching. Secondly, it was initially contemplated that tutors (university and school tutors) would be interviewed in order to gather information about the way they understood the process of TE. Different kinds of problems of time and misunderstandings arose which rendered the task impossible.

Some of the classes recorded turned out to be French lessons rather than Spanish, yet no problems were felt since the level of language used in classes was very basic and the main focus of the observation was the teaching activities.

Thirdly, after a process of negotiation with the students about means of recording classroom observations, they agreed that, once they felt ready, I could video-record their lessons. Nevertheless, only two of the students were video-recorded while four were audio-recorded and the last was only recorded by field notes. Yet this unplanned diversity led to an assessment of the means of recordings and it turned out that the richer data were those collected by means of a combination of tape recording and field notes. Video recordings can be more limited, since, especially if there is just the researcher doing the recording, there is only one aspect or side of the room you can be focusing on and they are particularly much more intrusive than a small tape recorder. Field notes taken during the class, together with audio-recordings, can provide a richer and less intrusive source of data. It proved that, like Goetz and Lecompte say,

\begin{quote}
The emphasis on meaning as defined by participants makes it impossible for an ethnographer to choose all the necessary collection methods in advance of fieldwork. (Goetz and Lecompte, 1984: 165)
\end{quote}

Fourthly, regarding the means of recording and ways of conducting SR, it was the original intention for the SR to be of a unitary nature and for all the students to conduct the activity on their own time by writing. However, as time went on they found they did not have time, so the unitary nature of the activity gave way to a
more varied mode: some of the SR were conducted in my presence and tape-recorded (Beth and Melani), others were conducted without my presence and were recorded by writing (Rachel and Ronan). What remained unaltered was the most important feature of the activity: the fact that it was up to the participants to stop the recordings and comment without direction from the researcher.

The complete research process is summarized in table 3.2.

Table 3.2 Research process

Notes:
1. The reason for starting with Melani's data is because in the initial reading of all the initial interviews from all the participants, she seemed very articulate, and the data seemed to offer a lot of possibilities.
Chapter 4. Research Findings

4.1 Introduction

In order to follow student FL teachers' development during a PGCE course, I have considered the following three areas. Firstly, the origins and content of student teachers' knowledge at different stages of the programme; secondly, their teaching performance; and thirdly, the way teaching and knowledge interact during TP. Student teachers' knowledge is worthy of analysis because teachers need an understanding of theory. This should include an understanding about language and about the language learning and teaching which might influence the pedagogical principles (1.4 and 1.7) from the perspectives of the student teachers. The material accumulated was analysed first looking at students individually, presented in a case-study form (4.1-4.4) and then as a group presented in a cross-case study (4.5). Although the study was conducted with seven student teachers, I have only analysed the material from four of them as I assumed that this would provide enough material for the objectives of the research. I selected the four student teachers from whom I had the most complete sets of data.

Following the discussion in chapter two, the concept of knowledge was used to describe student teachers' ideas about language, language learning and language teaching (see 2.3.2 and 2.3.3). Although it could be argued that it is not well defined, it is broadly useful when analysing the interview and observational data and also when establishing its relationship with practice (see appendix 1: 327-335). The analysis of the content of student teachers' knowledge, at different points of their learning and the relationship between knowledge and action has proved to be important in providing an understanding of the process of becoming a FL teacher.
4.2 Melani

4.2.1 Pretraining knowledge. Origins and content.

4.2.1.1 Origins

Melani's pretraining knowledge has its origins in both formal language learning experiences (school and college), informal language learning experiences (with her mother and in France and Spain) and memories of her teachers. Based on this learning experience, Melani has developed a way of understanding the subject matter she will teach (foreign languages), some of its pedagogical aspects and the way people learn it. The data on which this analysis is based is the initial interview which took place at the beginning of the course (appendix 2: 334-345).

4.2.1.2 Content

Knowledge about language

Melani's discussion of language deals with many of the dimensions common in the current relevant literature. I have identified the following categories: language functions, substance, use and medium of expression.

The functions of language

I have used the concept language functions to categorize those instances in which Melani talked about the ways language is used to accomplish different human needs. These functions are, to a considerable extent, context determined, in that her language learning experience has left her with different notions of what language is in relation to the context in which it is used. The most important characteristic of Melani's understanding of language functions is that while the range of ways in which language can be used in the world outside classrooms is rich and varied (e.g. communication, cultural, aesthetic), classroom language tends to be limited to what I have called a pedagogical function. This is, as it were, a reduced version of the real linguistic experience for classroom use and tends to have the formal properties of the language as its substance. Besides, she seems to see an interdependence between language functions and other defining characteristics of language, for example, between the use of language and the substance or nature of language as
illustrated in table 4.1 Melani's experience of language in the classroom (pedagogical function) with "no attempt to show us what learning languages is for, it was simply doing exercises, translating, writing, learning grammar" (appendix 2: 334) contrasts with a communicative function in a natural context where,

I was talking about different things, but I was also talking about the same things in a different language, using different words, saying things that I wouldn't have said in English. It was a completely different way of expressing things and finding about things and obviously that influences the way you think about things, because you think in the language. (Appendix 2: 335)

The substance of language

Melani had some knowledge about the substance of language or the different layers language has and the way it is used when performing different functions. For example, in a school context, when language was used in a pedagogical way, Melani viewed it as a system of abstract rules, "I loved it [language] in the abstract, I loved manipulating words and how things went in other languages" (Appendix 2: 334). When she discussed language in a real context when it is used to communicate with people, it was viewed as content and meaning as the next quotation shows,

So I came back to England with a whole new world, as it were, all tied up with the French language. There are things I learned about Indian dance, music, for example, that I wouldn't know how to talk about it in English because I only ever talked about them and discovered them in French. (Appendix 2: 335)

Use of language

Melani seemed to think that we have an inner, more perfect capacity to use language. Nevertheless, she argued, when we use it, it becomes less precise. In other words, she viewed performance as a faulty representation of competence:

It [bad or careless use of language] seems to me such a sacrilege, in a way, because we have this incredible means of communication and we don't use it to say exactly what we mean, we say things that roughly convey the idea, but we are not at all precise in our speaking. (Appendix 2: 341)

Medium of expression

I use medium of expression to categorize those instances of Melani's knowledge about language which make reference to the distinctive properties of spoken and
written language. Melani is aware that the conventions of the spoken and the written language are different and that an emphasis on the written language will not result in the learning of the features of the spoken language,

all the teaching was geared towards writing [...] writing and translating, reading and translating, reading literature and so on, all of which meant that by 15-16 I was quite fluent in the written forms of the language, but other things like accent and intonation, familiar language, not very much at all. (Appendix 2: 334)

The following table summarizes Melani's pretraining subject knowledge and shows the contrast between her view of language in a natural context and its narrowness in the classroom. It also indicates that Melani has a broad understanding of language that could be drawn upon during TE.

<table>
<thead>
<tr>
<th>Context</th>
<th>Real world</th>
<th>School</th>
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<tbody>
<tr>
<td>Functions of language</td>
<td>clarifying and creating distance from personal experience (expressive)</td>
<td>communicating • fluency • need • willingness</td>
</tr>
<tr>
<td>Substance of language</td>
<td>meaning</td>
<td>meaning paralinguistic feat language variety cultural content</td>
</tr>
<tr>
<td>Use of language</td>
<td>imprecise</td>
<td>careless</td>
</tr>
<tr>
<td>Medium of expression</td>
<td>spoken</td>
<td>spoken</td>
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</tbody>
</table>

Table 4.1 A summary of the content of Melani's pretraining knowledge about language

Knowledge about language learning

Melani's conceptualization of language learning was highly developed. I have described it using the following categories: a view of the learning process, factors which influence it (e.g. the learner's personal contribution, interaction, the learner's role) and learning outcomes.
Her knowledge about the language learning process included some features which are shared by different ways of learning a language (in formal and informal contexts) but also some dimensions which vary in the different learning contexts. The shared features are the actual learning process, the learner factors and the personal interaction. According to her, language learning is basically a process of "bringing out" what is "stored",

\[ \text{after a while it [learning] becomes quite unconscious. You look at the thing and the right word in the other language just comes. I don't know how it comes but it just does, I suppose your... experience [...] of the language is all stored somewhere and it comes out.} \] (Appendix 2: 339)

For Melani, the learner contribution includes the following: age, attitude (motivation, interest, emotions, learning satisfaction, a need to communicate things and a desire to learn), cognitive (concentration, attention and memory) and metacognitive factors (awareness of aims, purpose and awareness of the reasons for learning a language). Aptitude (facility in learning a language or linguistic sensibility) and individual learning styles complete the scope of personal factors which Melani sees as powerful mediators in language learning. The next two quotations are examples of some of these learners' characteristics, age, aptitude and attitude.

\[ \text{Well, as far as I can remember having lessons which was, I suppose, at 7 or 8, I always found it quite fascinating and I loved it, anything to do with languages, and found it very easy and got on ahead.} \] (Appendix 2: 334)

\[ \text{Quite often I'd find that I'd say things and wouldn't know how to say them in English, because I thought in French entirely and all in all, I was just as happy in French as in my own language ... And I suppose there is a lot of pleasure in that, in being able to take on a new personality [...].} \] (Appendix 2: 335)

Another factor which Melani sees as common to the process of learning a language in different contexts and to which she attaches a great importance is personal interaction. Both in the classroom where "in order to learn it does help me a lot if there is empathy with the person who is teaching. This, whatever it is, this spark or interest or whatever, if that isn't there, or if you are actually antagonistic toward the person, it's much harder" (Appendix 2: 339) and outside the classroom where some kind of empathy or 'spark' is needed with the people they meet in informal situations:

\[ \text{In France, after a while I met people that interested me a lot and wanted to talk to them on different levels. So I had an incentive to learn French as well as} \]
Language learning processes in general seem to be enhanced by an interplay between learners' factors and dispositions and their establishing positive relationships with other speakers of the language. Yet the nature of the process may be different, depending on the context. Learning a language outside classrooms makes it into an intuitive and instinctive process of picking things up with friends, while "learning a language and using it and translating it is an intellectual process". But in general she values the power of affective factors over intellectual ones in learning a language:

"yes, that’s what I’ve said about wanting to learn, and OK you can do something intellectual and get a certain mental satisfaction from doing it, but emotional satisfaction is quite different and much more powerful when it comes to learning."

(Appendix 2: 336)

It seems that for Melani contexts are powerful determinants in language learning. They determine the language used, the role of the learner, the activities and subsequently the learning outcomes. For example, learning French in France endowed Melani with a role as a person where she could use and think in French all the time. Consequently, this experience leads to very different outcomes (fluency in the language and a new personality) from the ones achieved in the classroom as a pupil (fluency in the written forms).

In the out of the classroom context it was a complete involvement, I had to function in the language as a complete human being in all different ways, so it is the whole personality that is involved, in the classroom you are given tasks to do. It is an intellectual exercise, and OK you are meant to express your thoughts, opinions or whatever in the language, but you thought "what's the point? my language isn't French. If I really wanted to say it, I'd say it in English", but when you are in the country and you want to say how you feel about something you have to use the language [...] the whole person as opposed to just the pupil. (Appendix 2: 336)

Table 4.2 summarizes the categories which form Melani's understanding of language learning.
### Natural learning and classroom learning: shared features

<table>
<thead>
<tr>
<th>Learner factors</th>
<th>personal interaction</th>
<th>content</th>
<th>activities</th>
<th>L’s role</th>
<th>materials</th>
<th>outcomes</th>
<th>language learning: an Intellectual activity</th>
</tr>
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<tbody>
<tr>
<td>innate factors</td>
<td>bring it out</td>
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<td></td>
<td>Language learning: an instinctive process of picking up the language</td>
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<td>attitude</td>
<td>empathy</td>
<td>writing</td>
<td>manipulation of words</td>
<td>pupil</td>
<td>old textbooks</td>
<td>fluency in the written forms</td>
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<td>spark</td>
<td>grammar</td>
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<td>purpose</td>
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### Natural learning and classroom learning: differentiating features

<table>
<thead>
<tr>
<th>classroom</th>
<th>natural context</th>
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<tbody>
<tr>
<td>content</td>
<td>content</td>
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<tr>
<td>activities</td>
<td>activities</td>
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<tr>
<td>L’s role</td>
<td>L’s role</td>
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<td>materials</td>
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<td>outcomes</td>
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<th>classroom</th>
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<table>
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<tr>
<th>innate factors</th>
<th>bringing it out</th>
<th>attitude</th>
<th>interest</th>
<th>aptitude</th>
<th>purpose</th>
<th>willingness</th>
<th>incentive</th>
<th>wanting to learn</th>
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<tr>
<td>bring it out</td>
<td>attitude</td>
<td>empathy</td>
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**Table 4.2 Summary of Melani’s pretraining knowledge about language learning**

**Knowledge about language teaching**

Melani’s pre-training understanding of language teaching included the following categories: a concept of teaching, the human components of the teaching/learning process, (e.g. the teachers’ personal characteristics, the learners, teacher-pupil relationships, pupil relationships), and teaching activities, content and materials.
For Melani teaching has to bring out the knowledge learners already possess. In that way she seemed to view language learning from a cognitive perspective (See Ellis, 1990). The most important factor in this process, according to Melani, is the learners and the positive interrelationships among the different participants in this process. This can be achieved when the teacher establishes group relationships in the classroom in a way that keeps a balance between teacher's control and learners' independence. Yet she observed that the most decisive influence for successful language learning is the relationships teachers establish with pupils at an individual level which may have influence both on the cognitive and the affective components of learning. Referring to one of her teachers she says,

this lady is also a born linguist and has a great love and fascination for language and manages to convey it [...] she sparked off my own interest in language, we kept sparking each other [...]. (Appendix 2: 338)

The teacher's characteristics (e.g. linguistic and professional competence, personal characteristics, attitude to teaching and subject) also are seen to play an important mediating role in the learning processes in both negative and positive ways:

[when teaching] you have to be very much in control and confident. So not only do you know what you are doing and you want to do it, but you know how to do it because that can be felt instantly. (Appendix 2: 343)

the one who taught me for language was competent in the language but made mistakes nevertheless, and because I had been doing it at home with my mother I noticed all the mistakes she made and it annoyed me. (Appendix 2: 337)

The social context, in this case the other pupils, is also seen as a powerful influence on the way individual pupils learn:

also the classes were very, very slow, because the general standard of the pupils was low and I was bored out of my mind all the time, and then, I'd do it in two seconds, everyone else would be asking questions and I'd be sitting there thinking come on, trying to whisper the answers to every one. (Appendix 2: 337)

The references she made to the teaching content (language) are linked to her knowledge of language fulfilling a pedagogical function in the classroom as discussed in 4.1.2.

Table 4.3. offers a summary of Melani's pretraining knowledge about teaching languages.
Research Findings

<table>
<thead>
<tr>
<th>What is FL teaching</th>
<th>bring language out learner independence planned and spontaneous activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers' personal characteristics</td>
<td>linguistically and professionally competent personal characteristics: warm and cool, confident, caring, motivating, relaxed attitude to subject and teaching</td>
</tr>
<tr>
<td>T-P Relationships</td>
<td>keep a balance between teacher's control and learners' independence personal relationship: empathy current motivating influence for learning future career influence</td>
</tr>
<tr>
<td>P-P Relationship</td>
<td>different cognitive level</td>
</tr>
<tr>
<td>Learners</td>
<td>response to activities understanding activities response to teacher (personally and cognitively) differences</td>
</tr>
<tr>
<td>Teaching Content</td>
<td>written language literature</td>
</tr>
<tr>
<td>Materials</td>
<td>old textbooks versus authentic materials</td>
</tr>
<tr>
<td>Learning Activities</td>
<td>doing exercises versus having a purpose</td>
</tr>
</tbody>
</table>

Table 4.3 Summary of Melani's pretraining knowledge about language teaching.

4.2.2 Summary of Melani's pretraining knowledge

As we saw in 2.4, Feiman-Nemser and Buchmann (1986b, and 1989), among others, observe that student teachers bring with them a wealth of knowledge when they arrive at the training institution. The knowledge Melani had at the beginning of the course was based on her reflections on her own foreign language learning experiences and memories of her teachers. She had a rich understanding of language, language learning and teaching. She saw language learning processes (natural and formal) as both different (contextual differences lead to different roles for the language learner, different kinds of language, etc) and similar (mainly regarding the influence of the learner's contribution and the fact that the experience of language is "stored" and somebody has "to bring it out", so she conceded interrelationships a leading role in promoting learning).

Language was seen as having different functions and different substance in the two contexts (classroom and natural). The pedagogical function of language as a
subject in the school curriculum was seen as a formal system and as mainly written language; in a natural context, language was understood as a way of exploring personal experience and interpersonal communication involving meaning, paralinguistic features, and spoken language.

Melani saw language teaching as establishing successful relationships with the students (mainly at an individual level), organizing activities (learning and managerial) and selecting materials and content.

4.2.3 Melani's TE knowledge before TP

The primary material that I have used to document Melani's newly acquired knowledge during the TE course is the journal she kept before and during TP since it represents a more faithful record of the on-going TP process. I have also used the second interview, (appendix 2: 346-353) conducted before she went to TP, as a complementary source.

Knowledge about language

Although Melani's discussion of language was not as extensive in the second interview and the journal as it was in the first interview the themes are recurrent. Among the functions of language she referred to language are as communication, as a way of clarifying personal experience and as having a pedagogical function in the classroom. I will report in detail about this last one, as from now on this function comes to the forefront of Melani's discussion of the subject matter.

The pedagogical function of language

One of the characteristics of language in its pedagogical function for Melani is the fact that the differences between means of expression (written or spoken) cease to be clear cut:

Pupils have to understand exactly what you mean and if you go on too long they are not going to learn from it. So it is necessary saying exactly what you want them to learn in the clearest possible way, which means that it comes very close to written communication, except that it has to be very brief, and direct like spoken communication. (Appendix 2: 352)

Nevertheless when she reverts to talking about language fulfilling a more real communicative function the differences are well defined:
I do write in a very condensed, concentrated style and it has to be absolutely perfect, not a word out of place and keep going back over it, trying to make it as good as it can be. So there is a lot of difference between the written and speaking styles. (Appendix 2: 352)

Another defining characteristic of classroom language is its formal or structural substance, as can be seen when she says, "after having done that [teaching] for a year or so, I would get to know in what order to present grammatical structures [...]" (Melani's journal 1: 7).

She also talks about the double aspect of language as teaching content and medium of instruction. When it is the medium she emphasizes the need to use it appropriately but in a simple way:

I've just realized that language is the means of teaching, the vehicle, and also what you are teaching as opposed to something like history or whatever. So it is all language and that means that you have to be alert to how you are using the language [...]. (Appendix 2: 348)

So there is no way I'd talk like this, it has to be just simple instructions, explanations, encouraging someone. (Appendix 2: 353)

Knowledge about language learning

The main features of Melani's understanding of language learning now are pupils' attitude and the importance of a good model. On the one hand she considers pupils' attitudes towards the language as one important contribution to success in language learning. This, she feels, is due, largely, to how they have been taught. She explains the fact that some of her classes are difficult because of "years of bad teaching and the resulting antipathy of pupils towards French" (Melani's journal 1: 58). On the other hand, she seems to adhere to the notion of language learning as a process where mistakes should be avoided. Ensuring that students do not hear a faulty model will prevent them from producing incorrect language, for example, "with this method they never hear an incorrect version - so, of course, they don't make mistakes" (Melani's journal 1: 16).

Melani started to question whether she could usefully draw on her experience because she may be in fact an atypical learner. For example the fact that she has been a successful language learner and the conceptualization she has made of language learning drawing on this successful experience may, in fact, not help her
It's hard to judge from my own progress at that age as I have never found anyone else who reached similar stages at the time and always tend to overestimate what other people - especially children - can do or understand. (Melani's journal 1: 5-6)

Calderhead and Miller (1985) make reference to the difficulty student teachers find when they try to draw on their subject matter knowledge when they are teaching.

**Knowledge about language Teaching**

It is this strand of knowledge which seems to take a much rounded shape during TE. It developed more than the others and it did so in the following categories: *a concept of teaching, a question of method, the teacher, the teaching materials, the teaching content, and the teacher-pupil relationship*. This is summarized in table 4.4.

**A concept of FL teaching**

Melani's pretraining ideas about teaching as mainly being able to establish a rapport with students at an individual and at a group level seem to have been tempered by her experience during the first block of TP. Emphasis now shifts to the importance of control and of an appropriate methodology. The classroom is seen as a complex web of interaction which the teacher must take charge of:

> If I can try to convey what I mean in an image. It's like standing in front of - or rather in- a complex, highly unstable, living structure (or organism) in which you have to constantly adjust the level of energy flowing from different parts or make adjustments to the structure itself so as to maintain the equilibrium of the whole. (Melani's journal 1: 68)

So discipline is vital:

> Control of the lesson would often come down to an outright battle of will (between myself and an individual or with the class as a whole) and because I knew I had to win, this absolute determination meant that I did. (Melani's journal 1: 75-76)

A key element for maintaining control is the use of an appropriate method "the first essentials for successful classroom control is a definite methodology and one that works" (Melani's journal 1: 60-61).
A question of method

For Melani, having a definite, clear method becomes the most important aspect of her knowledge about teaching. In different entries (e.g. 11.11.1990 and 2.2.1991) to her journal she comments that having a method means having clear and unambiguous materials, well defined lesson plans and being able to handle equipment successfully. It is when carrying out the sequence of activities dictated by the method that she measures both her pupils' progress and her own success as a student teacher:

Now having applied it [the method] with [...] both classes and private students, I can see why it's been called the 'miracle' method! Even my least confident students have been speaking the language with good pronunciation and without making mistakes and I know they'll never forget what they've learned... With this method they never hear an incorrect version - so, of course, they don't make mistakes. (Melani's journal 1: 15-16)

The method was without question the decisive factor in my carrying out TP successfully. It gave me absolute confidence and it had a positive attitude on the pupils towards French or Spanish and towards me, as it allowed me, for the first time, to really achieve something in the language and feel that they had achieved something. (Melani's journal 1: 57-58)

The confidence she experiences from having this well defined method, which she can apply in different contexts, also affects the relationships she maintains with the rest of the teachers in the school department and her attitude towards coursebooks:

They [the teachers] didn't try to interfere in what I did - partly because they simply didn't realize that different methods of language teaching existed! Recent developments in ML teaching have simply not reached them and their lessons are clear examples of language teaching without method. (Melani's journal 1: 51-52)

Having had the experience of looking critically at coursebooks I can just see how defective all the coursebooks currently available are, the [...] methodology enabled me to do this for myself [...] Now I feel confident that I won't need a coursebook to give me the progression of structures to follow but will be able to build up a course myself, selecting the structures to be taught and deciding in which order to present them. (Melani's journal 1: 16-17)

Finally, using and remaining faithful to the method turned out to have a dimension of loyalty to the training institution in which she had learned it. She found that her tutor "shared my enthusiasm for and belief in the [...] Method and I wanted him to know without doubt that I had understood it and put it into practice" (Melani's journal 1: 47).
The teacher

The personal and professional characteristics of the teacher (basically being tactful, confident and competent) also form part of her knowledge about FL teaching. For example she writes in her diary that "tact or human sensibility and confidence" are essential to teaching and adds, "the first consists of knowing exactly what to say, to whom [...]. It comes with practice, although a certain innate aptitude is necessary" (Melani's journal 1: 69).

The teaching materials

She views textbooks only as a source of teaching materials (e.g. pictures), since the selection and progression of language to present is decided and organized by the teaching method she has learned, and feels that she could devise her own coursebook, "which would be clear and effective, based on the methodology taught at [...]" (Melani's journal 1: 18).

The teaching content: Language

The selection of language Melani makes during TP, as described in her journal and then seen in her planning protocol and teaching, is based on structural criteria:

[...] the imperfect tense, for example, could be presented by means of a text, in which students have to recognize all the other elements which they already know: while working with these other elements, they are exposed to the imperfect verb forms. (Melani's journal 1: 31)

She adds a cultural component to structure which provides some kind of context:

finding, for example, pictures that are clear and also beautiful [...] or which give the impression of Spain that I want to convey. In the case of Spain in particular, I feel very strongly about not only teaching the language but giving an idea of the 'real' Spain. Perhaps this is because I have been so hurt and offended by distorted news of the country. (Melani's journal 1: 18-19)

Teacher-pupils relationship

As in her pretraining knowledge, one of Melani's concerns when teaching was the relationships between the teacher and students both individually and in groups. In her second interview she comments,
Well, it [teaching a class] is not all the same, obviously, because there is only one of you and 20 or 30 pupils. And also there is not something that you can really plan in advance, this is the kind of thing that either happens or doesn’t. So I just have to try and make it, and that it does happen for as many pupils as possible in the class. In a sense trying to make myself someone that they trust and open up to and want to do something for. It may not work for all of them but I hope it works for 99% of them. And it won’t ever be the same as one to one learning relationship but I hope that I manage to give enough time to each pupil, there is a sort of echo of that relationship. At the same time there has to be a rapport with the whole class, which is difficult again. (Appendix 2: 347-348)

It is the necessity of interacting with a whole class which Melani seemed to face more problems with and it became a question of control. She writes in her journal that “apprehension before giving a class is not, however, irrational, as it is difficult to control, and impose your will upon up to 35 individuals who are all part of the class and yet independent” (Melani’s journal 1: 67). Table 4.4 gathers the main categories which form Melani’s knowledge about language teaching during college TE.

<table>
<thead>
<tr>
<th>A concept of teaching</th>
<th>having a definite methodology</th>
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<td></td>
<td>classroom control</td>
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<td></td>
<td>relationship with pupils</td>
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<tr>
<td>Method</td>
<td>clear and unambiguous materials</td>
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<td>well defined lesson plan</td>
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<td>successful handling of equipment</td>
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<td>provides learning activities</td>
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<td>provides sequence of structures</td>
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<td>affects learning language learning process</td>
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<td>affect student teacher professional learning</td>
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<td>affects relationships with other teachers</td>
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<td></td>
<td>loyalty</td>
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<tr>
<td>Teacher</td>
<td>tactful</td>
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<tr>
<td></td>
<td>confident</td>
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<td></td>
<td>competent</td>
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<tr>
<td>Textbooks</td>
<td>use as material (photographs)</td>
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<td></td>
<td>she can create them</td>
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<tr>
<td>Teaching content</td>
<td>structures</td>
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<td></td>
<td>cultural context</td>
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<tr>
<td>T-P relationship</td>
<td>with individual pupils and with the group</td>
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</tbody>
</table>

Table 4.4 Summary of Melani’s TE knowledge about language teaching
4.2.4 Summary of Melani's TE knowledge before TP

A series of transformations seem to have taken place in Melani's pretraining knowledge during TE. I will summarize them as follows:

Melani's knowledge about language is now limited to a view of language as a curricular subject. The specific transformations involved include a reduction of the number of language functions to the pedagogical. This involves an absence of a real difference between the spoken and the written modes of discourse and the substance of the language being seen mainly as forms and structures, she also adds the dimension of the cultural component of language.

Language learning is viewed as mainly based on the teacher's mediation in the language process by the implementation of an appropriate method which does not allow pupils to make errors, and pupil attitude.

What seems particularly relevant about the new knowledge Melani acquired both at the training institution and during first TP is the development of two aspects of her knowledge about teaching, the idea of successful teaching (instructional aspect) based on a method and the idea of teaching as classroom control (interactional aspect).

4.2.5 Teaching. Relationship between knowledge and practice

From a theoretical point of view, it was assumed that teaching is more than the observable behaviour displayed while teaching (1.2.2. and 2.2.2) and from a methodological perspective (3.7.4) it was assumed that an external observer may not be aware of the personal dimensions of the classroom activity. Consequently, the analysis of teaching and its relationship to knowledge is based not only on classroom observations but also on interviews and stimulated recall techniques. In 4.2.5.1 I will analyse the teaching activity, while in 4.2.5.2 I will try to establish the relationships between knowledge and teaching. The observation (appendix 2: 361-367) provides data about the actual teaching activity and the pre observation interview (appendix 2: 355), post observation interview (appendix 2: 368-374) and SR (appendix 2: 375-397) about the way Melani thinks of her activity in different ways and at different times: a description of the teaching activity, a report of her ongoing thoughts and a reflective exploration of what she was doing during her
teaching activity in relation to her knowledge. The categories used to analyse teaching are the ones generated from the first interview and journal. The purpose is to look at Melani's teaching in relation to her own knowledge, to see how she realizes knowledge in practice rather than to analyse her teaching according to a set of externally defined criteria. Maintaining the same broad categories used to analyse Melani's knowledge, I will now be able to see on which knowledge she draws when she teaches.

4.2.5.1 Melani's teaching

Knowledge about language

Language function: It is the pedagogical function which mainly characterizes the way Melani views and deals with language in the classroom. This implies an emphasis on form at the expense of meaning (although some degree of meaning is taken into consideration) and a loss of the intrinsic differences between spoken and written language, regardless of the practice of oral and written activities. This function is realized during form manipulation and pattern practice as can be seen, for example, when she talks in the preobservation interview about what pupils do with the language, "I'll introduce the tú and yo forms. They can talk from the first person and so on. They can do the same interview with each other but using tú instead of usted" (appendix 2: 355).

Nevertheless, it is interesting to notice that it is Melani who uses language in a broader range of functions. While pupils' production of the FL is reduced to the pedagogical function, she uses it for social interaction (e.g. greetings), as the following exchange in her class shows:


She also uses it for explanations, directions, monitoring pace, giving praise, and explanations about the content.

M: ¿Vale? ¿Lo habeis leído? Have you read it?, leerlo, por favor... las palabras que no conocéis están ahi... estas son las palabras que quizás no conocíais. (Appendix 2: 361)
She observes that she would "only pass into English for the most essential words and those they [pupils] are not likely to be able to understand or guess" (appendix 2: 381). Moreover, she has developed her own rules about when to use English and Spanish in the course of the lesson:

if the message and the medium are both important, use Spanish, but if the message is absolutely vital then you've just got to use English. That doesn't devalue Spanish because if you keep English for explanations, well if you said everything important in English, then they soon realize that anything important is said in English and Spanish doesn't matter, but if you say a lot of things that do matter in Spanish, for example instructions and then just a few things in English, then that doesn't devalue Spanish for them. (Appendix 2: 388-389)

Nevertheless she views language as communication and as a way of exploring personal experience as an investment only realizable in the future. Classroom work is only rehearsal. This is an idea which appears repeatedly when she records her ongoing thoughts. Here is just an example:

there isn't yet anything that they want to find out about through the language or communicate to other people through the language, what all this is is a preparation for sometime in the future when they may well want to find out about something through the medium of Spanish and communicate it through Spanish, so it's like a role-play or rehearsal for the actual event, but just like in the theatre there has to be a certain suspension of disbelief, they have to imagine that this is something they actually want to find about, so that they'll be able to do it when the time comes. (Appendix 2: 385)

The substance of the language she selects and teaches is basically structural. This is clearly seen in the way she talks about her activity and in the way she teaches, as the following quotation shows,

it's simply an exercise but it'll still be interesting and fun for them to do and although they aren't actually communicating in the language, they are speaking the language and pronouncing it correctly and getting the feel of speaking it which will be of value to them when they communicate and also I think it can be an enjoyable way of using the language because they don't have to think about what meaning they want to communicate, that's all done for them, all they have to do is speak the language and understand it and it's much easier for them to do so, once they are freed of all concern about content, message, they seem to enjoy the Q/A, because, I think, it gives them a sense of achievement, they are actually being given the chance to speak the language without having to think of what to say in it. (Appendix 2: 387-388)

But she also conceives of language as underlying rules or patterns, because that way students "take the whole thing as a whole" (appendix 2: 387). Or "[...] after
the presentation [I was] asking them about the pattern, it's a way of focusing attention on the form: getting them to put circles around them makes it even clearer" (appendix 2: 368). Materials are chosen to illustrate patterns, for example, when Melani met her pupils for the first time, she gave them a text "in which they had to distinguish between the two verbs and [I] found that it was hopelessly beyond them, they hadn't the faintest idea, so I thought 'right, we're going to sort out first the preterite then the imperfect" (appendix 2: 372), or when she selects material, she says she was looking "for texts which had the language I wanted: 3rd person, then 2nd person, then first person" (appendix 2: 373). The following is an example of the way she conducts pattern practice in class:

M: Now can you try and work out which of the verbs in the circles are in the future? They all follow a certain pattern, they all end in the same way. Just look at them [...] Bueno, ahora mirar, look, ahora mirad, por favor mirar, S? Can you see a pattern in all these verbs? S -rá, M: -rá. So they all end in á. What's before the á. C: -r. M: and as well as that?.. what have you got when you take the -á off? S: ganar, M: ganar, vivir, ser... C: the stem, the infinitive...
(Appendix 2: 363-364)

Finally, she also plans activities which allow for some degree of meaning:

I wanted them to use this language actively and my way of doing that was to give them things they had to find out and make sure that each person had just one or two pieces of information [...]. (Appendix 2: 369)

Structures and patterns are presented in a certain cultural context whose main role is to clarify the grammatical meaning of the language introduced, for example, fortune telling provides an appropriate and clear context to introduce the future, since "at a fortune teller's they will say, you will this, you will do that, there is no confusion about what the language means" (appendix 2: 369). The following quotation shows the way she presents it to the students:

That was what his life turned out to be. This is the prediction that a gipsy made to him at the beginning of his life. It's exactly the same but all the verbs are in the future. (Appendix 2: 363)

Medium of expression: Although she plans and carries out oral and written activities, she doesn't use different texts to illustrate different specific characteristics of both means of expression but in fact she uses written activities to consolidate oral work, "this class is used to consolidating in writing before they speak" (appendix 2: 369) and she uses a written worksheet with the same questions they had practiced orally first.
Knowledge about language learning

Melani discusses FL language learning process in relation to natural language learning. For example, she grades and chooses language to follow a certain developmental path on the grounds that FL learning should resemble the acquisition of the mother tongue. She assumes a similarity between the order of acquisition of certain morphemes in the MT and the FL so she introduces the third person first because as she says that is,

the way we always start teaching a structure and next time it will be the yo and tú [...] First of all because that's the way a child first learns a language, if you've noticed, they talk about he, they can't make the link between I and you, they talk about he wants this, Paul wants this and so on and then it's easier to talk about. If the text is all about I, you can't ask about I and get the answer I, you need the I and you, whereas if it is he or she there is a point of reference and we can both talk about the same thing: viviré, sí viviré and so on. Later on there are different ways of introducing viviré, vivirás and so on... (Appendix 2: 368-369)

Repeated listening to a text will help make up for the lack of the constant exposure to the language characteristic of natural learning:

the point of playing the recording twice or even three times is to try in some way to compensate for what they are not getting, which is constant exposure, which they'd get if they went to the country. (Appendix 2: 389)

and a teacher-led Q/A activity will reproduce in the classroom the immersion process which characterizes natural learning:

Q/A activity does the same thing [as when you are in the foreign country] but because you haven't got a year or a long time it's doing it in a short length of time by selecting the language and so on, it's like a very intensive immersion session in the sense that the pupils are doing what I did when I was learning, which is proceed by trial and error, but they haven't got the [time] that I had, so it doesn't take the same length of time, they are supported in the way that I wasn't and at the same time it's immersion in Spanish, the whole thing is in Spanish. (Appendix 2: 387)

More specifically, Melani's understanding of language learning processes makes reference to the following four factors a) a deductive process of learning the grammatical system, competence, (e.g. pattern practice), as described by Melani herself:

M asks class about patterns, getting the explanations to come from them. She has written up four columns while class have been circling verbs, now asks
students to tell her which column each verb should go into. (Appendix 2: 375)

b) A focus on explicit linguistic behaviour, performance, (e.g. controlled presentation of the new language and practice of surface structures by a series of questions and answers where students do not make mistakes), c) a need for consolidating and reinforcing the newly learned language by writing and d) some opportunity for students to use the language in a more meaningful way. This seems to indicate an emphasis on influencing the learning process by external intervention rather than on paying attention to the learners' personal learning processes and strategies. Nevertheless, she also shows some concern about the learner's individual factors which contribute to language learning (interest, motivation and the need to speak). The interest that pupils may have in learning the language can be of two different kinds. Either an interest in the content, in completing an activity which would enable them to carry out the following one, or an intrinsic interest in the language itself rather than other more instrumental motivations like being able to find a job in Europe, as contrasted in the next two quotations:

so they had two purposes, one was the inherent interest in the text which may not have been very great for them, the other was because they knew that they needed to understand the text in order to do the next thing, so there was quite a lot of motivation, [...]. (Appendix 2: 385)

we weren't pretending any more that the point of learning Spanish is to get a job in the EC or anything, because that's not going to happen for any of them and [...] I think this is simply the wrong reasons, one of the main reasons for English children is just the inherent interest in language itself, so there they were, looking at Spanish, seeing how it worked and that was the point, I think, for them to understand that different languages work in different ways and to see exactly how it worked was itself the point of the activity. (Appendix 2: 391)

She complements her view of language learning with the idea that in order to be able to communicate something in the language one has to have mastered the forms first, so her lesson is organized in the traditional way of presentation, controlled practice and free practice. The controlled activities help students understand inductively the language system:

I think it's in a sense one of the most important parts because this is when they are looking at the language, at Spanish, and they're really going to master it because when you understand something you master it, you've got it, and this is what will enable them to use Spanish in the future. (Appendix 2: 390)

By a process of "suspension of disbelief" pupils will be able to use the language in the future in a more meaningful way.
Focus on the form during Q/A frees pupils' concern about meaning and "gives them a sense of achievement, they are actually being given the chance to speak the language without having to think of what to say in it" (appendix 2: 388). But, at other stages, focus on communication is relaxing because "they weren't thinking about the language and worried about getting it wrong, they were trying to do something with the language and that meant that they were less likely to injure themselves by making mistakes" (appendix 2: 394).

A further consideration about language learning is Melani's approach towards mistakes:

If a student makes a mistake get him or her to repeat the correct version but immediately turn attention away from him and get whole class to repeat. Make it clear by intonation, rapidity of turning away from him that I'm making as little of his mistake as possible so that he doesn't feel bad about it. (Appendix 2: 380)

In consonance with her view of language learning processes, the outcomes are mainly about form, although she also hopes to get some sort of meaning across:

I mean they were manipulating the future tense very very well, but I am just wondering exactly how much they really understood. they may have understood that the verb means viajaré, viviré or something, but they may be not quite clear about the rest of the sentence. It doesn't matter. They were manipulating the form correctly and they were getting the gist, but I think I'd better check on understanding in future. (Appendix 2: 371)

Knowledge about language teaching

Melani's knowledge about language teaching, as she realizes it in practice, includes, on the one hand, subject matter specific or instructional aspects, and on the other managerial or interactional. The former have to do with selection of content, selection of materials, "once I've decided the language I want to teach in the lesson before doing anything else I have to find some materials that I can use" (appendix 2: 374), choice and sequence of learning activities provided by the teaching method. These are things which the teacher generally prepares beforehand and which particularly the last ones, tend to be prescriptive (method). The following quotation illustrates the way Melani reflects on the teaching method,

This next activity is [...] still part of the preparation, but it's further work on the language in the text, we are still not using the verbs in the future but they are using the verbs and they are using all the other words in the text and in the Q/A
sequence you're taking them step by step as if were, first of all they just recognize the language, then they start using it with less and less support, and finally you ask them a question and they answer using language from the text. [...] it really is the essence of the I. method, this Q/A sequence, because it's the activity that links the language to their thought processes, that's why it's the most important part of the lesson. (Appendix 2: 387)

Her choice of learning activities is based on the knowledge she has acquired during TE, a method based on a sequence of Q/A. The next three quotations show a sequence of pre-teaching, teaching and reflections on teaching about the way Melani understands this method and the way she implements it. Melani explains the method and its application to the preterite thus:

That was very easy, all they had to do was to put it in order but they were seeing (?) the preterite, then the oral part of the presentation was I simply asked them questions, first the yes or no, then the alternatives, then was it this? No it was that, and then qué hizo en whatever año it was... (Appendix 2: 372)

In the lesson it takes this form:


Afterwards she remarks,

it [the lesson] simply went very smoothly, according to plan. I mean that's the beauty of having a method, that whatever you have to do, whatever you have to teach you know how to do it, it's just a question of finding materials and finding exactly what way to do it. (Appendix 2: 370)

Her knowledge of pupils during her period of TP helps her to decide to do certain activities rather than others or to alter the sequence of activities dictated by the method:

I don't know whether to do pairwork or the worksheet first. This class is more used to writing first, before speaking, so I might give them the worksheet first and then let them do the pairwork (Appendix 2: 355)

The managerial or interactional aspects (e.g. variety in activities, informing pupils of objectives, pacing and helping individual pupils, time management) are not much affected by previous planning and have to do with the interactional aspects of teaching. In general, it can be said that while she plans the instructional aspects before the lesson, the interactional aspects of teaching are more spontaneous and are less subject to pre planning, as she says "I think there is something that you just
have to do during the lesson: the timing and the progression of the materials and activities" (appendix 2: 374).

One of the interactional issues which she is very concerned about is time management, "how long will each thing take and how can you best fill the lesson so that you've actually reached the end of the progression by the end of the lesson [...]" (appendix 2: 373). Providing variety and leading pupils through at a swift pace becomes of primary importance when she teaches, as the following quotation shows,

have quite a lot of changes, so once they were settled down doing something, I didn't want to just let them go on until they started getting restless, but let them work for a while and then quickly stop and go on to something else. So that they were constantly changing and didn't have time to get bored, [...]. (Appendix 2: 373)

She is also concerned about monitoring learning pace and whether pupils understand. When she reports on her interactive thinking, she asks herself all the time, for example, "are they understanding? [...] Repeat words if necessary so that students understand the question" (appendix 2: 380) or "will they be able to do it? They should" (appendix 2: 382).

A further dimension is the teacher's characteristics and her relationship with pupils. She maintains an "encouraging" attitude, for example, "when a student hesitates she waits for a moment to see if the student will get the answer on his/her own" (appendix 2: 375), while at the same time remaining "cool and business like", which leaves her in a position of control over the pupils, for example, about when to pack up, "don't let them pack up when a few ask if they can as I want it to be my decision" (appendix 2: 383) or about maintaining attention, "make sure they're all working, notice anyone who's become distracted and call him or her back to attention" (appendix 2: 379), while at the same time,

you also have to know how to let people go and do things on their own, because they are not always going to have you or even have any one, and it does take the strain off you as well and also I think they enjoy it, actually doing something independently with the language. (Appendix 2: 395)

The classroom atmosphere or the pupils reactions and pupils' previous knowledge also form part of her reflections about teaching, for example she says "class becomes more alive and venture suggestions more confidently and spontaneously"
In her postobservation interview she observed that, when I arrived I was told very confidently that 'yes, they know the pretérito and the imperfecto and they can distinguish between the two'. Of course they haven't the faintest idea. So I had to spend 4 weeks simply sorting out the preterite, person by person, third person, first person, second person and distinguishing it from the imperfect. (Appendix 2: 371)

4.2.5.2 Summary of Melani's teaching

While teaching, Melani incorporates aspects of meaning and communication in the way she deals with language, but in a dramatically 'reduced version'. In a way she seems to reformulate her notion of classroom language during TP to add a limited notion of meaning to the structures and system of the language, which continues to be her main concern. She implements and thinks about language in terms of structures and grammatical forms, grammatical meaning and a certain cultural context which provides the support to clarify the grammatical meaning. Although she plans writing and oral activities, the difference between both media of expression becomes blurred. The use of different skills is not a natural use, since although different skills are practiced, the language used for the different skills is the same and the differences between spoken and written discourse are not taken into consideration. The pretraining ideas Melani has about language, more than any others, are the ones she has more difficulties actually implementing while she teaches. So she has to keep the real world and the classroom separate. For example when language is also seen as communication and as a means of expression it only applies to the classroom as long term aims.

Melani expresses a desire to model FL on natural language acquisition. A certain knowledge about the developmental path followed during mother tongue acquisition (children use the third and the second person before they use the first) forms the bases of Melani's criteria to select which grammatical forms to introduce. Repetitive listenings to the same text and the implementation of the method make up for the lack of natural characteristics in the classroom context. Further, Melani understands language learning in terms of deductive and inductive processes (fostered by the mediation of the teacher) and learners' personal factors (e.g. motivation, interest, personal differences).

Finally Melani's knowledge about how to teach language includes subject specific aspects (choice and selection of content and materials, language learning
activities provided by the method, sequencing of activities and managerial aspects: time management, pace and variety in the activities, student groupings and interaction modes between pupils and teacher and pupils and pupils). What is particularly relevant to point out here is that when teaching she mainly draws on what she has learned during TE, a teaching method. This specific method dictates most of the activities she implements. The scope of maneuver she has within this method is in the sequencing of the activities. Teaching is then discussed in terms of the implementation of a specific predetermined methodology which governs teaching materials, activities, ordering of skills, deciding which language to use and when, establishing the progression of activities, selecting and grading language.

4.2.5.3 Relationships between Melani's knowledge and Melani's teaching

The data analysed in 4.2.5.1 show that when Melani teaches,

1) Her understanding of subject matter knowledge takes her to decide that a fuller more communicative and meaningful development of language will take place in the future rather than in the classroom. Melani's way of dealing with language during teaching (structure, code and a certain degree of communication) draws on different sources of knowledge. The most influential is TE knowledge. Melani's transformations of subject matter knowledge for the purpose of teaching have their origins in her pretraining knowledge (she already saw different functions for classroom language). A further transformation is encouraged during TE. These two approximations to language are different. While her pretraining knowledge of the pedagogical function of language was a system of rules, the view of language she learns during TE is structural/phrasal. During TP she appreciates that her multifunctional and meaning based approach to language is only possible outside the classroom. So she follows a structural approximation to language with some systemic knowledge and a limited level of communication.

2) She sees the method as recreating the informal conditions of learning a language outside the classroom. Yet the description she makes of the learning processes in her classroom resembles what she had described before as 'an intellectual process', as different from a more intuitive, creative one. Learners' factors are still seen as playing an important role in the learning processes. Her understanding of language learning underlying her practice emphasizes the external intervention of the teacher (providing activities which focus on explicit linguistic behaviour and grammar
rules) rather than on the contribution of the learners' personal aspects. This shift from what seemed a cognitive view of learning in her pretraining knowledge to a more behaviourist oriented position can be traced to TE.

3) In terms of the relationships that can be established between her knowledge about teaching and the way she teaches, she mainly draws on the new knowledge acquired during TE: method, but part of her usual teaching activity, pattern practice, comes from her own pre-training knowledge. The newly acquired method during TE contributes to the learning activities and partly to the view of language, the knowledge of learners' routines gained during TP contributes to the sequencing of activities, and the knowledge about language, in its pedagogical function, partly to the selection of content.

As seen in 2.3.4 Shulman, Wilson and Wineburgh found that teachers engage pupils in a process which appears to reflect the subject matter orientations they subscribed to or that their teaching style is based, to a certain extent, on their subject matter backgrounds. Slightly different results were found by Calderhead and Miller (1985), as seen in 2.4.1. They argue that student teachers' accounts of their planning and teaching was based on their practical experience in the classroom and their observations of and discussion with teachers. Contrary to these two different sources of teachers' knowledge, Melani's planning and teaching, as made evident on interviews and classroom observation, seems to suggest that her teaching style is based on the knowledge acquired during formal training.

4.2.6 Melani's post Teaching Practice knowledge

Once Melani finishes TP, she seems to be back in a position in which she can continue to explore the ideas she had about language prior to the beginning of the course. More than ever, she now sees how difficult it would be to reconcile her ideas about language and the limited possibilities that a secondary class can offer.

Knowledge about the language

While she was teaching she could see and justify the language she was using and presenting to the pupils, in its pedagogical function, now she views this language in the classroom in a rather negative way. She thinks that teaching language in
secondary schools "is hardly concerned with language at all" (appendix 2: 399), or "you might as well forget that they will ever be fluent in more than one or two sentences" (appendix 2: 401). The most she can aim for when teaching a FL in this country is "to give your students a little bit of language awareness" (appendix 2: 401).

She contrasts the poetic with the pedagogical functions of language. She seems to have developed an awareness of what language is in the classroom and finds it impossible to reconcile it with her idea of language "as an art": "I've come to feel it more now as an art form than as a means of communication" (appendix 2: 398).

But you can't teach that to all of them because it's an impossible dream for the vast majority. You can perhaps prepare them for the possibility of visiting one of these countries and may be inspire them to want to go to one of these countries. That is really the most you can hope for. (Appendix 2: 401)

Together with these two already well known functions of language, she also refers again to the personal function of language to how one must "try to find words to name my experience" (appendix 2: 399).

Knowledge about language learning

Melani's pretraining knowledge about language learning, based on her own experience as a FL learner in schools and in foreign countries, was the basis for her conceptualization of these two experiences as different processes when learning different languages. Now her interpretation of FL language learning is more in relation to natural learning. She believes now that natural learning and FL are similar processes, "well, it's trying to do in a short space of time what they've done over the years in their mother tongue, which is link the words to concepts" (appendix 2: 402). What makes the two processes different are the circumstances in which the processes take place (e.g. learner factors, the amount of time available, the contextual constraints and the pupils' relationships with teachers and other pupils). Natural and L2 learning are now seen as a process of immersion by which people conceptualize the world around them. FL learning is a process in which pupils are taken through the different stages which resemble the natural learning process in a way that will make up for the limiting conditions imposed on classroom learning (particularly time and lack of language exposure). This is achieved by using a particular method. Following this method, pupils will assimilate the FL and reconceptualize the world by breaking the links with the MT
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(and cutting away the MT) as much as possible:

I think that all aspects of learning a language in a FL classroom are the same or similar to what would happen if you went to the country and learned by immersion, except that you haven't got those conditions. (Appendix 2: 403)

It's a question of recategorising the world and to do that you have to cut out their native language as much as possible and simply link the concepts or the objects to the FL and you do that through your presentation whether it's by video, tape or visual images or whatever and having made the connection between the concept or object and the language you then have to get them to assimilate that concept, so they can then take it out and use it and that's when the Q/A comes in which gradually leads them towards being able to use the language independently so that when that concept comes up instead of the language that comes into name it being English it would be the other language ideally, if they are in that situation, so when they see a picture of a street, la calle might come into their minds just as gradually as street would. [...] To get that to happen it's quite a complex process, it's ..., I think, the essence of it is assimilation through actually been making the connection but it has to be graded so that they can do it, so that they don't write [before they speak] but they are actually taken through all the stages. (Appendix 2: 402)

Learner factors include age, ability or aptitude, and motivation. "If the child is motivated they may be able to learn something with this method" (appendix 2: 400).

The relationships include those with the teacher and other pupils.

Context: Melani also relates the teaching and learning process to the wider official and political context:

really FL learning in this country is a desperate battle for the impossible. First of all, especially in the state schools, that everything, literally everything is against you, including the National Curriculum... Yes FL learning in this country is a hopeless task. (Appendix 2: 400)

Knowledge about language teaching

Some personal factors are seen as contributing to the learning process. Yet applying a particular method is seen as the single most important factor which can finally relate positively to learning success and make up for the limited conditions of language learning provided in the classroom.

It seems that learners' problems of lack of motivation, the negative attitude of a country to language learning, or the lack of available time, can be solved by
implementing the specific teaching method she learned during TE. She saw that "it was the only method that worked, that could possibly work [that would not] let me down, it simply worked, every time" (appendix 2: 403).

4.2.7 **Summary of Melani's post TP knowledge**

One of the most important characteristics of Melani's post teaching knowledge is that once Melani sees herself free from the constraints by the context of the classroom, she seems to go back to her pretraining ideas of language. At the same time that she emphasizes the poetic *function* of language, she underlies the limited possibilities that secondary classrooms allow for the teaching of languages. Classroom *language learning* is seen as similar to naturalistic learning. Yet, since contexts and circumstances vary, a way of bridging these differences and successfully reproducing a natural learning process in the classroom, *language teaching* is understood as following a specific teaching *method*.

4.2.8 **Melani's knowledge growth during an initial TE programme**

Melani began the TE programme with a very developed knowledge of some of the key issues in FL teaching. This knowledge was based on formal, academically and grammar oriented language education and on informal communication oriented language learning experiences. These two distinct experiences led her to think of language and language learning in two different ways. Nevertheless the learners' contribution to the learning process seemed to cut across these two contexts. Regarding teaching, she basically thought of the interactional role or the way of establishing positive relationships with the pupils. A third, very powerful influence on Melani's knowledge is the TE programme. During this programme she learned to teach using a specific method, based on the practice of highly contextualized phrases by a series of graded questions. During TP she has to make sense of this three piece puzzle: (a) knowledge based on formal language learning, b) knowledge based on informal language learning and c) knowledge learned during TE. The way she does this is by implementing the method she learned during TP very efficiently. She finds that it is the only answer to her planning and teaching decisions. At the same time, she dismisses her pretraining ideas about language as communication. Nevertheless, apart from practicing structures in the classroom, she also makes sure that pupils go away with some explicit knowledge of the grammar rules which govern the structures she teaches through Q/A. Her general
idea about teaching develops from stressing the interactional aspects to understanding teaching as highly instructional, based on an specific method. She also shifts from seeing language learning as mainly a learner-centred activity to seeing it as externally driven by a method in the hands of a teacher. When the programme finishes, away from the constraints of the classroom, Melani's pretraining ideas about language resurfaced with renewed intensity. Now, after her experience of classroom teaching, she thinks that it is almost impossible for her to implement her ideas about language and develops a very negative attitude towards teaching language in secondary schools.

4.3 Beth

4.3.1 Pretraining Knowledge. Origins and content

4.3.1.1 Origin

As in Melani's case, the evidence for the categories used to describe Beth's pretraining knowledge, summarized in table 4.5, is based on the initial interview I carried out at the beginning of the year (appendix 3: 408-415). Student teachers' pretraining knowledge, although based on their past school and college learning experiences, is actually the current conceptualization that students make at this particular time about their past experiences.

4.3.1.2 Content

Knowledge about Language

Although Beth's conceptualization of language is not as rich as Melani's, it is important to note that she also seems to see that language in the classroom and language in a natural context are not the same thing. These two contexts largely determine the functions of language, which I have been referring to as pedagogical (classroom practice of content) and communication (focus on meaning). The pedagogical function characterizes Beth's school experience as it did Melani's. She remembers how "we learned verbs, we learned why certain verbs took avoir or haben or whatever. And we learned vocabulary lists" (appendix 3: 410).
Classroom language was inauthentic and was inappropriate for a natural context:

Some of the words they [textbooks] had were actually incorrect, and I now know that some of the words if I'd gone into a shop and asked for whatever I would have been laughed at. (Appendix 3: 410)

This contrast with her view about language, where the ability to communicate in a natural context is the real goal:

...the actual communicative aspect is more important than what your accent is like as long as you can communicate [...] From what I understand now, the practice is, what is important now, is whether you achieve communication with somebody. It doesn't matter [...] if certain things are wrong, so it doesn't matter if you get a gender wrong or if you do something like that, it is your ability to communicate, I suppose language is simply a method of communication. (Appendix 3: 412)

In terms of the substance of the language she makes a difference between forms, on the one hand, and meaning and content other than language, on the other when she talks of:

using our language to look at current issues, so we would look at, I don't know, some standard things: racism in France or women's rights in France or the communist party in France, or things like that. That's where you could actually read proper French articles, I think that is the really important, rather than some ridiculous story that it has just been done purely for learning a particular point. (Appendix 3: 410)

Finally, she is also aware of the fact that spoken discourse is not the same thing as written discourse and that an emphasis on one does not necessarily help one to learn the other.

I mean, we learned verbs, we learned why certain verbs took avoir or haben or whatever. And we learned vocabulary lists. And there was no language lab so we didn't hear a recording, we didn't hear a radio broadcast or anything like that. We literally learned from reading aloud from textbooks. (Appendix 3: 410)
<table>
<thead>
<tr>
<th>Context</th>
<th>Real World</th>
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<tbody>
<tr>
<td>Functions of language</td>
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<tr>
<td>Substance</td>
<td>meaning/content</td>
<td>forms</td>
</tr>
<tr>
<td>Medium</td>
<td>speaking</td>
<td>writing</td>
</tr>
</tbody>
</table>

Table 4.5 Summary of Beth's pretraining knowledge about language

**Beth's knowledge about language learning**

As table 4.6 shows, the categories that appear in Beth's conceptualization of her own process of learning languages are not very different from Melani's. It seems that she finds certain factors which make the process of learning a language in the school and in natural contexts similar. These are basically the learner factors (aptitude, attitude, motivation):

I ended up doing languages... in the streaming in the school I was in the top group for languages, and then you choose what you are best at. I don't know if it is any great passion for languages, I mean, I enjoy languages, but I think you just end up doing what you are good at or what you think you are good at. (Appendix 3: 409)

One aspect which seems particularly relevant in classrooms is the fact that when the cognitive complexity of the text does not match the learner's cognitive level, it may be demotivating for the learners and may hamper the learning process, for example, she comments "it is a story of an 8 year old but you have to read it in another language and you are 15 or whatever and I would say that that kind of thing I didn't like at all" (appendix 3: 411).

The differences in the learning processes in the two contexts, (school and foreign country) relate to the actual process and the different circumstances that surround it. Contexts determine the language and activities learners engage in. For example, while language learning in a classroom is academically oriented with a focus on accuracy, learning in a natural context is focused on communication.
then [...] I spent my year abroad... and my French learning it didn't feel so much like learning, because you are actually in a situation where people don't talk to you because they want to teach you something, they talk to you because they talk French. So I don't think that would have felt like learning. And I used to have to do work that I had to send back to college which became more of an academic practice again. So it just didn't seem like learning because if you go out to supper with somebody and if you were speaking French with them you don't think I am learning, you just have to go on with it. So I think it is probably very different when you are in the country itself because you know the reality, you know, rather than just something from a book. (Appendix 3: 410-411)

The contexts also determine the kind of interaction learners maintain with the speakers of the language (teachers/native speakers) and the role they play, as the following quotation shows,

it is very different because probably, people who were my teachers might say something like: "come on, you have to get your French a bit better, it is not that good, this is wrong, this is wrong". When you go to the country [...] they would say "your French is good, you sound like you're French" and all this. [...] people are more much more enthusiastic... and you know it is not true, but it does encourage you, whereas some of the teachers some time ago were saying "that's dreadful [...] you are not using the subjunctive or something". (Appendix 3: 411)
<table>
<thead>
<tr>
<th>Natural learning and classroom learning: differentiating features</th>
<th>Natural learning and classroom learning: shared features</th>
</tr>
</thead>
<tbody>
<tr>
<td>classroom</td>
<td>natural context</td>
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<td>Role</td>
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<td>Interaction</td>
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<td>Language</td>
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<td>Interaction</td>
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<td>Language</td>
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<tr>
<td>Language learning: academic learning</td>
<td>Language learning: using language in a real context</td>
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</tbody>
</table>

Table 4.6 Summary of Beth's pretraining knowledge about language learning

Knowledge about language teaching

When speaking about the teaching process, Beth considers the characteristics of the teacher as one of the most relevant elements in teaching a FL. These include aspects which are relevant for all teachers, like being confident and strict, being able to both control and motivate the pupils without necessarily being their friend.

I don't think I am a sort of liberal teacher. I'd like to think that I'd be quite strict, I am not, I wouldn't be able to teach in a class which was full of noise, I mean I think that's one of the things I would probably have to learn to control, I don't
know whether I will be able to do that but I think the big thing is trying to justify why they should learn a language. (Appendix 3: 412)

A good teacher, not to scare people, but on the other hand I don't have an idea that I want to be the pupils' friend or anything like that, because they've got their own friends, you know. (Appendix 3: 413)

Other aspects are more specific to FL teachers and include, being competent in the language and keeping abreast with developments both in the language and in the country. Beth's concern with the teacher's linguistic competence, leads her to ask herself whether non-native speakers can be good language teachers:

what I think I am aware of is actually keeping up to date with what is happening in the language or what is happening in the country [...] and I think how much I have fallen behind in that sort of thing. In a way I think it is nonsense to teach a language which is not your own [...] I can talk, my English is a million times better than my French, so why really I should teach English [...] unless you can say that you've seen the problems of the learner because you've learned it [...] I don't know. (Appendix 3: 411-412)

Referring to the teaching content and the teaching materials she comments that language in textbooks at times is incorrect and focuses mainly on form and non-authentic use. She shows a preference for more realistic language which focuses on meaning and cultural content by using authentic materials, "I'd say linking things to real situations rather than this sort of dreadful 'Pedro goes to the seaside' sort of thing" (appendix 3: 411).

Finally, she makes a difference between form-focused learning activities (learning verbs, vocabulary lists, reading aloud, learning grammar rules) and meaning-focused activities (role plays, reading French articles and discussing them).
Research Findings

<table>
<thead>
<tr>
<th>Teachers' personal characteristics</th>
<th>linguistically and professionally competent (keeps abreast, native/non native speaker) personal characteristics: confident, strict, motivating</th>
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<tbody>
<tr>
<td>Materials</td>
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<tr>
<td>Teaching content</td>
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</tr>
<tr>
<td>Learning activities</td>
<td>learning verbs, grammar and vocabulary lists role plays</td>
</tr>
</tbody>
</table>

Table 4.7 Beth's pretraining knowledge about language teaching

4.3.2 Summary of Beth's pretraining knowledge

Beth's understanding of language teaching includes the following categories, the teacher (her professionalism and the relationship she establishes with the pupils); the teaching content and materials and the learning activities. Along with this conceptualization of teaching, she sees that language learning may imply two different processes (natural language learning and FL learning) which are context determined. The differences have to do with the kinds of activities learners engage in, the kinds of interactions they have with people and the role they play. The learner's contribution does not seem to be different in the two contexts. Language is described according to the function it has, which at the same time conditions its substance and, to a certain extent, the medium of expression.

4.3.3 Beth's TE knowledge before TP

This analysis is based on the second interview (appendix 3: 416-423), third interview (appendix 3: 424: 427) and her journal.

Knowledge about language

We saw, in the previous section, that she seemed to disagree with the kind of language she had to learn when she was at school, basically isolated pieces of the language system. By the middle of the first month of TE, when she had visited at least one school, where the emphasis of the language was on communication and
phrases, rather than on the system of the language, she alters her view and decides that perhaps the way she was taught was not that bad after all, as the 18.10.90 entry to her diary shows,

whereas I can generally accept that oral work, conversation, etc. is a more realistic presentation of language, language within a realistic context, I can't quite invalidate some of the ways I learned, e.g., memorizing lists of vocabulary for weekly tests. I understand the rationale that is discussed here but it is tempting to think - what's wrong with the way I was taught?

She emphasized this idea in the third interview when she observed that previously she considered the way she had been taught sterile but now she is not so sure. Her concern regarding language in the classroom is now more clearly about pattern practice and accuracy as a longer term and more valid investment than contextualized phrasal learning:

I've always looked at it from an academic point of view, like a mathematical formula, it should be correct, the verbs agreeing, and your nouns agreeing, whereas now I think it is much more "have you actually managed to communicate to somebody?" and that's quite a change for me [...] I can imagine that underneath I'd really want to be saying "you've really used the wrong gender there" or things like that. [...] and inside I would be thinking, "Oh well, that isn't correct" and things like that. (Appendix 3: 420)

She also comments she doesn't seem to be happy with the fact that pupils can say je m'appelle but may not be able to manipulate the language in other situations (appendix 3: 424). She agrees that 'phrasal teaching' may be more interesting and creative in the short term, but she doesn't know what would be better for the pupils in the long run. Learning the system of the language provides security and may be better in the long term, despite how boring it may be in the short run.

Knowledge about Language Learning

At the same time that she emphasizes the importance of a systemic knowledge of the language, she stresses the importance of the academic process of learning language as studying isolated pieces of language out of context:

and it was almost an academic exercise and I actually found that quite a fascinating way to learn [...] we had ten words to learn once a week, and you had a vocabulary test and we'd learn maybe feminine words associated with them [...] and we would learn them as individual items of vocabulary, we didn't learn them as part of a, in context at all. I am a little bit divided on this because although I
can see that realistically it's obviously much better to put things in context, I actually enjoyed the academic exercise of learning a list of things, but that takes the language out of it, I mean it is not realistic at all. And I can totally understand that. But I find that, I seem to remember that as being very satisfying [...] I feel as if I should be coming out thinking that I was just motivated by the French way of life, and French culture, but..., it interests me, I can't imagine thinking 'oh, I'd like to live in France' [...]. I just feel it was done as an academic subject. It wasn't really very much about French people, and I enjoyed it for that. (Appendix 3:418-419)

Learning the system of the language, she observed in her third interview, in contrast with what she had said in the first interview, may provide security and enjoyment for the learner.

As was the case with Melani, one of the things Beth was not aware of at the beginning of the year was about how long it actually takes to learn things in another language. Now she gets the idea that it "obviously takes a long time for people to pick up certain phrases and things like that" (appendix 3: 419). Subsequently, she develops the idea of a need for reinforcement and repetition as the basis of classroom language learning, as she says,"what might seem to me [...] quite a simple topic, maybe "it's sunny, it's raining" or whatever, the constant reinforcement that is necessary ..." (appendix 3: 419) and adds that one should "not underestimate how long it is going to take people sort of be confident about using certain parts of the language" (appendix 3:419).

Knowledge about language teaching

Beth's main concern seems to be not so much the subject specific or instructional aspects of teaching a FL but teaching as a generic or interactional activity. She focuses on teacher/pupil interaction (with group or with individual students) and the teachers' role (e.g. to maintain discipline and control and to motivate the pupils).

In her third interview, she comments that before she thought it was going to be awful being in front of 30 pupils, while now she would worry more about individual students (appendix 3: 424). Beth writes in her diary (25.2.1991) that since her classes are unproblematic she is free from discipline problems and can start thinking about how successful she is when she teaches specific content, "I taught both classes last term, neither misbehaved, both fairly well motivated, etc. but I didn't even get my graded questions right".
The specific aspects of a FL teacher she mentions are the teacher's language competence, and more specifically whether the language teacher should or should not be a native speaker of the target language. Her feelings are still mixed. On the one hand she admits "I wouldn't have the, how shall I explain myself? the, I wouldn't have the confidence, may be in my language that a native speaker could" but on the other she says,

I would be able to empathize with the feeling of actually learning a language and trying to think why was I interested, so I don't know [...] I think there are advantages to both... But we had a sort of a role play in French, in our curriculum day and the French native speaker in our tutor group was, seemed much more confident than the rest of us. (Appendix 3: 417)

In the following quotation from her second interview, the two aspects of teaching (interactional and instructional) appear intrinsically linked:

I really get the impression in teaching that they made us very aware of constantly having to change and adapt and respond to different things, when there is a fight in the corner of the classroom or whether there is somebody answering your questions correctly. (Appendix 3: 421)

Other categories which are part of her knowledge about teaching have to do with the content to be taught and the pace at which it can be taught:

before I started the course I was concerned about the level of my French and then I see the kinds of things that we are expected to teach in first or second year and I am amazed at how simple structures are and how slow you have to take it [...] So basically not underestimate how long it is going to take to get people sort of be confident about using certain parts of the language. (Appendix 3: 419)

4.3.4 Summary of Beth's TE knowledge before TP

Regarding Beth's new knowledge about language and what she thinks would be appropriate in terms of classroom learning, she seems to have doubts about the "phrasal language" pupils are working with in the schools she visits and teaches at. Her concerns seem to center now more on accuracy and language competence than on communication. Simultaneously, she re-evaluates the academic exercise of learning the language system. This, she argues, would, in general, have longer lasting effects than contextualized phrasal learning. Regarding her knowledge about language learning one of her concerns is trying to find out how fast pupils can progress. She can't relate that to her own language learning experience. Her
knowledge about teaching, includes interactional aspects (the interaction between the teacher and the pupils, in group and as individuals) and subject specific aspects (the teacher's linguistic competence and her capacity to select the correct amount of new content to suit pupils' learning capacities).

4.3.5 Beth's knowledge and relationship to practice

The analysis of Beth's relationship between knowledge and teaching is based on a series of two video-taped classroom observation transcripts (appendix 3: 444-467 and 477-496) with their respective planning protocols (appendix 3: 431-433), pre-observation interviews (appendix 3: 428-430 and 468-469), post-observation interviews (appendix 3: 443 and 476-477) and Stimulated Recall interviews (appendix 3: 444-467 and 477-496). This represents a total of five interviews of varying length for each of the two 7th year recorded French lessons. She also kept a journal during this time, in which some of the same themes also surface.

4.3.5.1 Beth's teaching

Knowledge about language

Functions of language: Beth's manifestation of her knowledge about language in practice shows an understanding of the function of language in the classroom (pedagogical function), as a mixture of some degree of communication and practice of the language as a system. When the purpose of using the language is practice, its substance is mainly form (structures or phrases), as the next sequence of her Q/A shows. This activity takes up a considerable part of the first recorded lesson:


So I've done a quick going through this target, the question and answer thing with this lot and now I've moved, I'm already into the target question, so I'm hoping that they'd transfer their knowledge from what they used when they were talking about the previous four women and transfer their knowledge now that they are talking about the four men, so the only change they've got to introduce is elle or il. (Appendix 3: 453-454)

The pedagogical function of language, is also characterized by the fact that there is
no difference between written and spoken discourse in the language she presents to the pupils.

A more communicative function of language is realized mainly by simple and routine teacher's instructions (directions, greetings, or when she gives praise), for example. B: "Fermez les livres. Fermez les livres. Fermez les livres, bonjour la classe" (appendix 3: 435) or "Alors, écoutez bien... levez la main... écrivez les numeros 1 a 6" (appendix 3: 438). Nevertheless the more complex instructions, directions and classroom management discourse are conducted in the MT. Yet she feels that she could "have done all of this in French... I am saying something in French here and then I clarify it in English, I am not quite sure if I should do that" (appendix 3: 446).

A communicative function is also seen when pupils actually feel a need for language which has not been introduced, when a more real communicative need arises so that language becomes more relevant to the learners:

what some of them are doing here is that they are asking me to, they are extending their knowledge beyond just what colour they've got and they're asking 'how do you say quite long, how do you say quite short, how do you say dark brown hair', they are asking me things like that, so they are wanting to move on more than the basis which is good [...]. (Appendix 3: 458)

*The substance* of the language practiced is a mixture of functions or 'phrases', as she frequently refers to them, and form. In her lesson plan (appendix 3: 431-433), she writes,

- aims: to reinforce les cheveux + adjec, to introduce more from elle 'a to fai
- Prenez vos cahiers de brouillon
- écrivez les numéros 1 a 6
- écoutez bien
- Draw a face to go c what I say
- What is the difference between il & elle

Or in her pre-observation interview she comments that the objective of the lesson is "reinforcing and introducing some slightly new material on people: what kind of hair they've got, if it is short or long, what colour eyes they've got" (appendix 3: 428).

When language is used in its pedagogical function, as Beth sees it, its *substance* is also the system or underlying rules which govern explicit performance. Although
she feels guilty about favouring language as a rule-governed activity over contextualized phrases, she dismisses the learning of contextualized phrases on the grounds of their limited generative potential in new situations and on the fact that learning the ability to speak may not lead to knowledge of the system. In other words, Beth does not seem to be convinced that practice of surface structures and phrases may be a means of helping learners to proceduralize declarative knowledge, which is the justification offered today for the continued use of pattern practice in language teaching (Ellis, 1990: 28):

sometimes I think it is easier to see it as a sort of... as rules really, I mean, I think that can sometimes make learning a lot easier because you can apply the rules to a lot of different circumstances whereas a communicative approach I think you can get stuck just at what you've been taught, I think purely communicative means you can't move on to things you haven't met before, I think. I am saying this and I am thinking, "oh my God, I am the only person who has thoughts like these", you know, it seems like really appalling. (Appendix 3: 451-452)

[and] it's so strongly inbred into you, as a result of being here and because of the school I was in, that you don't overdo the grammatical side of things. Personally I'd rather have a rule which tells you that there is more than one thing you put the s on the end of the adjective, personally that's what I like...
(Appendix 3: 451)

She seems to question the relevance or adequacy of some of the language she introduces for the pupils. She points out that even when pupils are practicing 'communicative functions' or 'phrases', these may also be irrelevant for specific classes or ages:

Let's face it, how often do 11 year olds go to a cafe and order drinks, anyway?, but it is in the scheme of work, so you have to teach it, it's like 16 year olds at GCSE booking hotel rooms, you know, all fairly unlikely, reserving tickets on airplanes, I mean..., it is 'authentistic'... (Appendix 3:482)

Beth also comments that, even if physical description may be communicative, the specific language, no matter how contextualized when it is practised, may still not be particularly relevant for the group of students she has, since the language remains removed from the reality of her pupils:

I'm trying to get off and do some pairwork on their own, asking each other what the' look like... the trouble is that in that class there wasn't much practice to say 'I've got blonde hair'. (Appendix 3: 456)
Or it may not be based on their communicative needs, "how much of that is something which is 100% necessary? that they'd want to say what do you look like?" (appendix 3: 465).

In her second lesson the emphasis is more on communicative-like language, with an emphasis on meaning which is achieved by practicing phrases. In order to recreate a situation which would resemble a real situation, Beth creates a realistic context by introducing the topic and using props in a role play to practice 'ordering things' and 'asking for the bill' in a place which "looks like a proper cafe":

there is a trip to Boulogne in the summer and so they're all learning things which should be useful for when they are actually in B. So, in theory they are meant to be able to go into a restaurant, cafe and order a coffee or order an ice cream or an orange juice [...] When I started the topic I linked it up by saying: "well, as you all know, we are making arrangements for going to B. and when you are over there you may be thirsty [...] and that's how you go and order a drink... (Appendix 3: 469)

Although she practices language in an specific context (a cafe) using props and specific behaviours which are part of a role playing activity, Beth still has doubts about the level of reality achieved:

it's the nearest you can get to providing a practice situation, I mean, it's fairly far removed from reality but it's the nearest you can get, you know, they maybe remember some of the phrases, yes, I don't think you can get much nearer than that [...]. (Appendix 3: 495-496)

**Means of expression:** From her planning protocol and the way she teaches, we see that she plans a sequence of learning activities in the traditional sequence of listening, speaking, reading and writing. Yet, as was the case with the rest of the students, there is no difference in the language she uses for each of them. Writing is basically used to consolidate oral work, for example, she refers to writing in the following way, "so although they would be writing something down simply so that they got it as a point of reference, the idea is that the oral work is important" (appendix 3: 469) and says,

[...] what I am asking the students to do now is again with the same language is I'm asking them to now transfer what they may have said orally into writing and what I did was I provided them with the worksheet... (Appendix 3: 466)
Knowledge about language learning

When considering language learning, Beth, like Melani, seems to find it difficult to draw on her own experience to estimate the level of difficulty of the language or how much pupils can actually learn in a certain amount of time. She makes repeated reference to this. In general terms she finds it difficult "to decide how much new material they can pick up [...] because some things look so simple to me, they look so simple and yet they just can't do it at all, and you know, I have to learn that" (appendix 3: 428).

More specifically she refers to the difficulty of making the transfer from talking about a third person to talking about the first person, for example "what I am trying to do today is also move from them saying "she has got brown hair" to say "I have got brown hair". And I find that a very difficult thing to do" (appendix 3: 429). The following extract, from one of her lessons, shows how, modeling after her, she deals with presenting pupils with this transfer:


She also finds it difficult to know whether and to what extent pupils already know the language she is going to teach them:

The main thing, I suppose, really is that I am teaching them something which I may find out that they already know, in which case it will be revision more than learning, and I'll still have to find out. (Appendix 3: 468)
Yet, although she remarks that "I don't really know what's it like to have to learn" (appendix 3: 445), I have identified certain themes which come up when she talks about learning a FL. The main themes are the individual learner factors, the learning process, the contextual factors and the learning outcomes.

**Learner factors** include attitude, aptitude, learning abilities, interest, enjoyment, previous learning experiences, individual learning styles, previous knowledge, and the specific role pupils play in different activities. For example, she sees the need to set easier tasks for some, so "they join in" but worries about "the level that they can join in" (appendix 3: 477). Because she could have never imagined "the range of speeds...the difficulty that some of them encounter in just doing what to me would be simple, sort of mechanical task" (appendix 3: 495). She recognizes individual learning styles and how they can clash with the method she uses. Two girls use their own phonetic transcriptions as a learning aid when they are still at the supposedly "oral stage" and not allowed to write. She wants to say "oh no don't write it down yet we are still at the oral stage" (appendix 3: 449) but admits that this is ludicrous. Apart from finding out what individual capacities pupils have, Beth, finds that it is important to check on how much they know, because "there may be a situation you really don't know how much the pupils know" (appendix 3: 493). She gives an example of a particular girl who was new at the school Beth was teaching, and she comments that "neither myself nor her normal teacher had any idea of her level" (appendix 3: 485). She is also aware of the fact that pupils in her class have different linguistic backgrounds and consequently "they certainly say it [French] differently from what you would if you were speaking with an English accent" (appendix 3: 491). Pupils' interest and self enjoyment, as when "they are still concentrating [...], it's time to go home now and they do seem to be interested in it" (appendix 3: 452) as well as a more dynamic role which "takes them away from just repeating sentences [to] actually say[ing] something [where] I'm not involved [and] they're on their own" (appendix 3: 496) can also foster language learning.

Her description of her teaching shows three underlying features of her understanding of language learning. Firstly the next quotations show an emphasis on correct modelling and form practice based on repetition, reinforcement and confirmation:

> what I am actually doing is, I am revising, we're consolidating something that we've done in the lesson before [...] it's consolidating [...] some of them [...]

...
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saying that they didn't understand, so I'm going back again to doing some practice [...] Maybe I've realized that their pronunciation at this stage isn't ..., they haven't come to grips with it, so I've done, I'm doing a bit of choral repetition with the question [...] a few have just begun to ask me again what is the question that we need to use, so I repeat it for them and they repeat it back to me. (Appendix 3: 453-457)

This was again number reinforcement and, in a way, this becomes a sort of attempt to bring the changes [...] and keep the numbers ticking over and keep them repeating the numbers and keep them hearing numbers. (Appendix 3: 493)

they want you to confirm the whole time if they've got it right, because on the whole, you know, they do understand what you do, but it's as if you need to reassure them. (Appendix 3: 458)

Secondly, language learning follows a certain developmental path. The most relevant incident of the lesson involved what she had already pointed out as the most difficult aspect: the transfer from third to first person. By avoiding providing explicit grammatical explanations or translations in the MT Beth finds the following problem:

In order to get them to understand that I was now talking about myself, I told them what my name was, I told them where I lived and that became a bit of a mistake because they started responding to my question that was specifically about appearances by also telling me where they lived or what their name was because that's what I've done, and that was a problem that I'm still not sure how to get round it, maybe I wasn't confident enough in their ability to understand that I was just talking about myself by saying j'ai and I shouldn't have gone on about where I lived... (Appendix 3: 464)

Finally Beth suggests a process which goes from teacher centred work to pair work, from reception and imitation to production:

they are learning it by hearing me saying it and then what happens is that I'm saying less and less and they say more and more, so they start off with just me producing it and they imitate what I've said, then I'm producing it and they are reproducing it and then I'm producing something and they have to reproduce something slightly different [...] and then eventually they don't hear me saying anything and they produce the whole thing. (Appendix 3: 463)

they were learning to put the question and responding to their friends, so they are now, basically I'm withdrawing a little bit, and I'm allowing them to get on with something themselves working in pairs. (Appendix 3: 465)

Some contextual factors are also discussed in relationship to language learning, particularly the teacher, the learning activities and other learners. For example,
motivation can be enhanced by physical activity and competition which she introduces at the end of one of her lessons, using the game "Simon says". She comments,

they are concentrating mainly because they are standing up, I don't know, it makes it a bit different, it makes it a bit more out of the ordinary from just them [being] slumped over their desks. (Appendix 3: 461)

Yet she is not sure that competition may stimulate interest, "I suppose you'd say that people in competition keep them interested, I suppose, it wouldn't keep me interested, but it seems to keep some of them interested" (appendix 3: 493). And she also comments that "the difficult thing to assess is how much it felt like work to them and, I mean, for instance, it is like games really but I think they are learning, I think it's reinforcing other things" (appendix 3: 479).

Other pupils can also influence the learning process in different ways, for example, "it's very difficult to know if it's they themselves who chose that because that's what they feel confident with or if it's chosen for them by their peers" (appendix 3: 491). Pupils could but do not make destructive remarks about different ability levels and,

the other quite nice thing is that [...] in their sort of progress in their performance, I don't know how aware are the others. Remembering back at school you're fairly aware of what people are like. But that's not actually very apparent and that's my fear of doing sort of team activities. (Appendix 3: 482)

At a different time she comments on the fact that pupils are well aware of who the 'brainy ones' are:

she is one of the brainy ones within the class hierarchy... it is really funny how when they see the two girls going up there, they are immediately assessing, you know, who is the strongest competitor... (Appendix 3: 487)

She sees that the teacher's expectations of pupils' performance is important to the point that "one of the weaker pupils has been able to do something and now I just don't notice that she had her hand up because I'm so used to them not having their hands up [...] she's got her hand up, although [I am] not noticing, oh dear! how much of that is because I'm not expecting her to answer" (appendix 3: 486). Furthermore, the fact that assertive pupils may not understand something may take the teacher, rightly or wrongly, to assume that the rest of the class had problems as well and she may decide, as Beth did to take a step back and start again (appendix
Finally, another aspect of Beth's conceptualization of her knowledge about language learning is her concern for the *learning outcomes*, which she sees as closely related to individual capacities:

> it's so difficult, I mean, some here have moved on to start practicing some quite sophisticated sort of language used in role plays, you know, and they are actually extending themselves, that kind of thing, and then there are some who are having difficulty with copying words off the board. (Appendix 3: 481)

**Knowledge about FL teaching**

Beth's knowledge about FL teaching and the way she deals with language in the classroom to make it accessible to pupils is a compound of the following categories: *the teacher, the teacher's relationship with pupils and pupil groupings* and a *concept of teaching* which includes generic aspects (e.g. to provide variety of activity for an specific age group, discipline, time pacing, managing and structuring activities), and subject specific aspects (learning activities and explanation of content, grading the content, teaching materials, objectives and monitoring learning and understanding).

Among the generic aspects, discipline repeatedly comes up in the different interviews. She had made it clear at different points that she could not tolerate a noisy class. Despite the fact that she doesn't have discipline problems in her classes, the following entry to her journal shows how concerned she was, "I felt very nervous this morning, couldn't imagine standing in front of a class and getting them quiet" (entry to her journal, February, 4th, 91) or some of the ways in which she organizes the pupils "I've got them divided into two teams [...] so I'm giving each of them a number and they've got equivalent numbers in the team so that's how I cope with back to front because it avoids a kind of who is going next [...] I'm just giving a warning of any silliness or noisyness which means that I stop it" (Appendix 3: 486-487). The following quotation shows that she likes to be in control of what happens in the class and she she likes the pupils to be aware of it as well:

> I'm laughing because some of them are cheating, I think they're copying of each other, so I've made a comment on this, "there is some cheating going on here" ... I don't want to make a big thing out of it, but I want them to know that I
know what is going on, I mean, quite honestly it didn't matter a bit but just that they don't think that I'm looking out of the window [...] but I prefer just to let them know that I'm aware of what's going on. (Appendix 3: 455)

She considers the need to introduce variety of activities to accommodate to the pupils age (first years).

I try to have activities which aren't going to last for a whole lesson for the younger years because they are not as well directed as the fourth years are and, you know, they need pushing, I think, and they need a fair amount of change [...] I realized that at the most there is no activity that will last much more than 15 minutes which in fact makes for a lot of work in a 70 minute lesson when a lot of your activities are maybe ten minutes long. (Appendix 3: 428)

She gives a lot of instructions but her over doing the instructions and directions seems to be justified by the fact that she feels that when she doesn't over explain, there tends to be problems,

I use an awful lot of talk here to explain something fairly simple and I don't think that was necessary, but I sometimes find that I over explain things in order not to get blank faces [...] It's almost like if you are trying to avoid every possible misunderstanding and you sort of overdo it. (Appendix 3: 446)

She is aware that she gives pupils praise in a routine like way "even if what they are saying is rubbish I am saying it's good [...] I said excellent, but it wasn't really" (appendix 3: 453, 456). But she justifies it because "you're just giving them [...] confidence, you are sort of going and checking up and they are [...] saying things and you are saying [...] 'that's right' because 'pupils are sort of lacking in confidence" (appendix 3: 457).

When she organizes activities she tells the pupils what they are going to do next, for example, she is "sort of reassuring them about the fact that we're practicing numbers [...] because otherwise they start squeaking... despite all the reassurances they still hate it when they do not know things, even when you tell them that" (appendix 3: 484-485). When pupils are involved in the activities, managing time: "I've decided by now that they have had enough time, you know, I think you get to a stage where they [...] don't need to work any more" (appendix 3: 490) and monitoring pupils' attention and concentration: "what I am doing is I'm going round the class, I'm pointing to them and they've got to say the next number in the line, so it's really an attempt to keep them all awake because they don't know
whether I'm going to pick on them" (appendix 3: 485) are important managerial aspects' of the teachers' activity.

In dealing with the mixed ability nature of the classes on the one hand, she admits that, while "I've done the best I can, I just got to carry on for the rest of the class and I know that sounds really harsh but I find it very difficult providing something which is suitable for everybody"(appendix 3: 446). On the other hand, rather than preparing different kinds of activities for different pupils, Beth usually dedicates more time during individual work to less able pupils, and gives them less demanding tasks, for example, she comments "I'm giving almost all my attention to this table [...] there is a table there who haven't had one visit and there is another table who's had, I'd say, 50% of my time" (appendix 3: 459-460) or "I'm trying to use the lower numbers with the less able members of the group" (appendix 3: 485). Finally when she thinks about homework, she says,

I'm giving them the homework now, telling them what they've got to learn, everybody's got to go to one level and some people can go further. (Appendix 3:491)

The knowledge which relates more specifically to FL teaching includes a notion of FL teaching. Basically introduction and practice of new language by Q/A, a sequence of activities which goes from teacher controlled practice to less teacher controlled practice (pairwork), with provision for oral and written activities and the need for "exercises to reinforce what I've just taught them" (appendix 3: 429) and then "do practice to reinforce" (appendix 3:468).

In her second lesson, she doesn't go through the 'complicated', process of introducing new language by Q/A, instead she is going to "point out how to ask for the bill. I am not going to do it in any particularly incredible way. I am just going to say how you say it and then I'm going to just read it and pupils will say it a few times" (appendix 3: 468).

The first of her lessons follows what she calls the I. methodology. This embodies the underlying learning principles of teacher's correct modelling, pupils' repetition and teacher's reinforcement by a sequence of Q/A. The role of the teacher is to model correct language and provide feedback, whether in the form of reinforcing the language and praise or of correcting mistakes. She is rather torn between the ideas underlying what she does, and what she really believes in. At the same time
that she disagrees with the underlying assumptions of what she was taught during TE, she comes to value the way she learned when she was at school.

I think the fact is, you know, that I learned French in a very traditional way and so it's very difficult to distance yourself from that kind of learning and my sort of learning was very much learning lists of vocabulary with English down one side and French down the other, now personally I find that a much easier way of learning something than the way they are doing it here... (Appendix 3: 450)

Consequently, Beth seems to understand FL teaching as being something more than the controlled practice of phrases in the Q/A sequence on the grounds that firstly, it limits pupils' independence:

the other thing I feel is that we're half way through the lesson now and it's still very teacher dominated work and they put up with it and they reacted very well, but because of the length of time spent on the presentation right at the beginning it means that you are just continually dominating, you have to get through a certain amount before you can let go off and do things and that's why I think there might be a quicker way to introduce the information at the beginning to allow them to go off and do things. (Appendix 3: 448)

Secondly on the grounds that it takes too long:

part of me would think that it might be easier just to give them a list of vocabulary. [...] It'd save a lot of time [...] just to tell them this means such and such and swap them round to get different meanings [...] it just takes a hell of a long time to get them to learn a few very simple phrases and I just don't know if that's the most efficient way... of teaching something. (Appendix 3: 445)

Thirdly she doesn't seem to be very convinced of the way Q/A practice produces learning. She thinks it may be rather superficial and routine, and would not help learners to internalize the language system. She doesn't appear convinced by the absence of explicit grammatical rules. She seems to prefer a deductive way of learning grammar rules rather than an inductive one, as shown in the following extract:

Personally I'd rather have a rule which tells you that there is more than one thing you put the s on the end of the adjective, but there is very much, particularly at this school, the softly-softly approach to it and it is let the pupils infer it rather than you tell them... it's learning by your own discovery rather than having the teacher telling you, which just takes a lot longer. I am just so reactionary... (Appendix 3: 451)

Fourthly, she doesn't agree with a rigid progression from oral to written work on the grounds that different pupils have different learning styles, as she has seen in
her classes:

there is very much this sort of you must do, you listening, speaking, reading, writing I am someone who likes seeing things written down and I don't know, I thought that was quite interesting when I saw that, you know, and at first [...] I am so sort of programmed into that I almost said "oh no don't write it down yet [...] we are still at the oral stage" which is like ludicrous, but I mean that's how strong the feeling is, you shouldn't be see it written down, if we haven't said it enough times. (Appendix 3: 449)

From her own experience she comments "I'd rather link a word with something right from the beginning, so I can start linking how something might sound like something that it's written down like that" (appendix 3: 450). She argues that although she has been taught to delay letting them see the written forms "by keeping things orally you keep things a bit untenable, you can't really get hold of them" (appendix 3: 450). She remarks,

I'd be interested to know to what extent pupils were confused by seeing the word written at an early stage, teaching that has it would throw them completely, [...] they would be unable to continue, but I am not so sure. I think it would mean that they would get a longer. (Appendix 3: 450)

To solve this conflict between her experience and TE she has learned to feel guilty about her real thoughts, "it sounds really traditional, doesn't it, I am ashamed of myself".

Regardless of the fact that she doesn't agree with this fixed progression of skills, she tries to organize her activities in a way that written work does not proceed oral work. Nevertheless, when, in the course of the second recorded lesson, she gives pupils something to read before they had practiced it orally, she felt guilty about it:

I did something which I felt so guilty about doing: I gave them some numbers without them having seen them before, it's on this piece of paper and [...] just making them read through them, on their own while I tried to solve something else. What would be interesting is to see afterwards how much they picked up from just reading instead of all the complicated activities that you arrange for them before they actually see it written. (Appendix 3: 477)

And fifthly, she doesn't see that the fact that students do not make mistakes as a sign of learning:
I mean so far I am just going through the standard Q/A thing and it's going, I am progressing at the same time in a way I thought I would do and they are responding in the right way, whether that's real understanding or whether that's because they know what comes next, I don't know, I don't think it is internal [...] until they are actually reproducing it themselves, I don't know whether they are just responding to questions and they know what to reply. (Appendix 3: 445-446)

The only way Beth can justify Q/A is in terms of the activities which would follow. Despite how boring and unproductive it is in terms of the way she understands learning, she still goes through the sequence and justifies it because "the trouble is that you sometimes feel that there is a certain amount that you have to get through and I just feel when I am going to do it and if you're bored, tough [...] you have to get through a certain amount, otherwise you cannot get to the next activity" (appendix 3: 444).

The instructional aspects of teaching also include a concern for the grading of learning tasks:

I think my worksheet should have been more graded and initially I should have structured what I wanted them to describe, so everyone was describing, somebody was describing somebody with blonde hair and blue eyes, rather than just the people who happened to colour somebody in like that, [...] I'm not sure if they were really writing, I'm not sure if there is not much of a gap from just doing oral work to actually creating and describing somebody, maybe the intermediate bit would have been maybe copying the sentence with a picture that I'd done first, I think there was too much of a leap there, I mean they seem to manage it but I'm not sure I gave enough of a progression to doing that. (Appendix 3: 466)

The activities tend to go from teacher-controlled (Q/A) to more student centered (pair work), where the teacher gives up some of that control, for example,"what I am getting them to do now is instead of doing things with me sort of dominating, I'm trying to get off and do some pair work on their own, asking each other what they look like" (appendix 3: 456). Repetition, consolidation and reinforcing are also part of pair work activities and games, which "at the same time is a choral repetition" (appendix 3: 461):

I'm really trying to get them to practice saying things, so what I'm doing with them is really repeating what they've just done within the classroom situation. (Appendix 3: 457)

A final issue related to the instructional side of teaching is monitoring students' learning, for example,"who's concentrating, who isn't concentrating, who can
understand, who can't understand, whether you are keeping the time, there are so many different factors that you are trying to sort of deal all the time [...] if someone doesn't understand [...] what do I do to help them understand" (appendix 3: 480). Thus when she is walking around she feels she is "subconsciously assessing how much they've actually picked up" (appendix 3: 449), identifying different rates of progress allows her to use her time efficiently and help those who need it:

What I'm trying to do is to at least go to every group once and find out what's going on and sort of getting them on the right trail, on the right track, rather, if they are then I tend to leave them to it. (Appendix 3: 457)

She recognizes the value of self and teacher assessment:

I'm explaining how the answers are set out [...] I am giving them a few minutes, just to check it themselves and then I'm going through it. (Appendix 3: 455)

She has also developed ways of dealing with non-understanding among pupils, for example,

I've picked on someone who can't do it now... so I'm encouraging her a bit, it's taking a long time, though... we're going into deep water here, because she can't do it, whether I should have moved on here, I don't know... so I'm giving her alternatives to try and ease the situation, so that she's got something to imitate, rather than just produce... (Appendix 3: 456)

she wasn't able to answer the question, so I've gone back into suggesting incorrect alternatives to see if she could use that to give me the correct answer... (Appendix 3: 454)

Finally we can say that at times it is not easy to separate the instructional and the interactional aspects. The following quotation shows this dual nature of teaching in just one activity,

I think when I start wandering round I am checking two things: first that they are actually starting to do some work and second that they are actually doing the work in the right way. (Appendix 3: 458)

Her conceptualization of the teacher includes an array of what we can call observable and non-observable features. Among the observable ones she comments on movement, physical appearance and use of language. Among the non-observable ones she refers to attitudes, expectations and feelings. One of the most important of the observable categories is the language the teacher uses. She doesn't seem to be satisfied, for example, with how little French she uses when she
teaches, a fact to which she refers continuously in interviews and which leads her to formulate her own rationale to explain it:

this is all happening in English, shameful, I think this should be in French [...] I sometimes feel [...] that you teach in the way you'd like to have been taught yourself and I wouldn't want to...somebody to speak at me in French, I'd like to have a French word and an English word, I'd like to be able to see things and, you know, the comparisons that you can make and, fair enough, you can't do that the whole time, but I think we make it more difficult for them by insisting on this, this sort of very rigid target language, because the fact is that however much you say that you need total immersion you are unrealistic because their total immersion is only for an hour anyway and then they are off speaking English. (Appendix 3: 449)

Among the non-observable features the teacher's feeling and emotional reactions to what goes on in the classroom are also important:

this is just waiting for them to organize themselves, which I find pretty irritating, actually, it's the same every lesson; the instructions of what they have to do, I think if it was my class, I'd drill them in what they have to do in the beginning of the lesson. (Appendix 3: 457)

The expectations she has about individual pupils modifies who she interacts with and how:

There have been lessons when [...] one of the weaker pupils has been able to do something and now I just don't notice that she had her hand up because I'm so used to them not having their hands up, that's something I'm learning to watch. (Appendix 3: 486)

I wasn't aware of how much attention I paid to a particular group [...] I suppose for it was the second term I was teaching them, my preconceived ideas about who would and wouldn't be able to do something and there are some tables who I would really let them get on with it, because I thought they would be able to do it and I mean whether or not they are correct perceptions, I had them. (Appendix 3: 462)

Beth's knowledge about the interaction between the teacher and the pupils can be described using the following categories, T/P ratio: "somebody like that, you can always ignore her when you are teaching because there are 25 others" (appendix 3: 479); mode of interaction: "I am concentrating on one person saying something and, I mean, lets face it, this is pretty boring for the rest of the class" (appendix 3: 448); rapport: "I am surprised that I look so at ease with the class, you know, with the pupils, because I am sort of nattering away to them and when you are actually out of the situation you think, "Oh God, you know, how can I just wander around
Talking to them like that?" (appendix 3: 481); teacher's awareness of pupils past experience in terms of what they are used to doing and what they know: "I think it must also make a big difference depending on which way they're used to being taught [...] at this school they are very much used to doing this kind of role play" (appendix 3: 482) or "I was going over to see the new girl who was in my lesson for the first time and really trying to find out exactly how much she knew" (appendix 3: 494); teacher's different expectations from different pupils:

It's really awful when you see how much you have or haven't done for a pupil and what can go on without you being aware of it, you know, in particular reference to one of the girls [...] she's just spent a lot of the lesson wandering around and because she isn't noisy she gets away with it and [...] I let her get away with it, I suppose, [...] I should be looking at ways of making sure that she can do more, it's sometimes it's such an effort to do that as well as dealing with the other members of the class. (Appendix 3: 492)

Providing individual and class attention simultaneously:

it is very difficult because I'm trying to give them attention but at the same time I know I have to keep looking round the classroom... I find it very awkward actually when I'm trying to explain something to somebody because you don't feel you are giving them your full attention because you are squatting down next to them or whatever but at the same time you are having to keep an eye about what is happening elsewhere. (Appendix 3: 459)

different ways of relating to different pupils:

well, because I can only have one person answering at anyone time and I am doing all the moving about at the front of the class, and I am thinking here sitting back here, you could read a book, I don't know, I mean I do pick on people, I am picking on people here because I think that's the best way of keeping people awake but quite honestly I can't do that the whole time [...]. (Appendix 3: 478)

the problem with it is that in an unmotivated class, which isn't a class like this, then having two people at the front the rest of them could just lose interest, and [...] that's something I just probably wouldn't do in some classes, but in this particular case they are well motivated... (Appendix 3: 494)

The last dimension which I have included in the categorization of Beth's knowledge about FL teaching is student grouping and the criteria she follows to put pupils in the same or different groups, e.g "I split them up because they can't work together really" (appendix 3: 491).
4.3.5.2 Summary of Beth's teaching

The categories which define Beth's knowledge about language during TP are *means of expression and skill progression* (from oral to written), *substance* (phrases and form) and the specific *function* which language performs. The pedagogical and communicative functions of language emerge, each one being made up of different substance (phrases, structures or systemic knowledge). Regarding language skills, although Beth conducts oral and written activities in the classroom, the intrinsic differences between spoken and written language are not contemplated either in her knowledge or practice. Writing is used to consolidate forms/structures which are first practised orally. Although she implements the new ideas she has learned during TE regarding what kind of language should be introduced in the class, she doesn't seem to adhere to them. As her pretraining knowledge has not been made explicit or challenged to any considerable extent, she goes back to it, despite her feelings of guilt. Her view of language, even if she doesn't manifest it during her teaching performance, is of a rule-governed system, rather than phrases. When she teaches she seems to be divided between using language as specific structures/explicit forms or phrases, (e.g. when she practices the Q/A sequence) and understanding language as a rule-governed system in her interviews. She disagrees with the phrasal view of language on the grounds of its limited creative potential and on the fact that practicing communicative phrases does not guarantee its relevance to the learner.

Concerning knowledge about language learning, the main themes which I have identified are: the *actual learning process*, the *individual learner factors*, the *contextual factors* and the *learning outcomes*. The assumptions underlying Beth's teaching suggest that classroom language learning is based on correct modelling, oral practice and consolidation by writing and reinforcement by which, it is expected, the learner would learn the systemic rules inductively. This follows a process by which pupils are expected to gain more control once they have mastered the structures. Another progression is from oral to written practice. Yet she doesn't appear to be convinced that the absence of explicit grammatical explanations would help pupils to move on or that a rigid progression of skills can cater for individual learning styles. Among the learner's contributing role to the process I have identified the following: individual differences regarding pace in understanding and learning, different levels of attention, lack of understanding and mistakes, different linguistic backgrounds and subsequently different levels of
achievement. Contextual factors, the learning activities and the interaction which takes place among the different members of the class (teacher-pupils and pupils-pupils) also contribute to the learning process in different ways.

Finally, Beth's knowledge about language teaching is made up of generic and subject specific categories. The former make reference to time management, discipline, variety of activities, the teacher and the teacher's relationship with the pupils and pupil groupings. The latter include a concept of FL teaching, learning activities, which tend to show a progression from less to more pupil controlled activities and an emphasis on practicing an adequate sequence of skills, teacher's use of language, which includes deciding which language is going to be used when and the teacher's feelings and emotional reactions to what goes on in the classroom.

4.3.5.3 Relationship between Beth's knowledge and Beth's teaching

When Beth teaches and reflects on the way she teaches, she draws on different sources of knowledge. During her teaching performance she mainly draws on TE knowledge. Firstly, with reference to the subject mater, language is taught as explicit behaviour (phrases). Secondly, with reference to language learning, a model which values an inductive approach to learning the system underlies her practice. And finally, with reference to FL teaching a method which takes pupils from imitation and controlled practice of oral language and consolidation by writing to a more communicative-like practice is implemented. Nevertheless her comments on the way she teaches show different degrees of disagreement with what she does. Drawing now on her pretraining knowledge, Beth views language more as a system of rules than as explicit behaviour, so she values the importance of a language learning model which provides explicit grammar rules which pupils can apply in novel circumstances and which doesn't follow a rigid progression from oral to written activities.

A key distinction in language learning advocated both by audiolingualism (explicit and implicit knowledge) and the cognitive learning theory (declarative and procedural knowledge) is relevant when interpreting Beth's understanding of the language learning process (See Ellis, 1990: 7). She favours what we could call a top-down approach, or a belief that language learning is enhanced by the explicit knowledge about the language which will then transform into procedural or implicit
knowledge. Nevertheless, she teaches following a bottom-up approach, which is at the base of the way she and the other student teachers have been trained to teach. Another aspect which places her nearer cognitive positions is the fact that she takes into account not only the observable language behaviour but recognizes the individual contribution of the learners to the learning processes. Or as Politzer argues, quoted by Ellis (1990), language learning is more than just simply a matter of method. Further evidence that she is nearer a cognitive position than a behaviourist one is the fact that she understands the substance of language as grammar rules and their generative nature. Along these lines, Ellis (1990) observes that in both positions there is a recognition that attention to the code contributes to L2 acquisition. It is the actual organization that varies:

Imparting the necessary information about the items that comprise the code can be attempted inductively (as in audiolingualism) or deductively (as in the cognitive mode method). That is, the instruction may simply provide the learners with plentiful opportunities to produce utterances containing the target item or it can provide explicit information about the properties of the item. (Ellis, 1990: 15)

Nevertheless her knowledge of the learning process is not monolithic. Side by side with these cognitive assumptions, there are examples which are more germane to a behaviourist approach. Among these it is important to mention her attitude to errors and her emphasis on the production of correct language and the way she provides for correction in the event of an error by repeated practice in a way similar to that describe below:

Error prevention necessitated massive pattern practice by means of mechanical drills which had a low probability of error and which could ensure use of L2. (Ellis, 1990: 25)

Beth has a similar approach to error correction to that recommended by audioligual theorists as explained by Ellis,

immediate correction by the teacher followed by further opportunity to produce the correct response. Such an approach to error treatment was compatible with the central tenet of operant conditioning, namely that correct responses received positive reinforcement and negative responses negative reinforcement. (Ellis, 1990: 25)

Another aspect of her view of learning which places her near behaviourist assumptions is her belief in imitation, repetition and systematic reinforcement by the
teacher. These practices are at the bases of the operant conditioning in audiolingualism, by means of which linguistic habits are formed.

In a way Beth's knowledge of language learning processes is a mixed approach which includes behavioural assumptions, (mainly that language is acquired by imitation and repetition) and cognitive assumptions, (mainly that language is best learned when explicit rules about competence are provided during instruction, and mediated by the learner's personal factors).

Brumfit's conceptualization of traditional methodology and communicative methodology, as quoted by Ellis (1990), is based on the difference sequence of the following activities: presentation, practice and free practice. The traditional methodology starts with presentation and finishes with free practice. Communicative methodology reverses this sequence. Beth thinks that the sequence she follows which starts off with controlled oral practice and finishes with pairwork and written worksheets is in fact communicative:

I mean, maybe I hadn't really understood fully what the communicative approach means, I mean, I certainly would use the target language in the classroom more now than I would ever imagine... but I certainly am not of the belief that grammar should not be mentioned... (Appendix 3: 498)

It seems that Beth has blended the method learned during TE with her pretraining views without being able to reconcile them at a theoretical level. She has a view of language learning based on her language experience, which she then has to modify, to a certain extent, when she meet her pupils. She gets her teaching method from TE but her underlying philosophy from experience. When she observes that teaching produces unsatisfactory results, she turns back to the ideas based on her own experience.

4.3.6 Beth's post Teaching Practice knowledge

This analysis is based on the last interview, which took place shortly before the end of the year (appendix 3: 497-505).

Knowledge about language

At the end of her TE course Beth still values the pedagogical function of language over what she calls vocational aspects which have to do with the more
communicative function outside the classroom. She argues that language in the classroom should put more emphasis on the generative aspect of grammar rules which underline the specific utterances in a phrasal or structural form (performance) because "I saw a lot of kids who [...] were bright enough [and yet] didn't have the ability to, they couldn't adapt things and switch them into different sentences and I was not convinced about that" (appendix 3: 498).

She includes a cultural component of language as well because "learning a language and learning about rules you can also sort of learn to value other cultures" (appendix 3: 497):

I think there is a lot of stuff that comes with that such as [...] culture and things which although they may be foreign to your class you can use them to reflect back on the class, that you can use them, for instance, in a language awareness kind of way, you know, you can say, you know, this is one culture that we value... (Appendix 3: 500-501)

Knowledge about language learning

The main themes which run through Beth's knowledge about the language learning process are the actual learning process, the learner and the contextual characteristics.

Concerning the actual process she believes in the generative power of rules that can be applied to other situations. She considers that it is not necessary to use the FL all the time, since this may create more difficulties for the learners:

I have just seen situations when you get to the stage of just having phrasal learning without the pupils actually understanding individual words within the phrase, I just don't know whether by avoiding too much emphasis on rules and fitting words into patterns, and things like that and just relying on talking to them in the target language, I just wonder if that makes it more difficult [...] I saw a lot of kids who [...] were bright enough [and] didn't have the ability to, they couldn't understand that certain things were transferable and that they could adapt things and switch them into different sentences and I was not convinced about that. (Appendix 3: 498)

These concerns are very close to some of the criticisms made against audiolinguism, namely that "no behaviourist theory of learning can account for the speaker-hearer's ability to produce sentences which are not merely novel in terms of lexical choice but also in their underlying system" (Ellis, 1990: 27).
Among the individual learning differences mentioned by Beth, I have identified the different learning rhythms, motivation and different abilities:

that's something that I just underestimated, the amount, the time it can take to explain even [...] the simplest of the points and watching the videos I [...] repeat myself about three times [...] you need absolute clearness to go, you have to go beyond your assumptions about whether something is easier or not. (Appendix 3: 499)

Watching my videos I was so bored because, [...] half an hour would be doing activities with the colour of somebody's hair and [...] I really can't believe that [...] when I was teaching, that the kids seemed fairly interested, like it was all new stuff and that is definitely something that you don't realize [...] I just think, "Oh God!, it's so boring", but they actually seem to still finding it interesting. (Appendix 3: 499)

The other thing which was unexpected was the range of abilities and the way some people just pick up languages, and they can fit in, they can produce what you've just said to them, they imitate accents and then there are others who just haven't got a clue. (Appendix 3: 500)

The contextual characteristics which she sees as contributing to the learning process, are now of a broader nature, for example the national attitude to learning languages:

if you are teaching them English, you know, there is the prestige that they want to understand pop songs, I mean, the lowest common denominator, they want to know what Madonna signs about, and you haven't got that, you know, it's a kind of arrogance about the English youth culture that you don't have in France or Spain. They want to know about American and English things. (Appendix 3: 498).

I still think that it can be quite difficult justifying the teaching of a language to certain sectors of the public, of the school population [...] I mean three terms ago I would probably have gone on about this vocational usefulness of being able to speak another language, but I wouldn't use that sort of justification now, I mean, I think the only justification that can be is that learning a FL has a certain amount of status and esteem attached to it. (Appendix 3: 497)

Knowledge about FL teaching

The last interview brings out the following categories: the teacher, the teacher's role, the teacher relationship with pupil and the actual teaching activities.

Regarding the teacher she is still unable to make up her mind whether to value the
linguistic and cultural competence which a native speaker of the language could contribute to the teaching process:

at the beginning I wasn't sure about being a native speaker and which was better and I think now that people that are native speakers have it much easier, I mean purely on the fact that there are sort of cultural references that they can bring which means that with my 18 months that I probably spent in France I can't, I can't bring as much as I used to be able to, as I could if I was teaching English in another country [...] but I don't think that that necessarily means that you can't be a good teacher and be teaching FL... (Appendix 3: 497)

The role of the teacher includes providing explanations and maintaining control (subject specific and management). Beth is digesting what she feels to be mistakes and deciding how to act in the future, for example:

I mean, some sort of clarity of the way things are presented, again that's something that I just underestimated, the amount, the time it can take to explain even the simplest of the points... (Appendix 3: 499)

I think I'd be a lot more decisive about putting people in groups or putting people in pairs if they couldn't manage themselves, I'd be more sort of "right, you are going to do this, you are going to do this", rather than just sort of letting decide for themselves. (Appendix 3: 499)

Examining the relationship the teacher maintains with the pupils, I have found instances of how Beth finds out how things appear to the learner and the different feelings of liking and disliking that teachers may have towards different individual pupils or class which leads to different kinds of rapport:

there are certain things which to me are so self evident that they become instinctive and then you have to really think about how they appear to the learners and I think that was something that I didn't realize: how clear you have to be with things and how long it takes to learn some things... (Appendix 3: 499)

the realization that you can't expect to like all of your classes and even though I was the same person walking to every class, the reaction can be just different from me and from them and I had a class that I didn't like at all [...] I just didn't have a good rapport with them and to be honest with most of my other classes I did have a reasonable relationship [...] I mean, you have to come to terms with that in your professional life, it's part of human nature, that not everybody is going to like you. (Appendix 3: 502-503)

Regarding the learning activities, she repeats that she doesn't agree with what she classes as the 'trendy miracle approach', which is based on contextualized phrasal learning, use of TL as much as possible and a sequence of oral and written activities
(a process of analogy, as Ellis (1990: 24) refers to it). She doesn't agree with it on the grounds that the lack of analytical power/opportunities may hamper the process of learning since the pupils may not be able to extrapolate the contextualized phrases to other contexts.

4.3.7 Summary of Beth's post TP knowledge

She stresses that classroom language learning should be more about learning grammar rules than about practicing structures. This would allow pupils to be able to produce new utterances in new circumstances. The teacher, the teachers' linguistic competence and the teacher's relationships with pupils appear to be the most important aspects in her discussion about teaching.

4.3.8 Beth's knowledge growth during an initial TE programme

Beth's understanding of language teaching at the beginning of an initial TE programme was based on her informal and formal language learning experiences. At that time she valued learning language as communication over learning the system of the language. Similarly to the rest of the student teachers, these two contexts (formal and informal) in which she learned languages, led her to conceive two different ways of learning languages. These contexts determined the language used, the kinds of interactions maintained and the kind of activities learners get involved in. Her knowledge about teaching is mainly about the teacher and the teacher's instructional and interactional roles. During TE, when she is trained to use a specific methodology, she both reassesses the way she learned language at school and reacts strongly against the idea of teaching contextualized, unanalysed phrases. Besides seeing the need to provide pupils with explicit grammar rules, she sees the need for repetition and reinforcement since she has observed that language learning takes longer and is more difficult than the experience which has constituted her knowledge. The way she does this is by implementing the method learned during TE although at the same time she expresses doubts about whether that is the best way to learn a language. At the end of the programme she draws on her language education and stresses again her idea that language teaching should be more about learning the grammar rules than about practicing phrases.
4.4 Rachel

4.4.1 Pretraining knowledge. Origins and Content

4.4.1.1 Origins

In contrast with the rest of the students, Rachel's L2 informal learning involved two different kinds of experiences, that of learning English as a second language as a child and learning French in France as an adult. She also learned French at school in a formal way, like the rest of the students.

4.4.1.2 Content

Knowledge about Language

Table 4.8 at the end of this section summarizes Rachel's pretraining knowledge about language. This is based on the analysis of the first interview (appendix 4: 506-515).

Language in its pedagogical function, as defined in 4.2.1.2, is viewed by Rachel as "a stage that I had to overcome to get me on to the second form" (appendix 4: 508), or as "simply another subject which for me was fun, like maths was fun" (appendix 4: 510). Linked to this function is the substance of the language to be used, namely the system (grammar, vocabulary, verbs, structures) and an emphasis on accuracy and formal language. She felt, for example, that "the translations were just an excuse to make sure we looked at our grammatical mistakes, a means of throwing up grammatical difficulties" (appendix 4: 510).

She observes that school language learning work on accuracy was divorced from work on fluency, in other words, the code and the meaning were kept separated, which, according to her, did not lead to much success. She implicitly argued for a combination of the two,

These conversation classes seemed in a way, like pursuing a private interest, almost alien to the course. I do feel that this type of class, if it had focused on making us aware of our grammatical mistakes a little more would have been far more useful to me in polishing my French than the prose classes. (Appendix 4: 511)
The means of expression is linked to the function language performs. At school, it was mainly written, except for conversation classes where the function of the language became more communicative and consequently the substance changed from form into meaning, and the means of expression, from written to spoken language.

A final dimension of language in its pedagogical function is its lack of relevance and usefulness to the speaker's needs. She comments, for example, that they never "learned at school how to do useful things with the language, we never learned how to get a train ticket" (appendix 4: 512) or that the teacher "made us learn silly action songs" (appendix 4: 513). So in general, she comments that "if I hadn't regarded French as an intellectual challenge, I don't suppose I might have regarded it as useful, or relevant to my needs. I don't think it was presented to us as a tool with which to do things" (appendix 4: 510).

This way of learning French at school contrasts with learning French in a natural context, where the function of language is communication and the substance meaning "it was completely different to go from learning verbs, structures to actually having to talk to people" (appendix 4: 511). So when she discusses language in a natural context, the language functions she mentions are more varied: communicating, expressing own personality, achieving things (doing useful things) and offering the possibility of seeing things differently. In general, we could say that this is the expression of language as doing, language as performing a vocational/pragmatic function, language as interaction and language as performing a personal function. The next quotation shows this rich variety:

It is a means of communication [...] In my experience I don't just switch from one language to another. There is also something else that goes on, and I am not quite sure exactly what goes on but some people have told me I'm different when I speak Spanish and when I speak English. I think language provides a framework for your personality and thoughts, the way you see things, I don't know, I don't know exactly what it is, a different language can make you see things differently. (Appendix 4: 514)

The substance of the language changes according to context. For example she comments on the pleasure it was to be able to concentrate on meaning, to be able to speak 'freely' and let her thoughts run in French "not have to concentrate on just getting the right tense, for example in one isolated sentence" and she remembers vividly the first day she went to buy a loaf of bread on her own thus "I practised
what I was going to say all the way to the shop in order to get things just right and I
was amazed that the shopkeeper understood me right away" (appendix 4: 512). She observes how different the experience of vocabulary learning at school was from being able to discover "bits and pieces about the country, people, day-to-day living" and remembers how "learning names of food at school was nothing compared to finding a list of fillings you may choose to put inside a crepe which you were really going to eat. Or finding out all the different hairdressing language for a visit to the hairdresser" (appendix 4: 512). How classroom language does not transfer to the real context is seen in Rachel experience when,

I stayed with a French family for a week and we were at the table and I wanted to
ask for some butter and I came up with something very formal, very polite, and they all laughed and, you know, that's how we were taught at school. (Appendix 4: 511)

<table>
<thead>
<tr>
<th>Context</th>
<th>Real world</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functions of language</td>
<td>Communication/ interpersonal expression of personality personal</td>
<td>vocational/pragmatic pedagogical</td>
</tr>
<tr>
<td>Substance of language</td>
<td>meaning fluency culture</td>
<td>code: forms, structures, grammar</td>
</tr>
<tr>
<td>Medium of expression</td>
<td>spoken</td>
<td>written</td>
</tr>
<tr>
<td>Relevance</td>
<td>relevant to speakers' needs</td>
<td>not relevant</td>
</tr>
</tbody>
</table>

Table 4.8 Summary of Rachel's Pretraining knowledge about language

Knowledge about language learning

Rachel sees FL and natural learning as two different experiences, determined by context, "the learning that took place in the two different environments (school and France) are so distant from each other" (appendix 4: 512) in terms of "input, practice, etc" (appendix 4: 512). She describes natural learning as "not formal learning" in contrast with the intellectual challenge of formal classroom learning. "The way I was learning English outside the classroom [...] I mean English just seemed to come without any formal learning" (appendix 4: 509) or "I wish I had a better memory. I'd like to remember how I learned English, that is a mystery to me,
it just happened" (appendix 4: 511). In contrast, like all the other curriculum subjects at school, formal language learning was a challenging task, but which bore no relationship to the outside world or the learner. This traditional academic approach to learning languages which she experienced at school where "if I hadn't regarded French as an intellectual challenge, I don't suppose I might have regarded it as useful, or relevant to my needs" (appendix 4: 510) contrasts with the pragmatic, vocational approach to which she seems to subscribe now. She mainly emphasizes the learner's contribution to the learning process, for example, "during that first month abroad [what] I valued a lot was discovering bits and pieces about the country, people, day-to-day living and being able to see all these things through language" (appendix 4: 512).

The activities which one carries out when learning a FL in a classroom setting and those in a naturalistic setting are also different, for example:

I mean, it was completely different to go from learning verbs, structures to actually having to talk to people. We hadn't done much work in listening [...] I don't think we ever learned at school how to [...] how to do useful things with the language, we never learned how to get a train ticket... so that was something you had to learn from scratch. (Appendix 4: 511-512)

The different roles the learner/speaker plays when interacting with other speakers, also contributes to make language learning different. In one case she sees herself as a pupil who, as such, is expected to produce correct language. In the other, she is more like a whole person and her focus on the language is not expected to be accuracy but communication. Thus commenting on her experience abroad, she says,

During my first week, when I spent time with a family, I took it as a personal challenge to get every single word I uttered right, but when I went to Paris with the daughter of the family I found I wasn't really expected to produce perfect sentences- in fact people were surprised I spoke as much and as well as I did. (Appendix 4: 512)

Finally interaction with other speakers of the language (teachers, pupils, native speakers) and the different responses and expectations learners get from the people they interact with, is seen as relevant to the learning process and may make the two processes different. She refers, for example, to a feeling of being left behind in relation to fellow pupils:
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I found that I was going to be a bit scared that I was going to be left behind because other people had done French and then I found that I was a little behind in things like vocabulary. (Appendix 4: 508)

She feels that when she was out of the classroom and was not expected to focus on accurate language, she could be more relaxed:

I found I wasn't really expected to produce perfect sentences [in France], in fact people were surprised I spoke as much and as well as I did [...] So I think I did start to relax about absolute perfection and at the same time I began to feel more and more confident about doing things in the language. (Appendix 4: 512)

When teachers focused on accuracy, it seemed to produce negative reactions, "the tutor would spend the hour correcting, one by one, each of our grammatical mistakes" (appendix 4: 510).

The teaching materials (authentic- non authentic) may also contribute to the learning process, particularly if these are relevant or not to learner's needs or interests. While she found "a new pleasure of reading real books in French. It was a wonderful feeling" (appendix 4: 510), she found textbooks "absolutely ridiculous, they didn't have very much to do with us, our needs, interest, and we just used to laugh and think 'what silly situations'" (appendix 4: 508).

When referring to the learner's personal factors she seems to think, similarly to the other student teachers, that the internal dispositions and attitudes of the students play a very significant role in learning processes, that it is not all a question of method and environmental stimuli. Thus she shares some of the tenets of the cognitive mode of learning (See Ellis, 1990). Among these factors she includes: personal satisfaction, attitude, motivation, perceived usefulness, wanting to do well, self motivation, feelings. These factors influence, in different degrees, the process of language learning in both contexts.

As Rachel reflects on the different ways she felt motivated when she was learning French, she acknowledges motivation may spring from the activities, "I think I enjoyed it from the beginning because it seemed fun, it seemed like a game" (appendix 4: 508), but she thinks that pupils' internal motivation is a more powerful factor in successful language learning when she reflects on her own experience:
my motivation for learning French didn't necessarily spring from the way it was taught. I was quite 'hungry' for the language and I wanted to do well in class. Now I wonder what my French would have been like if all my motivation had had to come from the teacher or the class. The motivation which was produced by the teacher e.g. getting good marks in endless, highly frequent testing suited me fine but if I hadn't regarded French as an intellectual challenge, I don't suppose I might have regarded it as useful, or relevant to my needs. (Appendix 4: 459-460)

Table 4.9 summarizes Rachel's pretraining knowledge about language learning.

<table>
<thead>
<tr>
<th>Context</th>
<th>classroom</th>
<th>natural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning processes</td>
<td>intellectual challenge</td>
<td>informal learning</td>
</tr>
<tr>
<td>Role</td>
<td>pupil</td>
<td>person</td>
</tr>
<tr>
<td>Interaction</td>
<td>correcting</td>
<td>encouraging/communicating</td>
</tr>
<tr>
<td>Activities</td>
<td>translation/learning the code</td>
<td>talking to people</td>
</tr>
<tr>
<td>Material</td>
<td>irrelevant</td>
<td>relevant</td>
</tr>
<tr>
<td>Language</td>
<td>accuracy</td>
<td>fluency</td>
</tr>
<tr>
<td>Learner personal factors</td>
<td>attitude motivation feelings satisfaction/enjoyment</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.9 Summary of Rachel's Pre-training knowledge about language learning

Knowledge about language teaching

Rachel's considerations on the pedagogical aspects of classroom language, point to a concept of FL teaching, which, although completely different, should resemble, as much as possible, natural language learning:

As a teacher now it worries me that even the most realistic, meaningful type of classroom activities that I can possibly imagine, will never manage to recreate the incredible experience and excitement of learning a language abroad. I do realize that the two learning processes are completely different in terms of time,
input, practice, etc. But it worries me that I lack the power to, albeit artificiality, reproduce only the excitement of the experience even. (Appendix 4: 512)

It should be, but I just don't know how to do that, but it would be brilliant to make the classroom what, say, Wales, was for me when I started learning English, it just happened. I mean if you can make the classroom as close as possible [...] to what happens outside, the pupil might have a better chance of learning a language. (Appendix 4: 514)

Regarding the learning activities, we can categorize Rachel's comments on activities as meaning-focused, "there were conversation classes [...] and that was fun, I really enjoyed that, and that seemed to start making French more relevant, more interesting, we would get involved in discussions and do projects and things..." (appendix 4: 459) and code-focused,"I don't remember doing very many activities, it was just... grammar was presented and then we would get on with exercises in the classroom" (appendix 4: 513).

She describes the role of the teacher including subject specific (instructional) aspects, for example she hopes that she is not going to be unadventurous, "I think there are sort of easy routes to teaching languages, which may be safer, I don't want to take them. I'd like to be able to be brave enough to try different things" (appendix 4: 515), as well as more interactional aspects, for example, "I'd like to make sure that I can interest children in learning languages, that I can make languages meaningful to them and have a good relationship with the students" (appendix 4: 513-514).

Within the classroom social context, she mentions the relationships between the members of the group, teacher and pupils, and among pupils. She found that the relationship with her teachers, except in the 6th form, was very formal and distant. She remembers that they "would sometimes go out with the teacher, but that was a special treat, to be with the teacher outside the school" and that "if you wanted to speak in class, you had to put your hand up" (appendix 4: 513).

She sees teaching materials in the conventional way (authentic and non authentic), saying, for example, "I never remember playing games and authentic material was never, never brought in. It was always a textbook that we worked from" (appendix 4: 513). Rachel's knowledge about teaching content, language, has already been discussed above.
The following table summarizes Rachel’s pretraining Knowledge about FL teaching.

<table>
<thead>
<tr>
<th>A concept of language teaching</th>
<th>should resemble naturalistic learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher and Teacher’s role</td>
<td>subject matter specific/instructional</td>
</tr>
<tr>
<td></td>
<td>general/ interactive</td>
</tr>
<tr>
<td>Social context</td>
<td>T-pp relationships</td>
</tr>
<tr>
<td></td>
<td>pp-pp relationship</td>
</tr>
<tr>
<td>Teaching materials</td>
<td>authentic and non-authentic</td>
</tr>
<tr>
<td>Teaching activities</td>
<td>meaning and code focused</td>
</tr>
<tr>
<td>Teaching content: language</td>
<td>function, substance, medium,</td>
</tr>
<tr>
<td></td>
<td>relationship between speaker and</td>
</tr>
<tr>
<td></td>
<td>content</td>
</tr>
</tbody>
</table>

Table 4.10 Summary of Rachel’s pretraining knowledge about language teaching

4.4.2 Summary of Rachel’s pretraining knowledge

Rachel’s knowledge about language includes the categories of functions, substance, medium of expression and relevance. The functions she attributes to language vary according to context. In a natural context language is considered to perform personal, interpersonal and pragmatic functions. In the classroom language is seen as performing a pedagogical function. The substance of language is context and function determined. While meaning, fluency and culture form the substance of the language functions outside the classroom, the system of the language is the focus in the classroom context. The medium of expression (spoken/written) is also associated with function. The relationship between language and speaker is viewed in terms of relevance.

Her knowledge about language learning includes an understanding of the actual process and the different factors which may contribute to it (learners, the role they play in interaction with different speakers, activities, materials and language content). She discusses language learning in terms of drawing differences and similarities between formal and informal learning situations.

Rachel views language teaching as a process which should try to resemble naturalistic language learning. The factors which come into play when teaching include the teacher’s role, including instructional and interactional aspects, the
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social context (relationships between teachers and pupils and among pupils), the teaching activities (meaning or code focused) and the teaching content. The language functions in the classroom can be communicative and pedagogical. The substance is mainly the system. The medium is written and the language is seen as irrelevant to the pupils.

4.4.3 Rachel's TE knowledge before TP

The analysis of this stage was based on the second interview which was conducted before Rachel did her first block of TP (appendix 4:516-521). In contrast with the other two student teachers, she found it very difficult to cope with the time commitment of keeping a journal.

Knowledge about language

The few references she makes to language during the interview are a reaction against the formal understanding of the substance of language she is expected to follow during TP:

I am reacting quite strongly against the methodology that is being advised here [...] for example, encouraging us to begin presentation with what they call "c'est un livre" "this is a book", "this is a chair", what is this? Is this a book?" (Appendix 4: 516-517)

I just feel I don't like to say: "right this is an orange, you have to learn this". (Appendix 4: 517)

She feels this form of presentation is not related to the students' own interests:

they've sort of advised us to use a warm-up. But the reasons for using that warm up seem to be to get the students to revise language which is going to be met later in the class [...] but there is no implications about whether that warm up is also there to interest the student in the language is about to learn. (Appendix 4: 517)

The function of language in the classroom is not seen as to perform any other function than a pedagogical one, where the focus is on correct, formal language. She comments on how pupils "are going to lose motivation or not see language as something that can help them do things other than getting the question right" (appendix 4: 518).
Knowledge about language learning

Regarding language learning, we saw how in her pretraining knowledge the two processes were seen as different, although she thinks that ideally classroom learning should imitate natural learning. Now she views them as two completely different processes:

One thing that I see clearly different now, not even see it differently, but I just did not question before, was that I always sort of felt, somehow, I mean, vaguely, that L2 teaching should try to be as close as possible and imitate as clearly as possible the acquisition of your first language, I mean, I hadn't even questioned that it may be, it should be like that, and the two processes are completely different, and you shouldn't make them exactly the same. And it was interesting to see all the disadvantages that second language acquisition has but that there is a very important advantage, that the teacher can control the input and frequency of the input. (Appendix 4: 516)

While during TE, for Melani, language learning becomes a question of method or environmental stimuli, which is near behaviourist assumptions of learning (See Ellis, 1990), Rachel's main concern when discussing language learning is the learner's personal contribution to the process. She views the process as a balance between teacher intervention and learners' contribution:

I am just wondering to what extent, where is the balance on that scale, where can you sort of excerpt your knowledge as a teacher in order to choose the right kind of input, to guide the students to look into, let's say, certain texts, or certain whatever, but at the same time keeping up motivation in the student..., I just feel I don't like to say: "right this is an orange, you have to learn this". (Appendix 4: 517)

All through the interview she isolates the learners and their motivation to learn the language as the most important determinant factor in learning. Referring to the Q/A presentation she has been taught she says,

I feel first that it is not respecting the students' intelligence, in a way. Students may not have the word in the foreign language for a book or a chair, but they know very well that it is a book and a chair and to have to spend 10 minutes arguing or not arguing, but deciding that this is a book and this is a chair, seems is to insult the students. (Appendix 4: 517)

the students may be not very motivated by that kind of presentation, firstly [...] why should the student want to learn, I mean, to learn those items in the first place? (Appendix 4: 517)
Knowledge about language teaching

The main theme which runs through the way she understands FL teaching is the resistance she offers to the new method she is trained to implement during TP. In contrast with Melani, who adhers to the new knowledge, or in contrast with Beth, who also rejects it, to a certain extent, adhering instead to the way she had been taught at school, Rachel finds herself uncomfortable with the new knowledge because it conflicts with previous teacher training and teaching experiences. And, in a similar way to Beth, she feels guilty:

I hope I am not going to be too critical about this, and not just, I suppose I shouldn't really say this, but I feel tempted to experiment when there isn't going to be an observer, whereas when I am going to be observed I'll do things that he [tutor] is expecting me to do and, I don't know, I may be a bit selfish, in a sense, that, you know, I am asking for time to experiment but there are children there that have to learn, and using those children for guinea pigs which isn't perhaps a good idea. But I don't know [...] but I just feel that there are ways that children or students can learn, can enjoy lesson more even if it has to take a longer route. (Appendix 4: 520)

She doesn't believe in a methodology which does not consider the learner as the center of the learning process. Her main consideration is to motivate the students: "it seems to me that it [Q/A] is a short cut, but in which you are going to get people stuck. Pupils are going to lose motivation or not see language as something that can help them do things, other than getting the question right" (appendix 4: 518). Nevertheless she still sees the need to progress from presentation and structured practice to freer practice:

well first of all [...] the general thing was: progression from very controlled practice to communicative practice. And whereas it was very controlled teaching, it was attempted to make it a bit more meaningful and even under very controlled drilling, trying to do that in pairs where you would have the students attempt to understand each other. (Appendix 4: 519-520)

The following comments which Rachel made after watching a video of different language lessons, shows more clearly her general concept of FL teaching:

to me they seemed, it was obvious what the teachers were setting out to do, they were doing very well, and a very clear progression and were carrying out everything into different activities very efficiently. But I don't know, I didn't like the way it was done. It seemed to me that [...] if there was motivation there it was the motivation that would come for the good students, for the students who wanted to get the answers right to please the teacher, and all right there were
games, but they were games that again, the main interest in those games was getting the answer right, not to make that language their own and using it to do things... in fact the classes were also extremely teacher centered and I’ve been obviously trained to see a class [...] to show some progression, not only in the difficulty of the tasks being asked to students but also progression from very controlled activities to free activities and I didn’t see that at all. Yes the tasks were getting more difficult but they were very, very controlled tasks... (Appendix 4: 518)

In Rachel's view these teachers were more concerned with teaching and teaching efficiency than with learning and learners. In contrast, it seems that for Rachel teaching is a question of maintaining a balance between respecting and fostering pupils' independence and the inevitable intervening role of the teacher. This intervention is seen particularly as organizing activities in a progression which goes from more to less control, progressively increasing language difficulty and pupil autonomy.

Rachel's comments about teachers elaborate on her pretraining ideas. A teacher's generic or interactional aspect includes organizing activities, motivating pupils and providing reasons for students to engage in the learning activities,"the idea that you would never, you would never give a child to read a text without a reason" (appendix 4: 520). Other generic aspects of teaching make reference to the number of pupils in the classroom, the relationship with other teachers and discipline,

I am a bit worried about the size of the classes, there seems to be about 40 pupils [...] To be honest the things that worry me most are the things that could happen outside the classroom: relationship with other teachers or so, discipline problems I am a bit worried about. (Appendix 4: 521)

The subject specific aspect (instructional) involves the teacher choosing the right input, dealing with "things like correction [...] putting different emphasis on getting the things right in different kinds of activities" (appendix 4: 520 ) or the way activities are carried out, for example how to teach writing:

It seems that writing here [during TE] seems to be just copying, just copying from the b/b. I've seen no encouragement to get students to write with any purpose other than copying and getting the word right. (Appendix 4: 520)

Yet, the following quotation shows the interplay between the specific and the general aspects of the teacher's role, which are at times difficult to keep separate,
And I am wondering to what extent, where is the balance on that scale, where can you sort of exert your knowledge as a teacher in order to choose the right kind of input, to guide students to look into, let say, a certain text, or certain whatever, but at the same time keeping up motivation ...(Appendix 4: 517)

4.4.4 Summary of Rachel's TE knowledge before TP

Rachel reacts against the new knowledge about language presented during the TE course, mainly because it only has a pedagogical function which focuses on a structural or phrasal analysis of language.

Her concept of language learning has changed in that she now views formal and informal language learning processes as completely different.

She also reacts against the new knowledge about language teaching. She doesn't agree with a method of language teaching which does not put the learner at the center. Teaching is seen as both interactional and instructional activity.

4.4.5 Rachel' relationship between knowledge and practice during TP

4.4.5.1 Teaching

The material on which this analysis is based is the total of the three cycles of observation (appendix 4: 528-533, 542-551 and 558-565), preobservation interviews (appendix 4: 524, 539 and 555-556), post observation interviews (appendix 4: 534-538, 532-554 and 566-568) and the SR written reports Rachel wrote on her on-going thought during teaching, her description of her teaching, and the theoretical considerations underpinning her practice on one of the video-recorded lessons (appendix 4: 569-577)

Knowledge about language

The way Rachel talks about language and uses languages in the classroom suggests the following conceptualization.

The language function is mainly pedagogical, in other words, language is seen as the content to be transmitted which is practised and acquired during classroom activity. The other dimension of language, even if Rachel does not comment much
on it, is language in its communicative function, which acquires an interactional or managerial aspect when it is used to give instructions and maintain discipline. The language used for the first of these functions is the FL, while it is the MT which dominates the second, with some exceptions, for example to give praise, or give very simple instructions which are conducted in the FL "muy bien, vale, vale, muy bien, a ver" is repeated throughout the lessons. The following extract from one of her classes shows language in its communicative function with Rachel playing an interactional role and using MT:

Just wait a minute because there are still people copying the top bit... Those people who have finished copying can begin on the worksheets [...] so what you think me pone means? [...] This is what we were looking, this is what the question we were asking means [...] all look at the worksheet..., the first exercise all you have to do is look at the symbols, read the sentences and mark with a tick or a cross. Decide whether the sentences are right or wrong. (Appendix 4: 528-529)

A pragmatic function of language can also be seen in the linguistic functions, which are practiced as phrases. This exemplifies language which is used to do something, although it is treated as structures:

it's all about the language of being ill and buying medicaments at the chemist [...]. But I thought I'd do it the other way round. I thought I'd start off with the illnesses [...] so that then you could go to the chemist's and, you know, have the language of illnesses ready for going to buy something for your illness. So last lesson we did ten go dolor de cabeza, ten go dolor de estómago and now we're going to do the structure of me duele. (Appendix 4: 555)

Language when performing its pedagogical function has the system (competence), explicit structures (performance) and some meaning as its substance, as the following comments on her teaching show:

But it still worries me, do they know that, why are they using the plural there? Do they know why are using the singular in 100 gramos de merluza?, for example. I tried to ask at the end of the presentation of food why we'd say, try to elicit, but there wasn't time, I am not sure that things are so clear [...] I don't know whether they would be able to take those items and use them in a different context when they need to use the article [...] if I had had the class from the start, I would have made sure that they had some kind of awareness of gender from the very start and they would be able to make links with the articles, with different kinds of articles, so that it didn't have to be taught every single time when the word came out. (Appendix 4: 536-537)

they expect them to learn phrases and you find that they know how to say them, they know when to use them but they are not quite sure how to handle the
Regarding the medium of expression, Rachel considers language to be made up of different skills, "I know that they would have done writing, listening and speaking anyway and some reading obviously from the sheet [...] So I hope to have covered the four skills" (appendix 4: 535), which are supposed to be practiced in a specific sequence, as we can see from the following instructions in her lesson show:

R: don't write it yet, I think it's quite important that you learn how to say it and how to hear it and then you write it down [...] Don't write anything down, I know it's tempting, but try not to. If you can remember it now without writing, you would learn how it sounds. (Appendix 4: 545)

Like the rest of the student teachers, she does not work with the differences between the spoken and the written language, "the [written] worksheet is very much like a written Q/A progression" (appendix 4: 556). She uses writing to consolidate pupils' learning of structures which had been practised orally as she comments:

Students then copied new language into their vocabulary books. This ensures that they have a correct record of new language. It is also the first time that new language is seen in written form, thus rounding off their grasp of the language and allowing them to fix it in their minds more permanently [...] The worksheet provides practice in the four skills. (Appendix 4: 575)

Knowledge about language learning

Rachel's concept of classroom language learning seems to be a question of learning the code, of acquiring language competence by mastering the underlying rules of the language. She expresses doubts at different times in her interviews about whether by only focusing on and practicing the explicit forms of the language pupils would also acquire the underlying rules and would be able to use the language in different contexts. She comments, for example that "they did very well and [...] they know how to use all this language, but I don't know if they know anything about it when you teach it in another context" (appendix 4: 537) or "how to handle the language if they are left on their own with those phrases. Will they know how to put the bits together? (appendix 4: 552):
I think it is difficult in the sense that, it is not difficult in that they have been able to use the language, they know how to use the new language... How to take these food items and use them in a different context when they need to use articles, that's the problem. Whereas I think that [...] if I had had this class from the start, I would have made sure that they had some kind of awareness of gender from the very start and they would be able to make links with the articles, with the different articles. So that it didn't have to be taught every single time when the word came out. (Appendix 4: 537)

Other assumptions about learning underlying Rachel's practice (oral Q/A and written w/s), have to do with a gradual process first of recognition, production of new language (vocabulary and structure), consolidation and reinforcement:

well basically, the oral question and answer just takes them very gradually [...] from the mere recognition of the language to the full production orally. And then the worksheet, in a way, reflects that as well; takes them from merely having to recognize the new language, by ticking or crossing where they are not expected to produce anything yet [and then] they produce the language they are going to produce by copying and then the next activity they have to, not to exactly copy, but they'd be able to use a model and change it and then the very last activity that they are expected to produce it on their own. So the idea is that everybody can start, and everybody will be able to recognize when they are copying, and most people would be able to gradually use the language on their own, just very gently... (Appendix 4: 536)

The need for limited input controlled by the teacher is an issue which appears repeatedly as it does here in the SR:

I had decided to present a new structure AND new vocabulary and was aware of the dangers of this choice. However the rhythm of the textbook and department meant that I had to keep up quite a brisk pace. If I could really revise GUSTAR well, and if I could make students see that GUSTAR is very similar to DOLER then what might be considered an overload of language could in fact result in a fairly smooth lesson. Students would not be dealing with new language alone, but could build upon their old knowledge of GUSTAR. (Appendix 4: 572)

The progression can be seen in the way she explains her plans to the pupils and in the way she describes her teaching,

R: OK. What we are going to do today is to do a very quick revision of me gusta, te gusta, le gusta, that you are comfortable with now. Then we are going to move on to parts of the body and how to talk about things that are hurting. (Appendix 4: 558)

Students were led from fairly undemanding choral repetition through to individual production of target language after target question. The gently graded
Q/A allows students to form hypotheses about the new language, they have the opportunity to test these hypotheses and patterns and eventually are comfortable enough with these patterns (their meaning and form) to produce them on their own. (Appendix 4: 575)

The first exercise on the w/sheet requires students to merely recognize...W/s 4: production of target language with model: students modify language presented to them, thus producing language with a model before them. This task is again, slightly more demanding than the previous one. Pupils are now working with VOCAB + STRUCTURE, but they have the support of the sentence before them as they produce the target language [...]

W/s 6: written production of target language. Students now only receive a visual clue and they must produce the target language on their own without the help of a model. a much more demanding task. (Appendix 4: 575-576)

W/s 7: Oral production of target language. Students now work in pairs- they are free to choose which ailment they will talk about and have the opportunity (to a very small extent) to make new language 'their own' by their choice and by communicating their choice to a partner [...] W/s 8: written production of target language. Consolidation of language. Students are now free to produce their own written sentences -within the confines of the language of ailments. This activity is less controlled in the sense that there is no one correct answer- students are free to make up reasons for not going out and have no model to copy from. (Appendix 4: 577)

Finally she emphasizes the need to revise language. It ensures that pupils do not see new language before they have learned previously introduced material properly. For example, in her SR written record, Rachel wonders whether she is "labouring the point too much? No, I must be sure that they have absolutely no doubts about this known structure" (appendix 4: 569). She provides the rationale for this in the 3rd ST activity as follows:

Q+A with known language. I wanted to ensure that students felt comfortable with known structure so that shift to new structure is easier. [...] Once they have been able to verbalize their hypotheses, they will be more ready to build upon them [...] Once a very thorough revision of gustar was carried out I felt I was able to move on to presentation. [...] once the links between these two verbs were established, the presentation was straightforward enough and students coped very well. (Appendix 4: 572)

So underlying Rachel's practice there seems to be an inductive view of language learning. The language system would be acquired by a process of practicing structures independently from their rules and their meaning, after that a rule is provided and later meaning is explained in reference to L1, as is reflected in all three transcripts of her lessons. Yet she argues strongly for a focus on the system in her discussions.
Other dimensions of Rachel's conceptualization of language learning are the learner's personal factors (particularly different abilities and learning rhythms). To deal with this mixed ability situation she doesn't expect everybody to finish different activities at the same time,

yes, you've probably noticed that there is lots of different speeds of work here. There are people who take ages and there are people that when people are on the second exercise ..., the table on my left was already practicing the dialogue. (Appendix 4: 554)

Or as she writes in her SR, she expects different levels of achievement from different pupils, "only more able pupils will be able to complete the table in Spanish. This is fine since I'm interested in pupils merely understanding language. If some can do more than this, all the better" (appendix 4: 571).

She also takes into account learners' previous knowledge and abilities for example, "I don't know how well they knew it or whether they sort of thought about things like gender" (appendix 4: 534) or "in this particular lesson ..., well I thought that the difficulty would lie in that there were a lot of items [...] and I was wondering whether they would be able to absorb all of that" (appendix 4: 536).

The other reference to learner's individual factors (motivation, interest) in mediating the learning process comes up in her written record of her on-going thoughts while teaching:

Will they feel motivated by this explanation? Will they want to learn this language? Do they feel this language will be important to them? [...] Are they tired of practicing food and likes/dislikes? or do they get pleasure from being able to use correct effective Spanish? [...] Good. They offer without my asking known language. Does this mean they don't mind language being practised again and again but feel reassured by their own language? (Appendix 4: 569)

Finally another question Rachel reconsiders is how the learning activities (variety versus familiarity) affect what pupils learn:

apart from the obvious question of time, that they do it quicker [...] I am not sure about that, I wonder whether, I haven't really thought about it, but perhaps the fact that they know what they have to do, they've got used to a routine, makes them think less about the language [...]. Yes, they know they are going to start off with a matching exercise and the second is an option. Whether they think "oh, I know what this is, and I know that I am going to get to, I've got a 50/50 chance of getting it right, so I just go quickly through it", I don't know [...], whether, maybe, surprising them with a different kind of exercise might
make them focus on the language more, rather than on the routine... (Appendix 4: 567)

She weighs some of the aspects she had considered important in the learning process, (e.g. making the activities relevant to pupils) against the classroom constraints (e.g. time) and concludes that perhaps it is more productive to give them time to practice rather than give the activity a personal dimension,

I thought this way would be better because it would help them to revise and make the activity more personal, that they themselves would choose what they wanted to have in their menus, so that later they could work with their menu, but perhaps thinking about it now, that has taken up a lot of time. It was good for them because it has made them look up again food vocabulary. They were going through the books and with their vocabulary books and they have been working very nicely, they have filled up the menu, but perhaps they have taken too much time to do that [...] Yes, then, perhaps, I don't know, the interest of creating something would have been lost, but having presented them with an already made menu would have meant more time to practice the dialogues. (Appendix 4: 553)

Knowledge about FL teaching

During TP she is involved in and discusses language teaching in its double aspect (instructional and as interactional). Language teaching also seems to be a process of keeping a balance between what the teacher plans to do in the class and what pupils know, in other words, the pupils' learning rhythm and the teachers' pacing, as the following comment on her lesson shows:

but what worries me is how long the activities are going to last it's very difficult to tell. Like... I had a little pair-work activity planned and I didn't have time for that. But I sort of, I tried to overcome that by leaving that kind of activity as an option activity at the end of the class. (Appendix 4: 535)

The way FL teaching is understood and carried out, depends on the substance of language the teacher is dealing with. When language is presented as structure, it is done in the following stages:

- revision of known language
- limited input controlled by the teacher
- repetition after correct model presented by teacher
- oral presentation of new language by a Q/A series
- oral practice with teacher's reinforcement
- written consolidation
- oral checking of written worksheet
- freer practice (oral and written)
This sequence of the instructional aspect of teaching is described and a rationale is provided for it in the last of Rachel's SR written records (appendix 4: 572-577).

Evidence of this process can be seen in her teaching and interviews (see, for example appendix 4: 528, 537, 542, 551, 556, 566).

Her concern with making sure pupils understand the underlying rules, language competence, is reflected in the way content is dealt with in the classroom:

R: a very common mistake which was, some of you felt a bit confused about when to use tomo and when to use toma. So make sure that you know the difference, for example, if I am talking about ...what I have for breakfast... I would say para el desayuno... tomo o toma? [...] But if I am talking about what A has for breakfast because I know what she has for breakfast, I would say [...] P: Para el desayuno tomo, toma. R: are you sure? P: because it's she. T. toma cereales. (Appendix 4: 543)

R: why do you add an n there? Yes? P: Because there is more than one. R: Yes, because there is more than one. That's right. Gambas, plural. No me gustan las gambas. (Appendix 4: 558)

The following extract from her lessons reflects Rachel's concern both for structures and rules. Structures are dealt with in order to make them accessible to pupils by presentation and practice. She elicits the grammar rules inductively:

R: [similar practice before with other kinds of food] Vale, ¿te gusta la tortilla francesa. X? ¿a X le gusta la tortilla francesa? P: Si, si le gusta R: La tortilla francesa, si le gusta la tortilla francesa a X. Y a ti, te gusta, a ver, ¿te gusta el gazpacho? P: No, no me gusta el gazpacho R: No te gusta el gazpacho. And ¿le gusta el gazpacho? P: No le gusta el gazpacho R: Very good. So we've got two things to remember there. What are those two important things to remember about me gusta, le gusta? P: (says something) R: Good, when we are talking about more than one, plural, something you like, you have to add one n, me gustan las gambas, los tomates, las verduras. And then we have to be careful because if we are talking about what somebody else likes you have to add, we have to change me gusta for le gusta. (Appendix 4: 557-558)

The way meaning is dealt with and conveyed to pupils is, more often than not, by translating it into the MT,

I don't like using [...] English translation for the language I am presenting to make sure that they've understood what [...] those items mean. But I have to [...] I really don't know whether those items that I've presented them which are supposed to represent the new language, I am not sure whether it is clear enough with just the symbols. I couldn't make 'hake' clear enough to represent hake. So
I had to give them translations. It'd be nice to find another way of doing it, without resort to English. (Appendix 4: 537)

R: Now let me just check that you know what all this means. ¿Le duele la cabeza? C: Si. R: No, si, le duele la cabeza, but what does it mean? ¿Le duele la cabeza? C: headache R: headaches. ¿Le duele la garganta? C: the neck R: Not, not the neck, the throat. What about this? ¿Le duele el brazo? C: arm. (Appendix 4: 561)

[Later on in the same lesson] it's hurting... now when you say le duele la cabeza, are you just saying headache? PP: head aches. R: Well, more exact he, his head hurts. All right? Literally... so don't just write headache in your vocabulary books. His head is hurting. His leg is hurting [...] it may seem very similar to say he has got a headache, and you may think there is no difference, but in fact next lesson we are going to learn how to say that. And it's a difference, it's a different phrase all together... now although it may seem very similar, please now write his head hurts. (Appendix 4: 561)

In the last quotation we see that, in order to make sure that pupils associate the FL phrase with the exact equivalent in the MT, Rachel makes pupils use an expression which is unnatural in the MT. Nevertheless in all the interviews Rachel showed a dissatisfaction with this way of dealing with meaning as we can see here in the following:

Students are not yet producing the target language but are only asked to recognize the meaning of this new language and make a decision about it. Again, I am not too happy about the use of English here, but this particular class had no E2L pupils and the checking was quick and efficient. (Appendix 4: 574)

Yes, and that's something that worried me a bit and perhaps translating, after the presentation isn't the best way to do it, but at least I make sure that they know what they mean. (Appendix 4: 552)

Another aspect is that she deals first with oral and then with written language in the same way, as we have already seen in some of the quotations above.

Errors and mistakes are corrected and correct forms reinforced by the teacher, as in the following example:


Among the aspects of teaching as management or interactional activity, of particular relevance is her choice of which language to use for different activities. She
basically uses the MT for explanations of content and general managerial moves and the FL when she focuses on the language as content, for praise and in minor instructions. The following examples from one of her lessons illustrate this pattern:

R: all right, number three, you actually have to write the whole sentence out yourself because the one...you have to correct that...Do come to number 5 if you've finished...C. was saying before wouldn't you say por favor? Yes, you would say it if you wanted to, so if you want to write it down, at the end of the question or at the beginning of the question... (Appendix 4: 531)

well, now look at exercise number 4, you are going to hear three conversations at three different shops. Three ladies are doing shopping. What you have to do is to write down what they're asking for, how much they are asking for and how much it costs. (Appendix 4:532)

R: de primer plato? you've actually been away, have you got the worksheets? Next time, make sure that I give you the worksheets, all right? (Appendix 4: 543)

Another aspect of Rachel's teaching as an interactional activity is the way she monitors pupils working rhythm, guides pupils when they are working on their own or provides individual support. Observation and interview data provide evidence:

R: come on. One more minute, have you nearly finished? One more minute...right, have you finished? (Appendix 4: 548)

I enjoy going round and guiding pupils at different stages of their activities [...] I like it when J offers answers in class. She is fairly able but has a tendency to give up at times, I heard her offering an answer just now, though I received the answer from another pupil, so I turn to her now for the next question which I know she'll be able to answer correctly, thus building up her confidence. (Appendix 4: 571)

I do worry about K. She is very lazy about work. I want to 'look after' her and encourage her without being at all punitive- this might scare her away from Spanish altogether. (Appendix 4: 570)

From the above, we can see that it seems that Rachel is primarily concerned with the instructional aspects of teaching, with how to make the content accessible to students. It seems that, in order to increase her instructional role (providing pupils as much opportunity to practice as possible), she limits the interactional role (instructions, explanations) to the minimum by getting the pupils practicing as quickly as possibly and establishes a set pattern of work to minimize the need for explanations and maximize practice time. She thinks that,
they are used to the, to my way of doing a lesson [...] There is always a ticking exercise, there is always a matching exercise, there is always an exercise that you have to write a sentence. They are familiar with that routine, that's why they can do it more quickly. (Appendix 4: 566)

4.4.5.2 Summary of Rachel's teaching

In summary we can say that the way subject matter is implemented in the classroom is in the form of structures and rules, communicative functions (pragmatic), different skills and meaning, mainly performing a pedagogical function, but also incorporating some communicative dimension. Although oral and written activities are implemented, they do not respect the differences between spoken and written discourse.

**Learning a language** for Rachel is a question of learning the linguistic code by a process of first recognizing and then producing the language (orally then in writing). But she has misgivings about the effectiveness of concentrating on performance in order to acquire language competence. The considerations about the learners have to do mainly with the mixed ability reality she finds in the classroom, which she caters for by allowing pupils to do activities at different rhythms and times.

When teaching, Rachel engages pupils in having as much practice in the FL as possible, focusing on the correct forms provided by the teacher and when mistakes occur, it is the teacher who provides the correct form. The way the subject matter is put across to the pupils varies according to the aspect of the language which is being dealt with. The formal aspects are dealt with by practice of the forms of the language and an explicit explanation of the underlying rule, which will lead to knowledge of the code. Meaning of vocabulary is dealt with by translating into the students' mother tongue. Practice of these two aspects is done separately, as we have seen in the previous extracts from her lessons, she first deals with the structures and forms and then she translates them into the pupils' language mother tongue. In her pretraining knowledge she expressed a dislike of this separation. The communicative functions are treated as structures, although at times she draws on the pupils schematic knowledge and places the language in a real context.

4.4.5.3 Relationship between Rachel's knowledge and Rachel's practice

By the time Rachel goes to TP she has already formed an understanding about
language in which her pretraining ideas are not valid for the classroom context, so now she discusses about and teaches language in a way which tends to perform a pedagogical function focused mainly on structures and grammar rules.

Regarding language learning, Rachel seems to favour a view of language learning which emphasizes a deductive knowledge of the rules of the system but her practice's underlying assumptions are nearer an inductive approach with an emphasis on explicit language behaviour, as she has learned during TE. She complements this with a real conviction, already present in her pretraining knowledge, that the learner should be placed at the center of the learning process.

Regarding language teaching, she partially draws on the knowledge she has acquired during TE. She comments that she agrees with the principles underlying the method she has learned, but she does not agree with the way it is implemented.

4.4.6 Rachel's post Teaching Practice knowledge

This analysis is based on the last interview (appendix 4: 578-586)

Knowledge about subject matter: Language

Rachel sees that language in a real context performs a communicative function and serves to gain knowledge about the world:

Well, I suppose, in part, [language] is a way of communicating; also it's a way of gaining access to knowledge, because you begin to learn things at the same time as you learn about language and also you use language in order to develop that knowledge you have about the world in general. (Appendix 4: 578)

At the same time she doesn't think that communication is possible in the constraining context of the classroom and the method has become the best way of dealing with unsatisfactory circumstances:

what you are doing with language during Q/A is not, by any means, language for communication [...] and that was one of the reasons why, at first, when I entered the course I really resented using that kind of activity, that kind of presentation, but see it now as a necessary step to later achieve use of language for communication in the classroom [...] it's very controlled and contrived kind of communication, it is the teacher mainly who decides which kind of language
is going to be used by the pupils and even when or at least the activities which I have used [...] when you try to make these activities quite communicative, or the most communicative activity in my own lessons can only sort of beginning to be communicative. I mean, even when I allow students to make decisions about the language they are going to use I am still defining very clearly, I mean, I still have my own boundaries of [...] the language that they can use within those boundaries [...]. In a real situation, in real life that wouldn't happen, there would be all sorts of unexpected things that could take place, but I mean, I suppose it's a good preparation, I don't know, for a real situation, I don't know how you could achieve that kind of real communication in a classroom. (Appendix 4: 580)

She sees more definitely now classroom language as a school subject with value of its own within the curriculum which can, for example, help pupils with general educational abilities. She thinks that,

of the ways I've definitely changed in my ways of seeing language is that I see language much more now as a discipline, that's of value in itself, even if the person isn't going to go abroad or isn't going to actually speak that language with other people from that country, it's in itself a valuable discipline that is going to help pupils understand the way they function in their first language, and it's going to give access to a whole lot of skills which are used not only in speaking but also in dealing with knowledge in general and in acquiring knowledge like... you are not only aiming to help pupils to communicate but you are aiming to help them see patterns and the discipline required in helping students to see patterns is a discipline which is going to be useful across the curriculum. (Appendix 4: 578)

Regarding the substance of language the references she makes are about teaching language as structures and as a code, something about which she has doubts as it may take away the pleasure of learning the language, and about using it for genuine communication, yet she has observed that pupils still enjoy manipulating language, as seen in the following quotation:

again I am reminding them of the pattern, eliciting the pattern from them and I always remember feeling a bit reluctant to do this because it is going to take away from the pupils the pleasure of learning a language [...], I don't know, maybe students see that language will be more fun if it was used for communication, maybe they resent going through these steps, but they don't, that was something that I was surprised at, they seem to take pleasure in working with these ideas, in working with putting the pieces of the puzzle together [...]. I suppose it is like a game for them even if they are not communicating in this language they still get pleasure from seeing that they have got something right and that they have been able to play with words and so even if they haven't communicated anything they still..., there is some kind of challenge for them. (Appendix 4: 581-582)
Knowledge about language learning

She now sees learning language as two distinctly different processes depending on the contexts in which it occurs, although she sees Q&A as a way of making up for the lack of natural conditions in the classroom (e.g. time):

I suppose in everyday life if you were to go to a foreign country and learn the language there you will come up against a new word and then you'd wait however many days until that word occurred again and you were able to sort of link the two appearances of that word and start to make some conclusions about what that could mean and then a month later you might feel that you want to use that word and so you bring it back and try to use it and see what the result was in a conversation whether it was appropriate or not and if it wasn't you'd try again later on and the Q/A I suppose is doing that but in a very concentrated and short time [...], taking the students through all those steps but very quickly and also you've made sure that is, that that one word is surrounded by others which can be very easily compared to that one word and you choose items which are going to work with each other. (Appendix 4: 579)

She also views classroom language learning as a question of going from "being able to recognize a pattern to being able to play with it and actually produce it" (appendix 4: 578-579).

As a result of coming to terms with what she says has seen when working in the classroom is that her idea of motivating pupils has changed:

I still have this notion that it would be best if they were motivated by the idea of using language in a communicative way. And I suppose it's nice that they can get pleasure from just working with language as well, even if it is not used for communicating. (Appendix 4: 582)

Knowledge about language teaching

Rachel's considerations about language teaching are again more directed towards the instructional than the interactional aspects. First, her concept of language teaching includes broad, multidisciplinary objectives, like helping pupils with general skills which "would be useful throughout their lives [...], developing memory" and making them "aware of their own language" and "the language of others". The more specific aspects of language teaching have to do with,

making sure that the teacher is responsible for really making patterns really very, very evident and the teacher is responsible in selecting those items and then gradually allowing the students to make those ideas and those words their own and gradually loosing the control that the teacher has over the language.
She does not think pupils will necessarily use the language they learn but feels there may still be a future pay off:

even if they are not going to use French or Spanish when they leave school, they would still be able to look at their own language and languages of others and being able to react to that language accordingly or to adapt it or to use it more... (Appendix 4: 581)

Second, her comments about the method she has been trained to use are particularly relevant. She mentions that towards the end of TP,

I felt that my lessons were becoming very mechanical because I seemed to have found a way, [...] we were shown a way here of going through a lesson of presenting and practicing language which I found was quite successful and it was very easy to stick to that method, but I did feel that it was a bit mechanical in the end. (Appendix 4: 532)

Regardless of her acceptance that the method is successful, she is aware of the possible narrowing effect it may have in her professional development, in case she "should stick to the same patterns of lesson for, you know, years [...] even if probably there are other ways and there is still a lot more to think about and experiment with" (appendix 4: 532).

The method has helped her develop a view of language that divides her old unitary conception into 'language in the classroom' and 'language in general'. It has given her a vital sense of professional security, "that method has sort of defined a way of carrying out a lesson with confidence", but she is worried that it may also turn into a straight-jacket:

but I don't know whether it'd stop me from looking at other things and from, I don't know, developing other ideas, examining other ideas, I mean I am frightened of the sheer bulk of the timetables and, you know the exhaustion that it would drain me and I wouldn't have time or energy to consider other possibilities, I'd like to, but I don't know. (Appendix 4: 584)

She is as yet unable to go beyond the method. She cannot deny its efficiency:

I don't actually like the Q/A, but I like the way it guides students through different processes and I like the way it guides students towards from just being able to recognize a pattern to being able to play with it and actually produce it. (Appendix 4: 578-579)
She admires the control and pacing it gives:

I like what it is trying to do and I don't know... well to actually present pupils with very specific language items which you have chosen because you have decided that they are the, ... well, of an adequate level and an adequate quantity for them to handle at that particular moment. (Appendix 4: 579)

Yet she still finds the situation artificial due to a lack of real communication and she doesn't like the way it is carried out:

I don't like standing in a class with a flash card and asking question which I know they have the answer to, I don't like that way of doing it, but I like what it is trying to do [...] I don't know that's something I'd like to go on thinking about: see if there is an alternative way of going through those same steps but in a different way. (Appendix 4: 579)

4.4.7 Summary of Rachel's post TP knowledge

What is relevant to point out about Rachel's post TP knowledge are the following aspects. Firstly, she views that language outside the classroom has a number of functions, while in the classroom nothing beyond a pedagogical function with the emphasis on patterns and structures could ever be achieved. Secondly, language learning in the classroom is seen as a process which goes from recognition to language production by means of a Q/A series which make up for the absence of natural conditions in the classroom. Pupils' motivation in the language is seen as more important than other external motivations. And finally she agrees with the underlying assumptions of the method she has learned during TE but she disagrees with the way it is actually implemented.

4.4.8 Rachel's knowledge growth during an initial TE programme

When Rachel frames the content of her thoughts, it is interesting to notice the dynamic or dialectical position she takes. She challenges her own pretraining beliefs but at the same time she checks the TE new ideas against her past short experience as a teacher and previous training. So, in general terms, it seems that in fact her experience of becoming a FL teacher is a sort of conflict between her pretraining knowledge based on her ample experience as a language learner, and on having completed an RSA Preparatory Certificate in TEFL and the new knowledge presented to her during the course of the year. This conflict is made manifest by her struggle between her desire to experiment during TP and the pressure to do
things in a particular way. Subsequently, dealing with this conflict has given her a sharper insight into teaching and ways of approaching teaching.

Her understanding of language from her pretraining knowledge seem to follow a process of conceptual reduction when TE begins which takes her from considering in the first interview a wide range of language functions, the substance of language, the medium of expression, with some reference to the relationship between the user of the language and the kind of language used (relevance) to seeing language before TP as performing a pedagogical function and having patterns and structures as substance. By the time she leaves the course, she has rejected some of her pretraining ideas and adopted some of those of the course. She seems to argue, implicitly, that the constraints the classroom imposes do not allow for developing language in functions other than the pedagogical. Her subject matter knowledge develops from pretraining knowledge and an initial rejection of TE new ideas about language to transformation of her pretraining knowledge by effective implementation of the new ideas during TP and a final rejection of her pretraining ideas about language.

She evolves from a view that classroom learning processes should imitate naturalistic learning as closely as possible at the beginning of the course to a view that they are two different processes. She also goes from having a cognitive approach to the learning process, at the beginning of the course, in which the learner plays a significant role to basing language learning on the teachers' external intervention. Basically she seems to go from a learner center approach to a teacher centred approach.

At the same time that she agrees with the underlying principles of the method in which she has been trained, she disagrees with the actual implementation of those principles through Q/A. A possible explanation may be that that is the way she finds of reconciling the new TE knowledge with her existing pretraining knowledge. So in the end there seems to be a divorce between what she believes in or her knowledge and the way she teaches. She sticks to the underlying principles and thinks about the possibility of finding new ways of conducting practice. At the same time the seeds of future problems are sown as she clearly does not feel her practice (the method) matches her ideas (largely based on pretraining knowledge). She will find this conflict hard to resolve because no attempt has been made to investigate pretraining knowledge.
4.5 Ronan

4.5.1 Pretraining knowledge. Origins and content

4.5.1.1 Origins

His linguistic background is very similar to the rest of the students, in that he learned Spanish and French formally (from secondary school to college) and informally (in natural environments). It is these experiences on which the origin of Ronan's pretraining knowledge rests. The data is based on the interview which took place at the beginning of the year (appendix 5: 586-595).

4.5.1.2 Content

Knowledge about language

The dimensions (see table 4.11) which shaped Ronan's pretraining knowledge about language could be categorized in the same way as that of the rest of the students'. The main functions performed by language are: communicative or putting one's ideas across and pedagogical. These two functions are contrasted in the following quotations, the first referring to an ideal situation, the second to Ronan's own schooling:

the one word... which keeps coming up again and again is communication, which isn't just language. [It's] being able to communicate as a teacher and being able to teach people to communicate in a different language [...]. Language teachers should be better communicators because they deal with the stuff in what we communicate [...] (Appendix 5: 592-593)

So hopefully as a language teacher, I would be able to have language into its context and hopefully that would be enjoyable for the pupils and I hope it would be enjoyable for me as well. (Appendix 5: 591)

there was not much oral expression, there was basically sitting down in front of your exercise book and writing out little sentences, and getting your very basic, very rigid grammatical background, which does have its advantages, I mean, you need to know that stuff but perhaps I would have appreciated a more concentration upon language as a more sort of dynamic force and in context. (Appendix 5: 589)

A new function which has only been mentioned by this participant is language as a form of play and entertainment, "there were times when we used to sit around and
just laugh about words and things, that is why language was used as a great form of entertainment" (appendix 5: 593).

We can also see an interdependence between the language functions and their substance. On the one hand he sees the substance of language as grammar when he was at school where:

we weren't taught many things about Spain, about the Spaniards. So it wasn't a live subject [...], it was just another..., it was like Latin: you learn your verbs and you do your homework [...] I think this is a bad thing. (Appendix 5: 599)

This contrast with his current view of language as "vibrant, it's changing, it has rules, but rules are broken [...] is more like an energy form, it's the way we get our ideas across, it is a discipline and an art and everything together" (appendix 5: 593). So the substance of language should be "oral proficiency more than anything else", "being able to put language into context with studies of the society" and natural and distorted pronunciation, because he presumes that,

if we had started listening to real Spaniards speaking it on tape, etc from the very start, it would have been a little bit harder at first but it would have led to a better standard of speaking. (Appendix 5: 594)

Language is discussed as having two different means of expression: oral and written, although he emphasizes the oral skills (speaking and listening).

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Table 4.11 Summary of Ronan's pretraining Knowledge about language

Knowledge about language learning

There are three pillars on which Ronan seems to base his conceptualization of language learning (view of the language learning process, the learner's contribution and context).
He discusses language learning by contrasting L1 and L2 learning as follows,

one starts off experiencing language without realizing what language is, you are born into it and you imitate it and you use it and become more proficient in it, you are able to manipulate it. In my case I was monolingual up until I went to school. My first experience of another language was with Irish [...]. Then I started Spanish, but in my experience you don't think of it as language, it's a word, it is a subject, it's a... that has to be learned and it hasn't any dynamism in itself until you get the proficiency where you can express yourself in some way... So as I progressed I became more aware of language. (Appendix 5: 593)

The contribution of the learner's personal factors to the learning process includes aptitude, attitude and role played by the learner. Reflecting on his own experience he observes "I obviously had the interest in Spain and Spanish and I find that comparing it with my other subjects, Spanish came fairly easy and I just enjoyed it, I find that I always enjoy things that you can do well, I think, with a minimum of effort" (appendix 5: 589).

He observes that a natural context contributes positively to the learning process. He contrasts the passive role of the learner when "sitting down in front of your exercise book and writing out little sentences and getting your very basic, very rigid grammatical background" with his experience in Spain which "gave me the enthusiasm to make the best of my learning (appendix 5: 589). In general he values the possibilities that the experience of learning language in a natural context can offer to the learning process. It can enhance the learner's personal interest and disposition and it offers the possibility of dealing with language in context, for example:

TV was one of the best ways I had of learning Spanish, especially when I went to Mexico. I watched a lot of TV for two months when I arrived. I found that I learned things extremely quickly and it is also a good way of getting the mood of the society. (Appendix 5: 591)

Nevertheless he also sees how, at times, a full immersion may prove counterproductive in learning the language as it may be a very frustrating experience if the learner can't understand:

I was interested when I went, I enjoyed the experience but of course very frustrating. You automatically think when you don't understand the language, I was fairly young as well, you get paranoid if people speak in a different language if you are in their company and you might think that they are talking about you, but it was good. (Appendix 5: 590)
Knowledge about language teaching

Ronan's understanding of language teaching includes firstly a conception of teaching which can be categorized as double-edged. On the one hand we have the instructional aspects in which he sees himself as using the FL as the medium of instruction and presenting a particular view of language. On the other hand, his interactional role involves issues of social control, relationships with pupils and creating ways of motivating them. For example he comments that he would like to know how,

to be able to command their attention, to deal with them in a disciplinary way and to be able to structure classes, so as to... leaving pupils knowing exactly what they have to do and not being bored. A matter of being able to get the control that you need in the class to be able to teach it the way you want in the class. (Appendix 5: 591-592)

Secondly the characteristics of the teacher include professional and personal aspects (e.g. linguistic and professional competence, age, the way they teach, attitude). In that way he remembers that "I was taught for a year by a teacher whose Spanish wasn't very good [...] he was old, and I don't think he spent anytime in Spain, his accent wasn't great [...] from what I can remember he taught in a very traditional manner, from the book" (appendix 5: 588). He argues that non-native speakers are preferable to native speakers since they have a better understanding of the language as a system than native speakers when he reflects on his own teaching experience:

When I did my year teaching in Mexico I got quite frustrated as an English teacher and when someone put a very specific grammar question to me I found inevitable 9 occasions out of 10 I couldn't answer it, I could put things into context, but the times I was asked a purely grammatical question I used to say 'well, I can't give you a rule, but I can tell you that this is right and this is wrong' but when I was in Mexico I also taught French in L'Alliance Francaise to a little beginner group and as I had learned French from scratch myself I knew the grammatical background, I enjoyed that more and the questions that were put to me I could answer them. (Appendix 5: 591)

But enthusiasm, comes top of the list as one of the most important characteristic a teacher should have, he thinks that,

...to a certain extent enthusiasm from a teacher, which you can't feign, you can't kid a pupil, if you are not into what you are doing it comes through. I think my favourite teacher [...] I didn't like his teaching [...] but his love for Spain and the work that he put in still came through. (Appendix 5: 590)
He criticizes the teaching materials he used at school, "the books were old, they were from the 1950s and older I reckon. They were very traditional: Franco's Spain and that kind of thing" (appendix 5: 588), the teaching activities, "it was learning your verbs and doing your little sentences and there was no sort of back up of social aspects of Spain. Oral work was kept to a minimum" (appendix 50: 588-589) as well as the absence of oral work and social issues as the content of his language classes.

4.5.2 Summary of Ronan's pretraining knowledge

This knowledge is based on his experiences, as a language learner and briefly as a language teacher.

We can conceptualize Ronan's pretraining knowledge about language as consisting basically of two different things. On the one hand, as performing an interpersonal function which is manifested when communicating with people and as a form of entertainment in which rules can be broken, language is contextualized and related to the culture and society and where the favoured means of expression is the spoken language. On the other, language as a school subject, performing a pedagogical function, where homework, not live nature, verbs and rules are part of it and its favoured means of expression is written language. Ronan tries to come to terms with this double dimension by expressing a desire to contextualize classroom language and by using the FL as the means of classroom instruction. His view of language learning contrasts L1 and FL learning and includes the learner contribution and the context. His understanding of teaching includes instructional and interactional aspects. The first one include teaching materials, activities and content and the second how to control and motivate pupils.

4.5.3 Ronan's TE knowledge before TP

This analysis is based on the second interview (appendix 5: 596-601), which was taped and on the third interview (appendix 5: 602-604) which was recorded on written field notes. He did not keep a journal.

Knowledge about language

The only reference found to the subject matter-language- during the second interview conducted with Ronan makes reference to the substance of the language,
and more specifically to the paralinguistic features and gestures which accompany the use of language:

communication isn’t just about words, it’s about body language, it’s about tone, obviously, and things like that [...]. The thing that is striking me now is that gestures and body language to one person or one culture may be quite different well are quite different than other cultures. (Appendix 5: 600)

Knowledge about language learning

Ronan focuses his ideas about language learning on the actual learning process by comparing L1 and L2 learning. On the one hand, he views the two processes as different. While L1 learning is based on complete immersion in the language which allows learners to learn the language by formulating hypotheses following a process of trial and error, classroom language learning needs to be more structured and gradual to make up for the absence of the features of natural language learning:

the ideal situation for learning a language is immersion in it and being surrounded by it and gradually by a process of listening and trial and error, and making a lot of mistakes you begin to speak and comprehend the language to a degree when it is more or less perfect and that is impossible to do in a classroom, when you only have two contact hours per week and you need ... and there is only one person who speaks the language and many who don’t and with that idea in mind you have to teach the pupils in the best way possible which involves a certain amount of artificiality... (Appendix 5: 599)

On the other hand Ronan suggests that L1 and L2 learning should involve the same process:

language acquisition, as far as I am concerned, with the pupils is an artificial process which mimics the natural process as closely as possible and that obviously you’ve got such a little contact time with the pupils that you have to make the best use of your time and speed up the processes of learning, but I think the basic principle is that you acquire L2 in the same way as you acquire L1 in as much as that is possible. (Appendix 5: 596)

Knowledge about language teaching

As the rest of the student teachers, Ronan’s knowledge about FL teaching acquires a more thorough discussion during TE. Ronan’s concept of teaching is of a unique experience as it happens in specific contexts and is conducted by individual teachers so he hopes,
to be able to relate to the pupils and I think it's going to be a lot of trial and error over the next six weeks [...] because I suppose every teacher is unique. There is no model because you cannot apply the model, a model can't be applied to a particular personality, that's not going to work for every one. So it is a matter of me testing the models and finding my own ..., own sort of niche and then realizing it with the pupils. (Appendix 5: 597)

At the same time as wanting to find his own method which would suit each set of unique circumstances and which would fit his style and the pupils' learning, he argues for the more fixed ideas of the teaching method he is learning during TE: grading, repetition, consolidation, balance of skills and Q/A, as seems particularly apparent in his appreciation of two teachers he observed,

we saw two classes [...], one with this new teacher [... ] which was very interesting using lots of the sort of graded questioning structure and consolidating, very much an oral approach and with great use of flashcards and pairwork, and this which made a very exciting class, very dynamic. We went from that into the other class which was the ex Russian teacher who was used to far more traditional methods and we were just comparing the classroom atmosphere, the amount of pupils participation. And I think the former was much better than the latter. (Appendix 5: 598)

We can see the tension between on the one hand Ronan arguing for teachers finding their own styles "by a process of observation, trial and error of my own methods. To see what exercises are successful, to see which aren't successful and which things keep their attention" and, on the other, what it seems his conformity to a pre-specified methodology which is a compound of "of listening, of repetition, of question and answer and of writing" (appendix 5: 599). Yet these opposing poles do not seem to be source of any friction for him.

Teaching is also seen as having two dimensions, an interactional one which has to do with the social aspects of the teaching/learning context, "you have kids that they are going to be little monkeys, if they want to be, and... [you have] sort of getting to grips with that and teaching them at the same time" (appendix 5: 597) and an instructional one in which teachers engage themselves in putting the content across to pupils,"I won't be rushing headlong into teaching children especially in mixed ability classes more than they will be able to take in and take on. I think I've become aware of the gradual step by step approach" (appendix 5: 596).

His method of dealing with subject matter is clearly described in the third interview (appendix 5: 603):
I follow COANT: visual input for vocabulary you build gradually in the oral process, after that you can consolidate the language with writing.

C. c'est... (e.g. vocab input e.g. hay una cerveza)
O.- oui/non' (e.g. ¿hay una cerveza? si/no)
A.- alternatives (e.g. ¿hay una cerveza? o hay un café? - hay un café)
N.- Negatives (e.g. ¿hay un café? - No, hay una cerveza)
T.- Target (e.g. ¿qué hay? hay una cerveza)

The need to follow a clear methodology leads him to mistrust textbooks and criticize his teachers,

Yes, well I think to a certain extent my own education was lacking in a clear methodology in that you had a book, you followed the book and that was it. And I don't think many teachers of that era really took time to ask themselves whether the book was good, whether that was the best way in that the language could be acquired. From what I've heard in the [university] so far, it doesn't seem to be the case, they are very keen to emphasize that a book is just one aid, like any other aids and it's perhaps, certainly not the most important part of the classroom, but just another means to communicate. (Appendix 5: 597)

For Ronan, these two aspects (instructional and interactional) are clearly interrelated:

to know what your aims are, to know what the education process entails and, in a sense, to make sense of why you are standing in front of a classroom full of young adults trying to impart some knowledge to them. You need to know why you are there before you can do your job properly but you need to temper this [...] with a certain amount of social awareness of the kids you are dealing with and also of what your role is as a teacher and what their role is as pupils. (Appendix 5: 601)

4.5.4 Summary of Ronan's TE knowledge before TP

The main ideas which shape Ronan's knowledge before TP are about language learning and language teaching. He has a double view of the teacher's role as dealing with content (instructional role) in a prescriptive way at the same time that he acknowledges the unique nature of each teaching situation. He also considers the interactional aspects of teaching in relationship with the pupils.

4.5.5 Relationship between Ronan's knowledge and practice during TP

This analysis is based on two complete cycles of tape-recorded lessons (appendix 5: 612-617 and 620-623), pre-observation interviews (appendix 5: 605-610 and 619), post-observation interviews (appendix 5: 618 and 624-625) and a SR cycle
Since he dealt with the same content in basically the same way during the two observed lessons, I thought that one cycle of SR interviews would provide enough information about his knowledge in relation to the way he teaches.

4.5.5.1 Ronan’s teaching

Knowledge about language

The *functions of language* which characterize Ronan’s way of dealing with language in the classroom are mainly pedagogical and communicative. In the first case the substance in the formal properties of language as the following extract from preobservation interview shows:

I think it is going to be fairly straightforward because I presume that they either know or are familiar with the adjectives I am going to use with them, because they are fairly fundamental ones and I am not presenting them in this class with any irregularities so it's just so that they can come to grips with the basic structure and once they have that we can move on rather than [...] presenting them *peor* and all that kind of stuff before they can understand the basic structure or what comparisons really are, you know. I want them to know what a comparison is by doing the exercise. (Appendix 5: 605-606)

An important consideration Ronan raises is that when language is used exclusively in its pedagogical function, with an emphasis on the formal properties of the language, it may result in an inappropriate use of the language:

Sometimes I'm a bit scared with the sort of the logical sequence and presentation producing slight illogicalities or perhaps things that they don't say, sometimes things don't sound quite good in your head, you know. Like with some of those adjectives, like, [...] *es el menos delgado*. [...] you can logically say it but it's not the kind of thing that you find that is going to crop up in conversation [...]. I think it is worth it because the structures being taught, it's well worth it and they know themselves that in English you don't normally say "he is the ...." you can say it, but you don't say it that often, you know. (Appendix 5: 609-610)

A certain degree of language as communication forms part of his class, for example to give instructions, explanations,

R: Well, unless it snows, *si hay nieve no hay escuela*, *si hay nieve no hay escuela*. OK? Right, we'll read through this first, *la encuesta*, that means... *¿qué quiere decir la encuesta?* (Appendix 5: 616)
In this case, the substance tends to be meaning, as shown in the following extract,


He argues that,

from the point of view of language this activity gets them used to ordinary Spanish language, I get them used to listening to my voice, listening to their own voices and communicating in Spanish, so that is something vital, it is not just in paper but it is also a vital thing, a means of communication, I think this is very important for the language learning because that creates a context, that shows them that what they are doing is a useful activity and that it gives a purpose towards it as they seem themselves progressing hopefully, they see the fruits of what they've been learning and what I've been teaching. (Appendix 5: 632)

Although there is no attempt to illustrate the differences between written and spoken language, he says that he usually does "some listening, maybe some speaking and get some writing done. Usually in that order: listening, speaking and writing" (appendix 5: 606). Writing is used as a consolidation activity, "the final exercise was the worksheet that I gave out to the kids: written consolidation of any language I think it is very important" (appendix 5: 633).

Knowledge about language learning

Ronan's main concern regarding language learning is his awareness of how difficult it is "to have a class on which you are testing the most able and encouraging the least able to do something" in a mixed ability class. He comments that if the teacher does not make sure "that every pupil can do something and that nobody is left behind" behavioural problems may develop because,

the ones at the bottom are lost and the ones at the top are bored and that's obviously going to give rise to say a lot of behavioural difficulties. Because if you are in a class and you don't know what the hell is going on, you start
messing around and if you are bored stupid, you are going to start messing around. (Appendix 5: 608)

It is this factor which he uses to justify the careful grading of the language and the activities.

Knowledge about language teaching

The way Ronan deals with subject matter during TP was categorized as follows. Firstly he shows a clear concern for the double aspect of teaching: the instructional when the teacher deals with the subject matter and the interactional in his relationship with the pupils (e.g. greetings, maintaining discipline, giving instructions and directions to conduct the activities). The activities which Ronan performs in his interactional role have to with with keeping in contact with pupils so he says that he likes "to be able to circulate around the class as much as possible" (appendix 5: 629), help those with problems, "beforehand I knew who the pupils who had most difficulty with the w/s would be so I can automatically go towards them, asking whether they had understood" (appendix 5: 629) and awareness of pupil-pupil relationship, "I needed to keep a careful eye on them because they got quite boisterous but I never wanted to split them up as group because it seems to get on well together" (appendix 5: 630). Ronan has a developed notion of the importance of group work which leads him to break down the normal teacher-pupil dichotomy and develop a more pupil centered approach:

I think working in teams is quite important and hopefully what happens is that the more able help the less able and don't just tell them what it is and that there is a general atmosphere of learning in the classroom where everyone is, can, has a possibility of, every pupil has a possibility to be both teacher and learner, a double role there and that was that really as regards this class. (Appendix 5: 634)

I do prefer to have the kids working in groups of two or three, or little friend groups, rather than as individuals because I do think that the language classroom, particularly, there is communication, interactive communication going on and as you can hear from the table now they are talking about the problem they had about trying to solve it together, which is great, that's what I wanted, that's what I was aiming towards. (Appendix 5: 630)

But he also finds it disappointing when he needs to be in different places at the same time so he has learned to recognize and prioritize individual needs:

As you hear now there is lot of 'sir' going on, [at] different ends of the classroom, so now is where I quickly prioritize and choose who to go to first. To some of the pupils I would explain it to them in English more than in
Spanish as I saw the capability or sometime I would explain it to them in Spanish, find that they haven't coped with it and then go on and explain it in English to them. When the noise level got a bit too much or when the kids were getting a bit too boisterous, I usually said politely "por favor" with a certain intonation to show that I was mildly admonishing them. (Appendix 5: 630)

Other concerns had to do with timing of activities "if you are not very disciplined how long can actually take you to teach something, so I just seemed to have spent a bit of time in this which on reflection I would definitely try to keep down to one class [...] You have to be very aware of the restraining of time and the amount of time you can devote to any particular topic" (appendix 5: 633). At the same time, he thinks that "it is important to have good schemes of work, to know exactly what you are hoping to be teaching more or less when and obviously you can be flexible within your limits because you are going have to be but so that you cover the course that you are required to cover and the elements that you have to teach" (appendix 5: 633).

In relation to the instructional dimension, he implements a concept of language teaching encapsulated in a method which emphasizes the practice of the explicit forms of the language, as the Q/A sequence does, over the traditional grammar translation approach common when he was a school language learner. This implies an inductive view of language learning by which practicing the explicit forms will give learners competence in the language. Thus he first introduces the language, makes pupils repeat after his model and involves them in choral and individual repetition exercises, followed by positive reinforcement:

I usually find little drawings or symbols on the b/b so that they don't have to have them immediately associated the Spanish word with the English translation, rather with the image. So you use the target language as much as possible. The exercises are always the same, usually listening, speaking, a bit of writing and a bit of reading and have it progress from the simplest to the difficult. To start off with the the simplest you can get: "yes/no answers" you can have "either/or" and they say it is one or the other, then go onto the negative versions when they say, you say: "is it such and such a thing?" and they say "no, it's such and such thing" and you move on to the target question where there is no indication as to what they are required to answer. So at the start all pupils can get an answer and they, you go up, you're gradually testing, building up their confidence, testing them more and more, as it goes on you try to keep that kind of format with everything progressing from simple to difficult. (Appendix 5: 606-607)

For example,

This process also involves careful selection of language by the teacher and an avoidance of grammatical terminology:

I just select it according to what I think they need to know. There is a rule, well not a rule, a suggestion that you present new structures with old language, that if you want the kids to learn a structure you don't give them new vocabulary to learn it with, because they won't learn the structure, they [won't learn] the vocabulary or they will get everything mixed up. Which is again very easily justifiable and for every class I have to see what kind of vocabulary is likely to come up and if there is something they are not familiar with I make a note to draw their attention to it and usually chose, say eight if you are presenting new vocabulary maybe eight different words, six and do that with them so that there is the gradual building, you know. You cannot present them with too much vocabulary. So I usually find that I choose, in my aims I think what words I want to do and then just start preparing my lesson. I'll sort of vet it as I go along to ensure that (Appendix 5: 608-609)

Of course the one word I am not going to use is "comparatives" or "adjectives" anything like that because it is a bit of a waste of time it's very off-putting especially for the pupils that are less able to have this horrible terminology like "comparative adjectives" It's not going to mean anything to them, you know. (Appendix 5: 606)

Finally, Ronan stresses the importance of progression from simple to more difficult and consolidation by writing:

From the point of view of language teaching the worksheet was graded from the simple to the difficult, I felt with simple sì o no answers at the start and then alternative questions and then progressing to open-ended questions where they had to manipulate the language which is vital for a mixed ability class, which all classes are, anyway, it is an important principle and it's important for the kids as well that they start off with something simple and manageable and progress as well, a sense of progression is very important. (Appendix 5: 634-635)

When he deals with meaning, he employs different strategies, although he uses visuals when he introduces new content so that pupils link the new words with a visual representation rather than with the MT equivalent, all through the lesson translation is the most common way of explaining meaning as in the following
exchange in one of his lessons:

R: Muy bien. La encuesta... pay attention. It says: aquí están los resultados de una encuesta sobre los chicos de una escuela. I mean, here are the results of a survey about children in a school. Se han puesto los chicos en orden de uno a seis según las categorías. (Appendix 5: 622)

He comments that, "it is a bit difficult when someone asks you what does that mean not to break into English, but I try and explain it into Spanish as well" (appendix 5: 628).

While other students justified the graded Q/A approach as a way of making up for the constraining conditions that the classroom imposes on the language learning, Ronan seems to justify it as well on the grounds that language and activities are carefully graded and it can be thus used in mixed ability groups:

there aren't any decent textbooks that you can use for mixed ability groups. So this means that you have to look yourself for the input. [...] so I can make up the worksheets, get the principles and hopefully that'll, I'll be able to get into a pattern where I'll be able to do it with the class and why I graded it from simple to difficult, using very precise stages is precisely because of this mixed-ability in the class. And I think that it should be done that way within any class, even when classes are streamed or set, which they aren't here. (Appendix 5: 608)

Another idea on which he bases his teaching is an emphasis on the progression of skills from oral to written, for example he comments after some oral work "I intend that to be written as well because you follow the same, the same principle and there was a homework set and I was going to finish the homework with them" (appendix 5: 607).

An effort to use the FL as much as possible as a medium of instruction completes Ronan's understanding of teaching in its instructional dimension. We see that despite the fact that he is concerned about limiting and grading the input as much as possible he nevertheless argues for and tries to provide opportunities for a richer/less controlled kind of input as he explains,"when dealing with kids on an individual basis I try to speak to them in Spanish" (appendix 5: 629) and he "always insist[s] on si señor because it proves to everyone that the class is in Spanish" (appendix 5: 631). What he is trying to do is,

to get the pupils into the process of listening to some Spanish and speaking some Spanish, it is fairly informal an is fairly regular and they get to know what to expect and what to do and it's my way of bridging the gap between teaching through the medium of English and teaching through the medium of Spanish, I
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think it is a very important part of the class, and indispensable one and it means that the kids have time to readjust. (Appendix 5: 632)

So we see how he engages the pupils in a series of questions which despite their appearance of content questions are more display questions followed by positive reinforcement as in the more controlled Q/A sequence:


(Appendix 5: 620).

Regarding the way he deals with errors in his description of the class he provides the following description of how he deals with them and his rationale:

I had to correct her because she was saying vive* for I live instead of vivo, but the best way to correct it would be to repeat it and to give emphasis on the syllable that she had wrong rather than saying "no, that's wrong" because then you got..., you encourage them more and you don't make them feel as if they are wrong. (Appendix 5: 627-628)

As we have seen in the categorization of the rest of the students, the instructional and interactional roles are not always clear cut. An example of the fact that a single teacher's action can perform different roles is when he circulates around the class. We saw before that he was doing it to bridge the distance between himself and the pupils. This is part of the interactional role. He also performs an instructional role, since when he goes round he also corrects mistakes and assesses performance:

a good thing about circulating in the class, which means that if you find any mistakes you can, as you go along, you can correct them there and now, because there is nothing more disappointing than to do, say, 10 sentences and they are wrong whereas if I've seen them when they've done one or two and could correct any errors of interpretation or comprehension that they had, it is much better for the pupils. (Appendix 5: 631)

As I went round the class it became apparent that some of them not only didn't understand it but wouldn't understand it if they had done it for a lot longer time but the gratifying thing was that every member of the class had got some of it done. (Appendix 5: 631)
Another example of the simultaneity of the double role of the teacher, in this case building contact and providing oral work, is the following extract from Ronan's record of his thinking processes while he was teaching:

I always try to start off in this way, with speaking exercises they know. I was conscious of the fact that they hadn't been speaking or listening for quite some time, so I took a lot of time to 'reintegrate' them into speaking and listening to Spanish. I like to have this contact with the pupils in every class. (Appendix 5: 626)

In summary, the teaching principles on which Ronan's teaching activity is based are: use of the target language as much as possible and as much as the classroom circumstances allow for, practice of oral graded Q/A sequence to cater for pupils with different ranges of abilities, written consolidation, pupils working in groups or pairs and support to individual pupils. It seems that it is the different abilities of the students which is the underpinning principle of some of the ways in which he teaches (Q/A) and the fact that the less able pupils would be given an explanation in their MT, rather than in the TL. This is carried out by the following activities, which come up in all the interviews in different degrees of explicitness:

- selection of content
- warm up
- introduction of new content with visuals to avoid translation into the MT
- Pupils' repetitions of new language
- oral practice (Q/A)
- written consolidation (worksheet based on oral practice)
- revision

4.5.5.2 Summary of Ronan's teaching

We see Ronan adapting his previous knowledge about language to practice as he teaches and reflects on his activity. Language is mainly dealt with in terms of the function it fulfills (communication and pedagogical), in terms of the substance (structures and semantic meaning) it is made of and the means of expression (but differences between oral and written language are not taken into account). Regarding the knowledge about language learning, the main idea is to provide for pupils' different abilities and the need for careful progression and reinforcement. One of the pillars on which he bases his teaching is on the use of as much Spanish as possible and the need for structure and grading (of language and activities) which is provided by graded oral Q/A and written consolidation.
4.5.5.3 **Relationship between Ronan's knowledge and Ronan's teaching**

Ronan's way of dealing with languages in the classroom seems to draw both on some of the ideas he had at the beginning of the course, for example to use the FL as means of instructions as much as possible, and also on the knowledge he learned during TE, mainly in his structural analysis and presentation of the language. His underlying ideas about language learning stem basically from TE and the principles of the method he has learned. In terms of the relationship which can be established between his knowledge and his teaching, he mainly draws on the new TE knowledge, implementing the specific method. But he also brings in some of his previous ideas, the first brainstorming activities by which he tunes the pupils into using the FL.

4.5.6 **Ronan's post TP knowledge**

The analysis is based on the final interview (appendix 5: 635-640)

**Knowledge about language**

The following quotations illustrate Ronan's idea of language at the end of the course. These ideas can be conceptualized using the same categories I've used all through the analysis. Regarding the *functions of language*, he sees language mainly as communication with functions/phrases as its *substance*:

> What is language? [...] I'll be talking about communicating, the old buzz word of the communicative approach, which is where language teaching is really different from my days, that there's a lot more talking and active participation from the kids expected now. So I think I've developed through the [university], through the course a greater sort of knowledge of the importance of language, the vitality of the language which was lacking, say, in parts of my own education, has become apparent and language is now seen first and foremost as communication, as a means to communicate in a situational context. (Appendix 5: 635)

But he also argues that a functional/phrasal analysis of language and subsequently an approach to language teaching which emphasizes the practice of contextualized phrases, may not develop the knowledge about the language which is needed when learning a language. So he also views language as having a pedagogical function, which substance is grammar rules, the phonetic system and paralinguistic features:
And I think too that has its dangers in language teaching [...] it becomes purely functional and that you don't create knowledge, you are not actually teaching the language per se which is language in all its aspects, you're not creating complete knowledge but you can veer towards a functional aspect where things aren't particularly related, the kids know [what] to do in this situation, but taken away from that context there can be a lack ... So what I think language is is more than that, it's an appreciation of the patterns, of the sounds, of the rhythm, of the constructions and it's something that you can build upon individually, so if you teach it right and teach it systematically where the kids can see patterns, where [...] they get what I would call sort of more real language, and language learning would be a language experience [...]. I suppose patterns is not far removed from an appreciation of grammar and of the structures, but it's seen in a different light, that the language has to be learned in that way. (Appendix 5: 635)

Another important aspect in his conceptualization of language is the means of expression in oral and written skills, although there is no reference to the actual differences between spoken and written discourse:

you've got your speaking, you've got your listening, your writing and your reading as well and there should be a happy interrelation of all four supporting and building on each other and that's where they'll get the best grasp of language, if you make sure that all the skills are attended to. (Appendix 5: 636)

Knowledge about language learning

His knowledge about language learning involves a concept of what the process involves and of certain contributing factors. Regarding his concept of what language learning involves, he views it in terms of the differences and similarities between classroom and naturalistic learning:

I've mentioned the word artificial before in that you have to create the context for language learning but it's not, in a sense, natural, as a person in a country you will hear language, you're constantly practicing it, constantly hearing it, constantly using it and manipulating it whereas in the classroom that's not true, so you have to think about it, structure it and get a mixture of these different things in the restraints that you have, but I think it's good to try and emulate the processes, certain natural processes of language acquisition in the classroom because I think it makes it easier for the pupils. (Appendix 5: 636)

He argues that classroom language learning should try to emulate naturalistic language learning, although taking into account the constraints which the classroom setting imposes on the process. So to make up for the absence of some of the characteristics of natural environments, the teacher intervention should be mainly directed to provide structure and careful progression:
it's also very important to progress from the simple to..., from the less complicated, I should say, to the more complicated, so that there is a progression in the class [...], starting with something that they are completely happy with and push them a bit further each time, I think that's really what the learning process is all about, structure, it's all about structure. (Appendix 5: 637)

In the constraints of a classroom, language learning has to follow different processes, mainly structured progression and revision, "your progression is really your key word, you know, you revise".

Contributing factors to the learning process are the learners themselves. Among the personal factors, he now emphasizes the affective factors (feeling relaxed, enjoyment), the metacognitive and the interpersonal or the kinds of relationship the learner establishes with the teacher:

the kids have to feel [...] a certain relaxation in the class, it's quite important to have a good relationship, it's quite important that they know what happens in the class, that they know what's expected of them, that they know when they can concentrate, that they know the different activities, and hopefully that they enjoy it, that they can see themselves progressing, that helps the learning activity. (Appendix 5: 637)

Knowledge about foreign language teaching

His conceptualization of teaching involves a concept of what FL teaching is, as well as a way of realizing this concept and a reflection about the role of the teacher. He has a spiral approach to teaching which consists of an ongoing process of revising and introducing language progressively and on practicing the four skills, and trying to use the FL as much as possible. This can be realized by the Q/A progression (oral and written) and by his brainstorming section at the beginning of lesson in which he gets pupils "integrated into the classroom atmosphere":

it's something of the kind of a spiral where you go round, say, taking from what they already know and then pushing beyond that, and then you go back again and as it increases you revise, keep revising, keep giving them opportunities to go over old things, but always moving out away from that and back again, moving out again in other directions so to get completely interrelated aspects the further you go on every thing sort of ties in together, you know? and forms like a spider [web] and things and various things, they all branch out from each other but they also come back to each other as well, I think that's what you really tend to do in the classroom if you are doing your job properly this is another matter altogether. So I think that's got a lot of bearings of what language is as well, it's constant use and reuse, constant discovery and practice in terms of that as well, that's part
of the learning process. (Appendix 5: 636-637)

At the start of each class when I give like a 5 or ten minutes Q/A session to get the kids to think in Spanish and to listen and to speak and just to get them integrated into the classroom atmosphere, the learning atmosphere. (Appendix 5: 638)

The teacher's role is mainly seen as instructional encouraging individuals and being the source of input:

and as a language teacher, I think you have a very active role in the classroom, more so than perhaps other teachers need to have because you need to be there, you are the source of the input in the class, you go around listening and encouraging and explaining in groups if you are doing group work and eventually you are extremely important especially at the first stages because their capacity for independent learning [...], is very limited in languages. (Appendix 5: 637)

4.5.7 Summary of Ronan's post TP knowledge

Ronan's understanding of language at the end of the course doesn't seem to show many differences from his pretraining knowledge. It can be categorized as performing two main functions (communication and pedagogical), as having different substance (phrases and structures) and as being expressed by different media (written/oral) without marking the differences between each type of language. What is particularly relevant and new here is the fact that he sees grammar as an important component of language teaching which allows pupils to perceive patterns, build up knowledge and apply that knowledge in different contexts, contrary to the limiting possibilities of highly contextualized phrases.

Ronan's understanding of classroom language learning involves a concept of the process of learning, mainly in relation to L1 learning, a consideration of learners' individual factors (cognitive and non-cognitive or affective) and interpersonal aspects, mainly the relationship between learners and teachers.

His knowledge about language teaching involves a concept of language teaching, mainly as a spiral process of revising known language and introducing graded language together with using the language as a means of instruction. It also includes knowledge about how to implement this idea, mainly by practicing graded oral questions, using the FL as much as possible and leading the pupils into the lesson by a series of teacher led questions which provides the learners with
opportunities to talk about themselves, although the emphasis tends to be on the form rather than on the content.

4.5.8 Ronan's knowledge growth during an initial TE programme

We can see that regarding knowledge about the subject matter, Ronan's pre-training knowledge and post TP knowledge do not show many changes and that there is a positive relationship between the way he understands language and the kind of language he uses in his lessons. Regarding the knowledge about language learning, while the learners' individual factors were the centre of Ronan's pretraining knowledge, at the end of the course he also has an idea of the actual learning process, which he discusses by contrasting L1-L2 learning. The relationship between his view of the learning process and the way he teaches is focused on the pupils' different abilities and the need for a carefully graded, teacher controlled process to compensate for the lack of opportunities classroom contexts offer when compared to natural environments. Ronan's understanding of FL teaching is already well developed when he enters the training course. This involved the teacher playing interactional and instructional roles as well as reflections on some personal and professional aspects of the teacher. He also reflects on the teaching materials, content and activities. His developmental process shows a shift towards a stronger consideration for the instructional aspects of teaching, particularly to a specific teaching method. The relationship between his conceptual framework and the way he teaches is a combination of the graded OJA method and his pretraining idea of using the FL as a medium of instruction as much as the constraints of the classroom would allow.

4.6 Cross case-study analysis

Although this research does not make claims of generalisability (see 1.7 and 2.3.2), a further level of analysis may give insight into interesting group patterns in the way student teachers learn how to teach their disciplines regarding the origins and content of their knowledge and its relationship to practice. This will then be the basis for discussing the education of future teachers, both regarding process and content in the next chapter.
4.6.1 Origins of student teachers' knowledge

All the research participants had similar disciplinary and educational backgrounds, as seen in 3.4 and the different case studies so consequently the origins of their pretraining knowledge were bound to be very similar. Firstly they had all been foreign language learners in different kinds of contexts. They learned foreign languages formally in fairly traditional classrooms (e.g. grammar based language teaching at school and college literature based work) and they also learned these languages informally during their required year abroad as part of their language degrees. Secondly they all had brief teaching experiences as language assistants. The significance of these data is that they offer ample evidence to argue that student teachers had a great deal of experience on which to reflect, if given the opportunity, and through which the necessary connections between theory and practice could be made during TE. By reflecting on these experiences, a theoretical dimension about the profession develops from the early stages of TE. Theory about language, language learning and language teaching is only relevant for the teaching profession as long as it can be made relevant for teachers, as discussed in chapter two. It seems obvious that reflecting on their language learning and teaching experiences may be a useful bridge between theory and teaching. So what is important is to elicit, analyse and build on student teachers' pretraining knowledge because, apart from making theory relevant to student teachers' practice, it will help clarify the way it relates to the new TE knowledge and to practice. The analysis of the content of student teachers' pretraining knowledge is the focus of next section.

4.6.2 Content of student teachers' pretraining knowledge

Student teachers' pretraining knowledge, based on their past formal and informal language learning experiences, is the actual conceptualization that they made at the beginning of their course. Their discussion of language, language learning and language teaching includes many of the dimensions in the literature, as we will see below.

Knowledge about language

Despite the different content individual student teachers may attach to the main categories, it is important to recapitulate the data analysis by saying that, in fact, their pretraining knowledge about language could be described using the same
categories and that the two different contexts in which they learned languages meant that they defined language according to these contexts. These categories are conceived of as the possible linkages between students' knowledge and theory.

For example, the concept of function, which has proved productive to categorize those instances in which student teachers talked about the uses or purposes language may be used for, can be related to the concept of function which Halliday used to provide a sociolinguistic account of L1 development and to which he assigned two different meanings ('language use' and 'component of the semantic system'). It could be concluded that all student teachers have, in different degrees, a functional interpretation of language particularly when they discuss language in relation to natural contexts. Yet despite these similarities in the functional interpretation of language, it does not follow that student teachers had the same view about the way language is learned. It does not follow either that they interpret language acquisition from a sociolinguistic perspective, according to which language learning is a process of functional development, with multiple meanings derived from each function, in the process of interaction between the child and those around him or her (See Halliday, 1975). In general terms they seem to interpret it in psychological rather than sociological terms. A functional approach to language means, within the personal context of the participants in this project, a view of the nature of language, rather than a view of the process of acquisition. As Halliday observes,

> If we consider first the linguistic system itself, we find that the adult language displays certain features which can only be interpreted in functional terms. These are found, naturally, in the area of meaning: the semantic system of the adult language is clearly functional in its composition. It reflects the fact that language has evolved in the service of certain particular human needs. (Halliday, 1975: 16)

Although it may be limited and scarcely developed, all the student teachers seem to have a functional approach to language, not so much in the hallidayan sense of language development, but in the way they understand language. This contrasts with what I have categorized as the 'pedagogical function of language' which student teachers relate to the classroom, both when they were learners and when they are teaching. It is interesting to note that Halliday dismisses the function of learning the system (when a child engages himself/herself in practicing the sounds or structures of the language without a reference to meaning) as no function
According to Halliday, functional theories of language have attempted to explain the nature of language not so much in functional terms as in types of language use, which are mainly two: the ideational (with different names), and the interpersonal. The ideational has to do with the representation of experience and when language is used to learn. The interpersonal has to do with the communication process as a form and channel of social action and language is used to act.

Although these functions are more relevant to the fully developed adult language, or the child learning his or her mother tongue, there are indeed aspects which, drawing on the data, are also relevant in L2 learning (at school or in a foreign country). For example, the way Melani (4.1.1.2) or Rachel (4.3.1.2) talk about learning a FL in a natural context resembles the ideational function in which language is used for the purpose of learning.

All of the student teachers made ample references to the communicative function of language.

These functions are context determined (natural and classroom contexts) and at the same time they determine the substance of the language. This concept has also proved productive when categorizing some of the instances of student teachers' pretraining knowledge about language. All student teachers were aware that language is made up of different kinds of substance or that it can be described and understood at different levels, for example language may be analysed according to its formal features or according to sociological aspects.

Medium of expression was used to categorize those instances in which student teachers commented on oral and written language. Although student teachers refer
to it in varying degrees, they all seem to be aware of a distinction between spoken and written language. (For a discussion of the differences between writing and speech see, for example, Crystal, 1987).

Knowledge about language learning and learners

Most student teachers show a conceptualization of language learning which I was able to categorize using two general categories: a concept of what language learning is and the learner's factors. Regarding the first category, three of the students showed a clear conceptualization of language learning related to natural or classroom context. All three of these students see the two processes as different (see 4.2.1.2; 4.3.1.2 and 4.4.1.2) because they involve learners in different kinds of activities, in using different materials and language, playing different roles, and consequently arriving at different kinds of learning outcomes. The conceptualization that the fourth student provides, although less developed than the first three, also points out these two different language learning processes. At the same time we can also see that they observe that there are elements which are shared by the two processes, the learner's contribution. It is important to observe that LA research has no definite answers regarding similarities and differences in the two processes due to the great variety of situations in which people learn languages. Regarding the second category, all the students include in their discussion of language learning learner related factors. Although there is no clear consensus in the literature about what the terms really consist of (see Larsen-Freeman and Long, 1991, chapter 6), I have categorized them using a variety of terms, but mainly as attitude and aptitude.

Knowledge about language teaching

Three of the four student teachers discuss the way they understand FL teaching. All of them make reference to interactional and instructional aspects of the teacher's role in the classroom (See Widdowson, 1990, and Wright 1987 and 1990). Instructional aspects are those in which teachers involve themselves in dealing with specific subject matter content. The specific aspects that the participants in this project mentioned in the first interview include, the teaching content, the teaching materials and the teaching/learning activities. The interactional or managerial aspects of the profession have to do with the kinds of social relationships teachers establish with learners (individually and in groups), control and discipline.
What is particularly relevant about the findings reported in this section is that, despite the different individual personal learning and teaching experiences student teachers may have had and regardless of the specific origins of this knowledge, they do not approach the training experience as blank slates, or empty vessels into which new knowledge has to be poured. (One of the common arguments used to justify a focus on training in Preservice TE rather than education). Although their ideas may not be put forward in the conventional academic discourse they may serve as the very basis on which to make the connections between theory and practice which are crucial in their professional development. Theory then may become more relevant for them from the very beginning of their profession, since their conceptualizations about language, language learning and language teaching touch on current issues in language studies/linguistic theory, language learning and language teaching. Consequently it could be argued that student teachers can and do contribute a theoretical dimension to their education. Although I am not arguing that teachers have to be linguists or LA researchers, there is an important body of FL literature (see chapter two) which would support a plea for the role of the teacher as a researcher and for acknowledging a theoretical dimension to the profession in a fast changing world which imposes rapid changes for teachers, in different contingencies, to which they have to respond and for all of which no TE programme –regardless of how comprehensive it may be- could equip student teachers. Without a theoretical dimension teachers would be limited to viewing their teaching experiences as a technical matter, which would most probably be subject to fashion and unattested change thus leaving teachers little opportunity for their own analyses and decision making. These results, I think, provide enough empirical evidence to support a case for advocating teacher education (rather than training) not only during inservice TE but also during preservice since student teachers do have their own learning experiences to reflect on and make links with the theoretical aspects of the profession. Furthermore, existing pretraining knowledge relates to TE knowledge in a variety of ways which would determine the way student teachers learn. This relationship is explored in the next section.

4.6.3 Content of student teachers' TE knowledge

The focus of this section, similarly to the last, is not so much the actual TE curriculum but the meanings student teachers seemed to have attached to it. In the next chapter I will be discussing more specifically the modifications that student teachers made to their pretraining knowledge about language for the purpose of
teaching it. A more complete picture of these modifications would, no doubt, have emerged had the student teachers' views been complemented with tutors' interviews and observations of seminars, thus offering a possibility to combine an analysis of the programme with that of the process of learning to teach.

**Knowledge about language**

What is particularly important to notice is that the range of language functions which appeared in the student teachers' pretraining knowledge is reduced to that of language performing mainly a pedagogical function, with an emphasis on structures and forms and no real difference between the written and the spoken means of expression. It is also important to notice that two of the students (Rachel and Beth) reacted against what they saw as a view of language different from their own. Beth rehabilitates an 'academic view' of language with an emphasis on language competence and knowledge of the underlying grammatical system, which would allow learners to generate language in different contexts. Rachel, on the other hand, reacts against the view of language she finds in the course mainly on the basis that language is devoid of meaning and relevance for the learners.

**TE knowledge about language learning**

In all the student teachers the conceptualization of language learning focused on classroom language learning. In contrast with other aspects of their knowledge where their growth had been similar, we find very different mappings of what classroom language learning involves.

For example, Melani sees the process as an interplay between the teacher's intervention (presenting a good language model which prevents learners' from making mistakes) and pupils' attitude. These ideas bear a close resemblance to behaviourist language theories in contrast with her pretraining knowledge which included what seemed to be more learner related contributing factors to language learning. Now there seems to be an emphasis on the idea that learning could be manipulated from the outside, with a particular emphasis on method, at the expense of the learners' contribution to their learning process. While Melani understands language learning as a question of creating the necessary external conditions for learning the language, Rachel seems to insist on a more cognitive view of language with an emphasis on the learners' personal contribution to the language learning
Beth's view of language learning includes both competence or understanding of rules and performance. She can only justify the practice of contextualized surface structures through repetition and reinforcement in the short term.

Ronan focuses his concerns on the similarities and differences between L1 and L2 learning. It is a view shared by many scholars that the same fundamental process controls L1 and classroom learning.

**Knowledge about language teaching**

In all four cases a concept of teaching based on an interplay between the subject specific instructional aspects and the more general, socially oriented interactional aspects seems to continue. Different students reacted differently to the new TE knowledge which emphasizes the use of a particular teaching method. Melani's pretraining knowledge of teaching as an interactional activity becomes mainly a need to maintain control. Teaching as an instructional activity becomes a question of implementing a specific teaching method. Beth, on the contrary, seems to place much more emphasis on the interactional aspects rather than on the subject specific instructional. Rachel's strongly-rooted pretraining conceptualization of teaching leads her to react against the teacher-centered methodology she is being trained in. Ronan seems to combine two different concepts of teaching. On the one hand, he views it as a unique experience which needs to be approached individually by individual teachers in individual contexts. On the other, he is also drawn to the idea of a specific methodology which could be implemented regardless of individual and contextual characteristics.

The relevance of these findings is that they show that student teachers' pretraining knowledge and the TE knowledge in which they are trained (I use the term *trained* here to describe a specific way of forming student teachers into a specific teaching method) interact in a variety of ways and that this relationship is not clear cut or linear. The fact that this process of relating the new to the old is not open to critical reflection, evaluation and checking may be one of the reasons for this variety. More indepth studies are needed of both TE programmes and learning to teach processes.
4. 6.4 Relationships between student teachers' knowledge and teaching

Establishing relationships between knowledge and practice is not particularly easy, straightforward or simple. The relationships are complex and multifaceted. Yet, despite the methodological problems that gaining access to peoples' thinking and knowledge may pose to researchers (see 3.7.1), if it is assumed that teaching behaviour is thought determined (see chapter 2.2.3) and that teaching is more than meets the eye, efforts should be made to try and unveil what kind of relationships exist between knowledge and practice. I will explore some of the ways in which student teachers draw on knowledge when they make instructional decisions during TP.

Knowledge about language and its relationship to practice

Student teachers use pre-training knowledge and the new TE knowledge in a variety of ways during TP. For example, the way Melani deals with subject matter when she teaches and when she reflects are different (4.1.5.1). The language she finds relevant for classroom language learning is different from the language that she considers relevant in learners' future fuller language development when they are out of the constraints imposed by the classroom setting. This can be related to Widdowson's distinction of language for communication and language as communication. The first view of language, which is only seen as a rehearsal stage for the real experience, draws on some of the content of her pretraining knowledge, particularly the way she focuses on developing language competence, TE knowledge or the way she focuses on developing accurate language performance by explicit practice of surface structures and on the progression of skills from oral to written without a real consideration for the intrinsic differences between the two means of expression and practice-generated knowledge in the way she uses and reflects upon the use of language (FL and MT) as the medium of instruction.

Similarly, Beth draws on her TE knowledge to deal with content, particularly when she focuses on language performance by practicing contextualized, unanalysed phrases and in the way she progresses from oral to written activities without considering differences between the two, writing being a way of reinforcing oral work. She doesn't draw on her pretraining knowledge about language when she deals with subject matter. Nevertheless her reflections about language (4.2.5.2) reveal that, in fact, she does not agree with an understanding of language as just
performance. Her disagreement is grounded on linguistic and psychological considerations. On the one hand she views language as more than explicit linguistic behaviour, seeing it as a system of underlying rules which can be used to generate language in new circumstances. On the other, she has misgivings about the effectiveness of learning language competence by means of practicing highly contextualized linguistic behaviour and about the relevance of certain phrases for specific groups of learners.

Rachel, similarly, draws on the knowledge she acquired during TE when she deals with the content as structures and phrases and the way she progresses from oral to written skills (see 4.3.3.1). She incorporates part of her pretraining knowledge (language viewed as a system of underlying grammar rules) in the way she directs pupils' attention to the grammar rules. Her pretraining knowledge is also manifested when she disagrees with this way of dealing with language. In a similar fashion to Beth, she argues that perhaps practice of a sample of structures (performance) may not lead to understanding the language system or generate grammatical competence. But a lot of her pretraining conceptualization of language doesn't seem to be relevant for her teaching situation. Besides, she also seems to draw on practice-generated knowledge, namely in her use of the TL and the MT in the classroom.

Ronan seems to draw on his pretraining knowledge in the way he tries to use the FL as the means of instruction and his emphasis on oral language. He appears to draw on his TE knowledge in the way he understands language as the content to be taught, mainly with an emphasis on explicit linguistic behaviour (phrases and structures) and a disregard for grammar rules or grammatical terminology. It seems that his use and rationalization of the way he deals with meaning (by translating it into the MT) is practice-generated knowledge, as well as the way he decides to key in the students in the FL by a series of personal questions at the beginning of his lessons.

Knowledge about language learning and its relationship to practice

When teaching, Melani appears to draw on different kinds of knowledge about language learning. Her ideas about the actual process of language learning seem to be based on her TE knowledge. As we saw in 4.2.3.5 this process is seen as an inductive way of acquiring linguistic competence by the practice of surface
structures or a focus on actual performance. This is complemented by her pretraining knowledge which makes her see the need for a focus on the underlying grammar rules or grammatical competence. She argues that in order to be able to communicate you have to have mastered the formal system. When discussing the classroom learning process she says that the teaching method should recreate the learning conditions of informal language learning situations. Yet the description she makes of the learning process in the classroom resembles what she had described in her pre-training knowledge as an intellectual process as opposed to the informal intuitive one which takes place in natural environments. Her pretraining ideas about achieving communication are postponed for the future when pupils are free from classroom constraints. Her view of mistake avoidance seems to be based on the new method. She draws on her pretraining knowledge when she refers to the individual learner factors (e.g. interest, motivation, sense of achievement).

Beth also draws on different sources of knowledge. She reflects on the actual learning processes in two ways. Firstly, drawing on TE knowledge, she describes and implements a view of learning which is based on correct modelling, repetition, practice and reinforcement. Secondly, drawing on her pretraining knowledge, she reacts against what she sees as an overemphasis on explicit performance and practice of surface structures at the expense of competence and understanding of the underlying grammar rules. Drawing on her pretraining knowledge and probably on knowledge generated in practice, she includes in her view of learning the learners' individual factors (e.g. age, previous knowledge, general ability, language aptitude, attitude, individual learning styles, level of cognitive maturation, what they are used to doing, enjoyment, interest). She also includes the contextual factors and the relationships which are established between the teacher and the pupils and among pupils as contributing to the learning process.

Rachel shows and implements a view of language learning which seems to be based on her TE knowledge. She focuses on performance by the practice of correct language structures in a process of pupils' recognition and production of language carefully selected and graded by the teacher. She draws on her pretraining knowledge when she expresses doubts about this approach to language learning. She sees a need for an understanding of the underlying grammar rules. According to her, the individual learners' factors which contribute to the learning process include the different general abilities, previous knowledge, motivation, interest. This view seems to be based both on pretraining knowledge and on practice-
generated knowledge. Her understanding of contextual influences on the learning process which for example, include the activities in which pupils are engaged, are also based on her reflection on her practice.

Ronan' understanding of language learning focuses on performance by practice of correct structures in a process of repetition, oral practice and written consolidation, is also derived from his TE knowledge.

**Knowledge about language teaching and its relationship to practice**

During TP all four students implement a particular methodology which they have learned during TE. Melani and Ronan did not seem to have any problems in accepting the restructuring imposed on their pretraining knowledge by this specific methodology while simultaneously incorporating other ways of dealing with content which were present in their pretraining knowledge (elicitation of grammar rules or the belief in using the language as a means of instruction). Rachel and Beth, on the other hand, although they implemented the specific methodology with high levels of efficiency as seen in their classroom observations, show a greater degree of resistance towards the modifications not only to their pretraining subject matter knowledge but also on the knowledge about the language learning, imposed by the new methodology.

What is important to notice is that in fact the knowledge student teachers have access to and use when they teach comes from different sources (pretraining, TE and TP). Consequently it can be argued that preservice education is not just what happens after students enter the training institutions but student teachers also carry into practice their pretraining knowledge. More research is needed to explore these different, at times conflicting, influences (grammar based learning at school, real communication in foreign countries and a teaching method) in student teachers practice. More specifically, what is particularly relevant about these findings is that:

1) all student teachers implement a view of the subject matter which is different from their pretraining conceptualizations. Basically they shift from a combination of what we could loosely call a functional approach and a concern for grammar rules to a more structural or phrasal approach,
2) there seems to be a common shift from an intuitively based cognitive approach to language learning, with an emphasis on the active role of the learner, to a more bevariourist oriented position, with an emphasis on external action,

3) although all student teachers implemented a specific learned behaviour during TP, ('the method') this may be only superficial behaviour, which teachers may shed once they do not feel they have to conform to certain standards and they may base future teaching not so much on the ideas and methods they learned during TE, but on their pretraining knowledge. Some of the ideas which they expressed in the last interview conducted at the end of the year offer initial confirmation to support this idea. Thus we find that different student teachers internalized the specific teaching method propose by the TE course and reacted to it in different ways. While there were some who found the method to be their main way to approach teaching but still included some ideas from their pretraining knowledge (Melani, Ronan), others followed the method with little modification on their part, despite misgivings about it (Rachel, Beth).

What is important about the last point is that it may not be productive to train students in a specific method which offers little or no scope for modification when dealing with different kinds of content (language), or learning and teaching conditions. Arguments against the concept of method as an adequate system of teaching are also abundant in the FL literature. Moreover research which measures the superiority of one method over another has done very little to improve the profession.

4.6.5 Relationship between student teachers' pretraining knowledge and post training knowledge

Knowledge about language

As could be logically expected, different student teachers left the course with different kinds of knowledge. For example, Melani's realization that her pretraining conception of language could not be implemented in secondary classrooms, led her to a considerable degree of disappointment and feelings of doubt about her future career as a teacher. As a matter of fact, she started teaching part-time this year, but she has already abandoned the profession. On the contrary, Beth leaves the course with a reinforcement on the ideas based on her own learning
experiences, particularly that more emphasis should be made on developing language competence - understanding of grammar rules - rather than on the practice of actual samples of performance which may impair future possibilities of using language in different contexts. Similarly Ronan, although he values language from the situational/phrasal approach he has learned during TE, shares the same concern about the limiting of the language potential when language is reduced to the practice of phrases. On the contrary Rachel, who had shown the most rejection of the new TE view of language accepts the fact that language as mainly communication is not a feasible idea within the limiting constraints of the classroom and changes her view of language as mainly communication to language as a system of rules to be learned.

Knowledge about language learning

Three out of the four student teachers seemed to have shifted from an intuitive notion about language learning, mainly as a cognitive process which emphasizes the individual learner factors, to viewing the process of language learning mainly as similar to or having to resemble L1. To make up for the restraining conditions of the classroom context, the external intervention by the teacher is emphasized in the form of a specific methodology. This resembles behaviourist explanations for the acquisition of second language structures. On the contrary, Beth emphasizes the limited value of a focus on performance to learn language competence. One of the important claims of cognitive theories of language learning is that so many of the abstract and complex properties of language cannot be determined from a mere inspection of utterances or surface sentences (Gass and Schachter, 1989:4). Rachel agrees with the underlying principles of the method but not with the actual implementation.

Knowledge about language teaching

While Ronan and Melani do not show any reservations about the method they have been trained to use, Rachel and Beth manifest a series of misgivings against it. Beth, for example continues to be concerned with the limited learning opportunities which this method can offer. Rachel finds what seems to me a compromise. She agrees with the underlying principles (about language and learning) of the method learned during TE but rejects the way in which the are actually implemented. So there seems to be a gap between the way she teaches and her beliefs. It would have
been interesting to have followed her in her first year of teaching.

The analysis of the last interviews offers further evidence about the fact that student teachers may remain loyal to pretraining knowledge about language in most cases and that they may also revert to defending the way they themselves were taught rather than drawing on the knowledge presented to them during TP (chapter two). In the light of these results, a need to bring pretraining knowledge into the open during preservice TE courses becomes an imperative, since as Bolin argues,

> Because our programme philosophy holds that there are many divergent approaches to teaching that are of merit, we are not as concerned about changing the students' perspectives as with enabling the student to be more thoughtful about it. Student teachers may not have articulated a philosophy of education, nor are they likely to be aware of its sources. Students must become conscious of their own taken-for granted philosophy of education and attempt to understand how they have arrived at it in order to adequately critique and develop it. (1988: 53)

A further discussion of these results and its relevance to preservice TE courses will be carried out in chapter five.
Chapter 5. Conclusions, Discussion and Implications

5.1 Introduction

For the discussion that I will carry out in this chapter, it is necessary to revisit the aims and objectives of this research. As stated in 1.7, it aims to understand and analyse the origins and growth of student FL teachers' knowledge and its relationship to practice during a pretraining teachers' course. In other words, the research aims to identify the knowledge student FL teachers bring to TE, how it interacts with TE knowledge and how these types of knowledge combine and influence the way in which they teach during TP. This kind of information about the process of learning to teach a FL could be the base for future decisions on planning and implementing TE courses.

Chapter four gathered the research findings which cast light on the process by which student teachers learn to teach their subject matters and the actual content of their professional knowledge. As we saw in 4.5, what is particularly relevant is not so much to identify the specific origin of student teachers' pretraining knowledge, but to actually identify and analyse its content, since, as it was hypothesized (chapter 1.4) and has been found in the relevant literature (chapter 2.3), this knowledge interacts with the new TE knowledge in a variety of ways. We won't be able to establish what kind of contribution TE courses make to teachers' development and how they can contribute to student teachers' education if we do not know not only what was already there but how the old knowledge and the new relate to each other and to practice.

Firstly I have been arguing that while the language learner's contribution has become central to an understanding of learning processes (See, for example
Littlewood, 1984, with reference to language learning), it has been neglected, to a considerable extent, in the learners of teaching. Secondly, I also assumed that teaching is more than meets the eye and that there are different kinds of relationships between knowledge and practice. It may be the case, as Larsen-Freeman and Long (1991) state, that FL research on teaching and teachers dominated the research spectrum till the 1970s. Yet that does not mean that we know all about teaching, far from it. As we saw in 2 2.1, FL classroom research has focused for the most part on the observable behaviour of experienced teachers. We haven't seen much research done on the less methodologically accessible aspects of teaching, particularly the teachers' personal contexts (chapter 2.2.3) or on the process of learning how to teach a FL in general. On the other hand, research which has focused on the more cognitive aspects of teaching, has, more often than not, focused on general attitudes, educational values or concepts of teaching as we saw in 2.3.1, 2.3.6 and 2.3.10. For example Bolin (1988), focuses on how student teachers develop a concept of teaching and their role during TP, as they emerge from the analysis of a journal. Finally, I assumed that student teachers, if given the chance, would reflect not only on their activity during TP but also on their own language learning experiences. These provide them with a springboard to explore the theoretical aspects of the profession from initial TE, without necessarily having to postpone it till they are fully fledged classroom teachers, contrary to suggestions (see 2.3.7) that only experienced teachers have the faculty to reflect.

Consequently, this discussion will address the following issues: student teachers' pretraining knowledge: origins and content; TE: the transfer to the notion of teaching method and relationship between pretraining knowledge and TE knowledge; TP: relationship between knowledge and practice, relationship between pretraining knowledge and post training knowledge and a reflection on the use of the concept of teachers' knowledge. It also includes a discussion of the theoretical and methodological implications of this research for TE and a discussion on the research methodology. This will, hopefully, provide some of the rationale on which to base TE courses. Wallace (1991: 165) argues that "without a rationale, FLTE programmes can become simply a grouping of inputs and activities adopted for a variety of reasons, implemented in a variety of ways and therefore unlikely to form a coherent training experience".
5.2 **Student teachers' knowledge growth**

The following conclusions aim to provide some answers to the questions about content, origins, development and relationship of student FL teachers' knowledge to practice, which are at the origin of this study. The conclusions which I will discuss in this chapter draw on each individual case study first and then on the pattern which emerged from the cross-case study and are discussed using the following organizing themes which coincide, at the same time, with different preservice TE phases.

- **pretraining knowledge: origins**
- **pretraining knowledge content: knowledge about language, language learning and knowledge about language teaching**
- **TE: the transfer to the notion of a teaching method, relationships between pretraining knowledge and TE knowledge and transformations of pretraining knowledge**
- **TP: drawing on different sources of knowledge**

5.2.1 **Student teachers' Pre-training knowledge**

**Origins:**

All student teachers had memories of their language learning experiences on which they built an initial conceptualization of their profession. This is based not only on the apprenticeship of observation, as socialization studies have suggested, but also on having been active in their learning experiences. These memories are based on their own learning experiences (formal and informal) as well as on the way they were taught. Ball and McDiarmid (1990) also argue that "understandings of subject matter are acquired in significant ways outside of schools; to assume that teachers' subject matter preparation is confined to experiences of formal schooling would be to ignore a major source of teachers' learning and ideas" (446). They learn not only from teachers but from fellow pupils and other people they interact with. Similarly, Horwitz (1985) argues that student teachers have had individual learning experiences which they have made sense of in different ways and to which they assign different meanings. Regardless of the specific origins of student teachers what is relevant is that they have a wealth of knowledge when they come to the training institutions. In general this may contradict the too well accepted idea that
reflection is a prerogative of experienced teachers since one is only able to reflect if one has something on which to reflect. Furthermore, while some FLTE models (see 2.4.1) only contemplate a two phase TE model (preservice and inservice), the data from this research adds further evidence to the conclusions of socialization studies (2.4) for including pretraining experiences and the meanings student teachers attach to them as an integral and legitimate part of initial teacher education. It has often been ignored that student teachers have had ample experience on which to reflect, build theory and make the theory more relevant to them personally and professionally despite the fact that the content of pretraining knowledge is particularly relevant for teacher development. It is the content of this existing pretraining knowledge that I will discuss next.

Content

Many different kinds of studies have shown that student teachers approach TT institutions with a large baggage of knowledge which would influence what they learn and the way they teach (2.4). The data from this study support this general idea but also point out that they not only bring with them general views or general concepts about teaching as a general activity as most studies on teachers' thinking reviewed in 2.2 and some of the studies on teachers' knowledge in 2.3 show. For example, Zeichner et al's (1987) belief inventory includes the following categories to describe teachers' perspectives: teacher's role, teacher-pupil relationship, knowledge and curriculum, student diversity, role of the community in school affairs and role of school in society. Research on effective teaching has also viewed effective practices in terms of teaching as a general activity. Richards (1990) summarizes the categories which have been used to describe effective language teaching as classroom management, structuring tasks, student groupings, time on task and feedback. By contrast, Wilson et al (1987) argue that, when asked, young teachers think about the instructional as well as the managerial aspects of teaching. They observe that one of their concerns is with finding out ways to explain the content of their subjects to pupils.

My results have shown that student FL teachers clearly begin their education courses not only with general ideas about the dynamics of teaching and learning as found by, for example Calderhead and Robson (1988), Clark and Peterson (1986), quoted by Zeichner et al (1987) or about the general/interactional aspects of
teaching and teachers' roles but that they also bring with them subject specific knowledge and knowledge about learning and teaching particular subjects. Similarly Feiman-Nemser and Parker (1990) documented in their research how subject matter specific concerns were part of student teachers' discussion with their supervisors. So, in general, we can say that student teachers have been shown to have knowledge bases on which to reflect and base their professional development when teaching their specific subject matters.

Research on student teachers' pretraining knowledge has, then, put forward a series of ideas which are relevant for TE (see 2.4.3). The data generated in this study show in addition that:

a) This knowledge is subject specific (about the subject matter -language-but also about ways of learning and teaching it) and not only about general learning theories or theories of motivation. Students not only have general concepts about or attitudes towards teaching but they are also aware of the instructional subject specific aspects (teaching content, materials, activities), interactional aspects and teachers' personal characteristics.

b) Pretraining knowledge is transformed during TE before and during TP rather than in practice (see further discussion in next section). Calderhead (1988c) argues that the knowledge bases student teachers bring with them are not readily translated into classroom action and that, on the contrary, they seem to draw on the observed practices of their supervisory teachers. Although it is also true that student teachers in this study didn't draw on their own store of pretraining subject matter knowledge, knowledge about language learning and teaching when they organized their teaching, the data provides evidence to argue that they draw on the knowledge they have acquired during TE before they go to TP at least regarding the observable aspects of their teaching activity.

c) Pre-training knowledge is not as influential in the student teachers' performance during TP, as it was found to be in other studies (see 2.4), but it comes up in their discussions.

d) Some of the transformations needed for teaching content were already present in their pretraining knowledge (e.g. the different functions and substance student teachers assign to language according to context in their pretraining knowledge).
Calderhead (1988c) points out (see also 2.4.1 and 2.4.2) that student teachers are left to their own devices to make the connections between the knowledge bases presented to them in TE and classroom activity. Furthermore, it can be argued that they are also left to their own devices to sort out what kinds of relationships exist or they are supposed to make between what they bring with them and what they are given. It seems that, in the light of the previous discussion, we could conclude by stating, as argued by Hellgren in 2.4.1, that the kind of knowledge that student teachers bring with them, if cleverly utilized, could both facilitate and accelerate the acquisition of the given knowledge because the new knowledge can be interpreted and adapted by using the old knowledge.

5.2.2. TE: the transfer to the notion of teaching method

In this section I will discuss how student teachers make sense of the new TE knowledge since it has often been pointed out that student teachers find TE knowledge either irrelevant or difficult to grapple with (Tamir, 1988). Researchers have found different explanations for this state of affairs. Some, like Wilson and Wineburg (1988) found that beginning teachers base their teaching goals and the way they teach on their undergraduate disciplinary backgrounds. Or in general, socialization studies (2.4) view formal TE as largely failing to alter the effects of the socialization of students by observation of their own teachers. Barnes (1989), Pennington (1990), Feiman-Nemser and Buchmann (1986), and Britzman, (1986) (in 2.4.1) found that the little impact TE courses have on how teachers think about their work is related to the influences of what teachers bring with them, shaped by years as 'teacher watchers'. Zeichner et al (1987) quote several studies in which there is much evidence that the pedagogical methods and content knowledge introduced to students in campus courses has little influence on the subsequent actions of students even during initial training. Tamir (1988) argues that one of the reasons why TE knowledge seems irrelevant or difficult to understand is because student teachers bring in a heavy load of knowledge and very little professional experience. Others highlight the role of practice, for example, Calderhead and Miller (2.4.1.3) emphasize practical experience in the classroom as the source of student teachers' knowledge. Shulman and his collaborators have argued (2.3.4) that the modifications that subject matter knowledge needs to undergo in order to be fit for teaching, occur during practice. These transformations occur, according to these researchers, in the process of teaching. They reported that a series of pre-observation cycles provided important insights into how student teachers were
using and adapting their content knowledge and, in the process, establishing their pedagogical content knowledge. A different picture emerges from my research. Contrary to these findings, my data suggest that, in fact, a large proportion of the transformation of pretraining knowledge (subject matter knowledge, knowledge about learning and about teaching) to pedagogical subject matter knowledge has its origin on campus before student teachers take up their school placements, as we will see in the next section. These changes are related to the way they select content, provide explanations and organize activities during TP.

My results seem to suggest that the changes can indeed be observed in practice, but that they are generated not only during practice but mainly during the TE programme. In this way student teachers' pre-training knowledge about language, knowledge, about teaching and about learning became a compound body of knowledge encapsulated in the method student teachers are trained to use during TP which amalgamates a view of language, a view of how people learn a language, and of a particular series of learning activities. What remains an open question is whether this particular transformation is the only one possible, or whether different transformations should be made available to the students and whether this particular pedagogical content knowledge is the only one desirable. Supporting evidence that it is the TE programmes which induce a particular behavioural transformation rather than practice can be found in the fact that all students proceed to present the subject matter to their pupils in the same way regardless of different contexts, content, or learners.

Gudmundsdottir and Shulman (1987a) suggest that there is no indication that their teachers were taught to organize their content knowledge the way they did. Instead, they invented the teaching models themselves during years of practice. The evidence I have from my data does not support the idea that the transformation occurs once teachers are in class, but suggests that it is induced by TE programmes. So it can be argued that, while experienced teachers seem to develop their pedagogical content knowledge from practice, student teachers are taught on TE courses a particular way of organizing the subject matter to make it accessible to pupils. This particular model is imposed on them and makes them restructure their pretraining knowledge into a pre-specified and unified body of knowledge which they implement when teaching. I will discuss this below. During TE student teachers seem to have acquired a pedagogical knowledge (a method) which they lacked and some ideas about language learning processes, while their subject matter
knowledge remains largely the same and in some cases is a source of friction with the new TE knowledge. Consequently student teachers seem to modify their pretraining knowledge in response to pressures which come from the university rather than from the classroom and so perform their task during TP in a similar way, although they may voice reservations about the way they teach in their discussions about their teaching. These student teachers efficiently implemented on TP the method learned during TE, yet the degree of acceptance was subject to a great deal of variation. I will try to explain why this should be so, presenting some of the reasons that have previously been put forward in the literature and relating them to what has emerged from the data.

While the teachers studied by Wilson et al. (1987) developed their pedagogical content during practice in different ways given different sets of students, different schools, time, or content, all of my student teachers implemented the same method regardless of any of the above elements. Yet as discussed in the literature, there are a number of problems in describing teaching in terms of method and in training teachers to use a particular method. I summarize them in two points:

1) As Richards (1990) argues, methods present a predetermined, packaged deal for teachers that incorporates a static view of teaching. In this view specific roles and teaching/learning activities and processes are imposed on teachers and learners. As he argues, attempts to find general methods that are suitable for all teachers and all teaching situations reflect an essentially negative view of the teacher.

2) General teaching research on teacher effectiveness and teachers' thinking (chapter 2) has put forward the idea that, in fact, social and personal contexts intrinsic to the teaching process make teaching independent of any particular methodology. FL research also has come to realize that when comparing the effectiveness of different methodologies, the results have been inconclusive and disappointing since there are a vast number of factors -teacher and pupil related- that are not linked to methodology and which influence the teaching processes (Littlewood, 1984, among others). Bolin (1988) observes that there are no generic classrooms where students may directly transfer specific techniques learned in TE and Bowers (1986: 406) comments that "all methods work some of the time and no methods work all the time". And finally, there is no experimental evidence that has established unequivocally the superiority of one method over another or that one way of teaching is better in all settings than another (Brown 1990, and Gebhard et
It seems that, as Brown (1990) suggests, beliefs and assumptions have a large part to play in how any individual teacher perceives his or her 'approach' or 'method'. The notion of method so much discussed in relation to FL teaching (2.3.3) and research doesn't seem to be able to provide for any degree of pedagogical variation. The particular group of student teachers studied in my research came to the training institution with a wide range of experiences and knowledge which encompassed theoretical and practical dimensions. During TE they were taught to teach in a particular way - a teaching method- which narrowed down all the previous knowledge and made some of the students react against it and. As Clarke observes (2.3.3), the concept of method proved to be limiting and maintains the split between theory and practice. Gebhard et al (1987) argue that in following a prescriptive approach to TE, the responsibility of decision making remains with the teacher educator so that it reduces the possibilities for teachers to be prepared to assume responsibilities for what goes on in their classes.

Evidence from my data seems to offer the following explanations for this situation. It seems that it is not so much that student teachers have to absorb professional knowledge or classroom relevant knowledge they lack but that they are not given opportunities in which to make this previous knowledge explicit and analyse it so that connections and adaptations can be made. Further the inculcation of a rigid methodology does not allow for reflection and adaptation.

5.2.3 TP: Relationships between knowledge and teaching. Drawing on different kinds of knowledge

The data from this study clearly indicates that, although an analysis of the student teachers' behaviour may show a homogeneous way of dealing with subject matter, in that they follow the same method, the interviews I conducted on the way student teachers were teaching show that, in fact, student teachers' knowledge has not been made homogeneous, and at the end of the year they maintain different positions regarding their knowledge about language, teaching and learning languages. In other words and making use of a common distinction in linguistics, performance did not necessarily match competence. Previous pretraining knowledge is not so much apparent when the student teachers teach, but in their discussions of their teaching. Interviews with student teachers indicated that in most cases TE did not
alter significantly the knowledge that students brought to the course regardless of
the similarity with what they carried out their instruction during TP. It was clear in
the analysis that during TP, student teachers organized and presented their content
and designed learning activities in the way they had been taught to do during TE.

Calderhead and Miller (1988) found that student teachers have problems when
drawing on their available subject matter knowledge to teach. This may be because,
as they argue, student teachers need to be given opportunities to translate this
knowledge into more classroom relevant knowledge rather than ignore it and
impose a different kind of knowledge on the previous structure.

In general, socialization studies emphasize either pre-training knowledge or the
effect of TP and relegate TE to a minor role (2.4). This is not what seems to
emerge in this study. The picture is a more complex one. We could say that TE
has played a very influential role in shaping student teachers' performance during
TP. Yet, the longer term effects are less certain, since some of the students showed
reservations about the way they taught.

Moreover it could be argued that although during TP student teachers draw on
different sources of knowledge, it is the knowledge learned during TE which
underpins their teaching performance. Melani, for example, draws on different
kinds of knowledge generated in different circumstances. When teaching her
subject matter, she calls mainly on what she had learned during TE, but also on
pretraining knowledge. Transformations of her subject matter knowledge took
place basically during TE and before TP, but some subject matter knowledge for the
classroom can be traced to her pretraining knowledge while some seems to be
practice generated.

What these data suggest is that, while the main source of language learning and
teaching knowledge as implemented when teaching remains TE, pretraining
knowledge forms the basis of the discussions of the way they teach. In fact,
student teachers' development during preservice teacher development cannot be
attributed to one single influence. It is important to find out what experiences
contribute what, so that the learning process can be enhanced, rather than
hampered. In this process of knowledge growth, student teachers have progressed
differently despite the similar behaviour displayed during TP.
5.2.4 Pretraining and Post teaching Knowledge

The only data collected after TP was an interview at the end of the year. Although it would have been interesting to carry out some observations of some of the students in their first year of teaching, there are some ideas which can still be drawn from these interviews.

Despite the homogenizing effect of the teaching method on student teachers' performance during TP, the fact is that, at the end of the course, they left with different kinds of knowledge about the dynamics of teaching and learning languages. To a considerable extent these variations are rooted in their pretraining knowledge.

5.3 Reflections on the conceptualization of student teachers' knowledge for teaching

As seen in 2.3.2, defining teachers' knowledge is not an easy task and different researchers have come up with different models and concepts with a certain degree of overlapping among them. The particular conceptualization which guides and emerges from this study is an interplay between induction and deduction. The main general categories were derived from the literature on teachers knowledge (2.3) and FL discussions on teachers' knowledge bases (2.3.3 and 2.3.5). The specific content and concepts are data driven and provide evidence to document student teachers' knowledge growth and to compare students teachers' knowledge with their teaching performance. I will now discuss the complete framework of the areas of knowledge and concepts which was developed to analyse the data.

On the one hand, Shulman and his team first drew attention to the lack of subject matter specific concerns in TE research and generated a series of categories to account for the different domains of knowledge on which teachers draw when they teach. These include, content knowledge, pedagogical content knowledge, general pedagogical knowledge, knowledge about learners and about learning, knowledge of context, knowledge of objectives, goals and purposes and curricular knowledge (Gudmundsdottir and Shulman, 1987a). The most important of these sources and the one they put most emphasis on is pedagogical content knowledge, since it is a kind of subject matter knowledge which is specific to teachers. Teachers have to adapt and transform subject matter knowledge in order to make it accessible to
pupils, so it is a mixture of content and subject specific pedagogy. Subject matter includes substantive and syntactic structures (see 2.3.2). But as Ball and McDiarmid (1990) argue, what is learned from studying a subjects "entails much more than what can be inferred from examining syllabi or curricular goals and objectives [...] students learn more than the substance [of their subjects]" (:440). It is the dimension of knowledge about the subject which is the aspect of subject matter knowledge considered in this project. On the other hand, FLTE theorists argue that teachers should have a knowledge, not only of language but also of the way languages are learned and taught. While these general categories of knowledge do not inform us of the changes which occur during TE, the specific concepts which form them at different points of the programme provide information about the way student teacher knowledge changes and influences practice. From this interplay between induction and deduction the following conceptualization resulted and was used to describe student FL teachers' knowledge during this study:

<table>
<thead>
<tr>
<th>Knowledge about language</th>
</tr>
</thead>
<tbody>
<tr>
<td>functions of language</td>
</tr>
<tr>
<td>substance of language</td>
</tr>
<tr>
<td>means of expression</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge about language learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>process of language learning</td>
</tr>
<tr>
<td>learner characteristics</td>
</tr>
<tr>
<td>context of learning</td>
</tr>
<tr>
<td>learning outcomes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge about language teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>instructional aspects</td>
</tr>
<tr>
<td>interactional aspects</td>
</tr>
<tr>
<td>the teacher</td>
</tr>
</tbody>
</table>

Table 5. 1 Summary of main categories of student teachers knowledge

5.4 Implications for TE

From the analysis of the data a number of implications developed for the content and process of FLTE.
5.4.1 Content

The cross case study analysis has shown the presence of a number of recurrent themes in student teacher's knowledge before they enrolled in a PGCE course. So, rather than present student teachers' with a given curriculum, based on a transmission model, starting with and building on these themes would contribute to a more active participation of the student teachers in a shared curriculum and consequently lead to more effective learning. It would also alleviate the endemic problem of lack of time in preservice TE courses, continuously voiced by teacher educators to justify transmission models. The themes and issues which were of general concern among the participants of the study were a discussion about language which includes its functions, substance and means of expression; a discussion of language learning which involves a concept/theory of language learning, individual learners' factors, L1-L2 learning; and finally a discussion of language teaching which incorporates the role of the teacher and a concept of teaching. These categories cover a lot of the things that happen in the classroom and which are the focus of current research. If teacher educators have an understanding of student teachers' knowledge it may help them in designing TE strategies and specifying the content of TE in ways which can develop that existing knowledge more effectively.

5.4.2 Process

Firstly, it seems that regardless of whether teacher training institutions are progressive or not in the content they convey (see 2.4.3), TE should not be a question of imposing traditional or progressive teaching models on student teachers, it should be about establishing connections with the student teachers' personal understandings and building on that knowledge. If we accept that the learner's personal contribution has an influential role when learning new material, TE courses should aim to provide space and means by which student teachers can bring up and examine their pretraining knowledge in order to see how it relates to TE knowledge, so that learning is more meaningful. Hewson and Hewson (1989) argue that in the same way that teachers need to know what their students' conceptions are and why they hold them, teacher educators need to know their student teachers' conceptions of teaching so that they can find new conceptions of teaching intelligible or create, if necessary, dissatisfaction with existing conceptions.
which may conflict with those taught (:195). As Calderhead and Robson (1988) argue, it is clear that the growth of student teachers' knowledge depends on the opportunities students are provided with to make their preexisting knowledge explicit, to examine and challenge it. Ross, Ashton and Mentonelli (1989) argue, like Clandinin (1986), that helping students reveal, think about and check their perspectives about teaching and learning is essential to educate them in the process of reflection. In the same way that teachers are concerned about pupils' knowledge and the role it plays in the school curriculum (Hudak, 1987), teacher educators concerned about the way student teachers learn should make sure that student teachers' previous knowledge has a legitimate status in the college curriculum. If we consider this knowledge as meaningful for prospective teachers' development, we will be bridging the gap between student knowledge and college knowledge. Besides, as Book et al (1983) argue, only when we, teacher educators, understand student teachers' perceptions of teaching when they enter a teacher preparation programme, can we adjust appropriately the course content to overcome any misconceptions that might be getting in the way of preservice teachers' learning.

Secondly, we have seen that during TE student teachers modify their pretraining knowledge and not only their knowledge about the discipline they are going to teach, but also about the way it is learned or taught. They teach in a way which does not bear much resemblance with their pretraining knowledge, although this does not mean that it is not influential in the way they think about their activity. What it would be interesting to examine in further studies is whether this induced change into a general teaching method is the best way to promote teachers' ongoing (present and future) development for the very varied and rich contexts they will have to work in. Understandings such as these, as Calderhead (1988c: 63) argues, "can enable us to examine critically our current TE practices and to build TE courses which equip teachers not only with basic common competence but with the knowledge, skills and confidence to continue learning". As Calderhead (1987d) also comments, research on teachers' thinking points out how unrealistic it is to conceive of TE as a set of pre-formulated ideas or principles to be implemented by teachers. These ideas are necessarily filtered and adapted by previous knowledge. What is clear is that, as Bolin (1988) states,

if teachers are to assume a larger professional role, as suggested in much of the current public discussion of teaching, it is imperative that they be prepared to come to be deliberative. (:53)
how we prepare students of teaching to talk about their work may be of more importance than the specific techniques of teaching and classroom management that we get them to master. (49)

So it seems that preservice TE courses should help student teachers to be in more control of their professional development and provide them with the opportunity to approach the profession from a much broader perspective than a mere method approach. Student teachers should be taught the skills and confidence to analyse and articulate their thinking.

Thirdly, since it was clear that teaching performance and competence are not the same, evaluating student teachers' observable behaviour may not provide enough information about the way they have or have not internalized the new knowledge presented to them during TE courses.

Fourthly, in this research the use of interviews, together with observational records has proven to be invaluable in exploring student teachers' knowledge, particularly by providing evidence that teaching, as hypothesized, is more than observable behaviour. Consequently, teacher educators, should include techniques to evaluate TP which also reveal the assumptions and beliefs which lie behind student teachers' actions. Research strategies that get teachers to talk about their work in different kinds of recorded interviews and recorded observations of their work can provide materials so that teaching can be individually and collectively analysed. For example, as Westgate (1988) points out, recordings offer the possibility of making explicit the possible divergent assumptions about procedures and processes held by teacher, tutor and student teachers. Or the use of transcripts can provide a fruitful stimulus for discussion. Because as Westgate (Ibid: 149) observes, "examples of teaching by students may be at least as valuable as those showing experienced teachers because of the turn which events can take under less experienced guidance". As Ramani (1987: 3) argues,

the responses of student teachers to classroom data can be used to raise theoretical questions which can then be linked to current conceptual issues. These questions will suggest the areas which need to be read up or investigated for clarity and deeper understanding. Such an approach to theory, which is rooted in teachers' own intuitions and which encourages them to move from the specific to the general, is seen as being more meaningful than one which is based on theoretical inputs from trainers.

The videotaping technique could be a valuable means of allowing student teachers to develop an understanding of their thinking and the ability to verbalize and think
through what they were doing (Woods, 1990) thus enhancing their responsibility for and understanding of their classroom decision making.

Finally, as Cooney (1984a, undated) and Weinstein (1989) conclude, if we design TE programmes without an understanding of student teachers' conceptions and the role they play in their education, we are implicitly assuming that our conceptions and theirs are the same. Most teachers would agree that pupils' learning rarely matches curricular aims. Similarly most teacher educators should accept that student teachers' learning is unlikely to be synonymous with curriculum aims. It seems necessary that student teachers' conceptions and understandings of their subject matter, teaching and learning should provide a foundation for TE. A serious consideration of student teachers' pre-training knowledge will also encourage us -teacher educators- to examine our implicit theories. This will lead us to explore whether our programmes are consistent with our underlying assumptions (Weinstein, 1989). Helping students to be aware of the understandings they bring to formal education is only the first step in the transition to professional thinking in which students learn to look beyond the familiar worlds of teaching and learning (Feiman-Nemser and Buchmann, 1986b: 255).

5.5 Reflections on research methodology

There are five issues which I want to address regarding the methodology used in this project. Firstly, methodologically and theoretically this study would have been able to offer a tighter and more complete picture of student FL teachers' knowledge growth had tutors (college and school tutors) also been part of the research and if seminars and tutorials could have been observed. Different kinds of circumstances made it impractical (see chapter three). It would have offered very important information about TE knowledge from a different perspective.

Secondly, I conceived of a research design as open as possible (chapter three) so that it would not suffer from the constraints and artificiality which sometimes characterize those designs which reduce their scope by focusing on relatively discrete and isolated aspects and which make categories fit neatly by disregarding different kinds of data. By adopting this broad frame of reference I hoped to make the study relevant for the research participants and for teacher educators. How is it relevant for student teachers? They are given a great deal of freedom to talk about
the way they see different aspects of the profession in their own words, letting them make the connections which are relevant for them. I am aware that by not directing them more there may be things which are part of their knowledge which were not mentioned for different reasons such as failure to remember, feelings of embarrassment, etc. Yet the fact that this research was not, in any way, related to the course, made student teachers feel at ease about the things they had to say. They didn't feel that they had to respond according to a prespecified set of criteria. An example of this is the way they express their opinion openly about what they agree or disagree with in the course. Another strength of the design is that, despite its open nature, student teachers were interviewed at different times in different kinds of situations in which they could offer their views and could remember things previously forgotten, build trust and explore ideas. It was not just a one-off interview or even a pre-post dual interview.

How is the research relevant to teacher educators? It is a first step towards an understanding of the process of learning to be a teacher. This process is mainly characterized by the fact that student teachers draw on different kinds of knowledge when they teach, rather than just on the knowledge they have learned during TE and that the relationships between knowledge and practice are individual because the building of this relationship is a personal undertaking. It is important that teacher educators consider these aspects mainly when assessing the contribution of TE to the professional development of teachers.

How is the research relevant to me? As a teacher educator it has mainly meant an opportunity to bring up, challenge and change previous assumptions on what it means to educate preservice teachers. As a novice researcher it has been an opportunity to explore epistemological issues, mainly to experience what it means to be the research instrument and the consequences which derive from that. Lincoln and Guba (1985), Burgess (1985c) and Guba and Lincoln (1981) explore this concept, its implications and qualities in contrast with the role of the researcher in traditional research. This learning has confronted me with the challenge of how to design and carry out a project which values what is diverse and idiosyncratic over what is common and general and can take account of the personal, contingent and temporal conditions which imbue both the actual learning processes of students becoming teachers and in the generation of knowledge.

Thirdly, I am aware that different questions could have been asked of the data, and
that the same data could stimulate further studies which may focus, for example, on analyzing student teachers metacognitive knowledge, or areas of conflict and dilemmas student teachers experience in the process of becoming teachers and how they deal with them, or within a different theoretical framework, on the reflective processes that students engage in when they are asked to reflect on their teaching.

Fourthly, because of its open nature which allowed categories and hypotheses to emerge it seems that two different kinds of studies should follow up this initial attempt at understanding and documenting the learning process of student FL teachers. One kind would be a deeper analysis which would focus on one or two student teachers and their tutors. The other kind could try to test previously defined categories of teachers' knowledge and try to establish their relationship to practice. In that way we could look at the process both vertically (in depth) and horizontally (in breadth).

And finally, I want to point out that four case studies can only provide more questions than answers about TE. How is student teachers' existing knowledge taken account of? Is student teachers' knowledge challenged and furthered during TE? What kinds of interactions are allowed between student's knowledge and TE knowledge?
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