ENGLISH AS A SECOND LANGUAGE TEACHERS' ATTENTION TO
STUDENT CHARACTERISTICS DURING LESSON PLANNING: A
NOVICE-EXPERT STUDY

by

CHERI DAWN MACLEOD
B.A., Simon Fraser University, 1983
A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
in
THE FACULTY OF GRADUATE STUDIES
(Language Education)

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA
©Cheri Dawn MacLeod, 1991
In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Language Education
The University of British Columbia
Vancouver, Canada

Date June 20, 991
Abstract

Recent changes in language teaching methodology have created needs for a better understanding of lesson planning among English as a second language (ESL) teachers. Research on teacher thinking and lesson planning in general suggests that teachers mainly pay attention to content, activities, and student characteristics, but these elements may have unique features in second language instruction. The present study investigated the lesson planning of 6 inexperienced student teachers of ESL and 6 experienced sponsor teachers of ESL teaching the same students in a practicum context. The teachers’ planning was analyzed in terms of the attention they gave to content, activities, and student characteristics, while assessing possible differences between the two groups. The study found that ESL teachers gave more consideration to content and activities than they did to student characteristics. Both groups considered these three aspects of lesson planning individually about half the time and in conjunction with other aspects of planning about half the time. Experienced teachers proved to use more complex mental representations of lesson planning than student teachers did. However, many individual differences emerged among the inexperienced and experienced teachers, obscuring differences between groups for most of the planning behaviors assessed. The student characteristics most often mentioned in think-aloud protocols during lesson planning, and reported
as most important on a rating scale, were students' English proficiency, personal motivation, language learning needs, and interests.

Further studies should use a larger sample of teachers and might profitably investigate lesson planning throughout an entire course.
TABLE OF CONTENTS

ABSTRACT.............................................................................................................. ii
TABLE OF CONTENTS.......................................................................................... iv
LIST OF TABLES................................................................................................... vii
LIST OF FIGURES................................................................................................. viii

CHAPTER ONE
INTRODUCTION
1.1 Background of the Study................................................................. 1
1.2 Purpose of the Present Study...................................................... 2
1.3 Practical Significance of the Study........................................... 4
1.4 Definition of Terms................................................................. 4
1.5 Limitations of the Study............................................................ 6
1.6 Organization of the Thesis.......................................................... 7

CHAPTER TWO
REVIEW OF THE LITERATURE
2.1 Teacher Planning................................................................. 8
2.2 Differences Between ESL and Content Instruction......................... 10
2.3 Differences Between Experts and Novices.............................. 14
2.4 Rationale for Methodology..................................................... 17
CHAPTER FIVE
DISCUSSION AND IMPLICATIONS

5.1 Summary of Main Results ........................................... 75
5.2 Relations to Previous Literature ................................. 81
5.3 Limitations of the Research ................................. 83
5.4 Implications for Future Research ............................... 87
5.5 Implications for ESL Teacher Education ................. 89
5.6 Summary .................................................................. 90

REFERENCES ....................................................................... 92

APPENDICES (I-VII)
APPENDIX I SUBJECT CONSENT FORM ............................ 100
APPENDIX II POST-PLANNING/PRE-LESSON INTERVIEW .... 102
APPENDIX III RATING SCALE ........................................... 103
APPENDIX IV PROMPTS FOR POST-LESSON INTERVIEW .... 104
APPENDIX V POST-PLANNING/PRE-LESSON INTERVIEW .... 105
APPENDIX VI THINK-ALOUD PROTOCOL EXCERPT ONE: SPONSOR TEACHER ........................................... 115
APPENDIX VII THINK-ALOUD PROTOCOL EXCERPT TWO: SPONSOR TEACHER ........................................... 117
APPENDIX VIII THINK-ALOUD PROTOCOL EXCERPT THREE: STUDENT TEACHER ................................. 120
LIST OF TABLES

Table 4.1 Mean Percentages and Standard Deviation of Mentions of Content and Activities in the Think-Aloud Protocols........................................ 68
| Figure 3.1 | Outline of Methodology for the Study | 24 |
| Figure 3.2 | Profile of Participants | 28 |
| Figure 3.3 | Examples of Coding | 36 |
| Figure 3.4 | Summary of the Research Questions, Data, and Analyses | 42 |
| Figure 4.1 | Rankings of Identified Student Characteristics | 52 |
| Figure 4.2 | Rankings and Standard Deviations on 10 Identified Student Characteristics for Experienced Sponsor Teachers and Inexperienced Sponsor Teachers | 53 |
| Figure 4.3 | Comparison of Mean Scores (1-5) of Important Student Characteristics for Student Teachers and Sponsor Teachers | 54 |
| Figure 4.4 | Consistency of Data for Sponsor Teachers and Student Teachers | 56 |
| Figure 4.5 | Percentage of Means of Student Characteristics, Activities, and Content in Think-Alouds for Individuals | 65 |
| Figure 4.6 | Mean Percentages of Student Characteristics, Activities, and Content for Student Teachers and Sponsor Teachers | 66 |
| Figure 4.7 | Percentages of Complex Mentions in Think-Aloud Protocols | 67 |
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Analyses of language teaching have focused on teaching methods for most of the last century. These methods have gone by various names but the best known are grammar-translation, direct, and audio-lingual methods (Stern, 1983, p. 452). These methods have featured fixed sequences of behavior specified in instructional materials for respectively (a) translation to and from the target language and grammar, (b) exclusive use of the target language in the classroom, and (c) the separation of the skills of reading, writing, speaking, and listening, dialogues for language practice, drilling, and mimicry (Stern, 1983, pp. 452-472). Language teaching methodology and syllabus design has, however, recently undergone much change (Breen, 1987). Current trends toward student-centered or needs-based curricula (Nunan, 1988b; Stern, 1983) have challenged much earlier pedagogical theory for English as a second language instruction. Student-centered, needs-based curricula, and other new ways of thinking about English language teaching suggest teachers consider their students' learning needs before establishing a curriculum or instructional methodology. This orientation implies that teachers' decision-making is fundamental to second-language curricula. Moreover, as methods of teaching change, corresponding changes in teachers' thinking have also occurred (Nunan, 1988b), affecting how teachers plan their lessons and what they consider when they plan.
This area of educational research is important, given the large number of Canadians now learning English as an additional language as well as the worldwide importance of English in commerce, science, and education.

1.2 Purpose of the Present Study

Previous research has shown that activities and content are important considerations in teachers' planning (Peterson, Marx and Clark, 1978; Morine-Dershimer, 1979; Yinger, 1979). Yinger (1980) suggested student characteristics are also an important factor in planning, a point supported by several other studies (Borko, 1978 and Russo, 1987, both cited in Shavelson and Stern, 1981; Cooper et al., 1979). The present research builds on these previous studies to describe the lesson planning of ESL teachers in terms of the attention and importance they give to student characteristics, as well as the relationship this element has to ESL teachers' considerations of content and activities.

The present study analyzed 6 pairs of sponsor and student ESL teachers while they planned lessons for their usual classes. Six experienced sponsor teachers had each agreed to have an inexperienced student teacher in their classes for a practicum period that was the classroom component of the student's ESL teacher education in either a college (for 25 hours) or a university (for 20 hours). The 12 teachers all produced think-aloud protocols during their lesson planning, filled in a rating scale about their planning priorities, were interviewed, taught their lesson with an observer present, and were then interviewed a second time.
The study attempts to fill a gap in the research literature concerning the lesson planning of ESL teachers. Richards (1990, pp. 3-4) reports that research or theory dealing with the nature of second language teaching is "scant" and further says that there has been little systematic study of second language teaching processes, leaving practices in second language teacher education open to the charge that they are based on intuition and implicit conventions only. Cumming (1989) suggests that a lack of information on the cognitive development of ESL teachers currently hampers decisions about appropriate forms of education for such teachers. Generalizations from research on content teachers may not be applicable to English as a second language education as ESL student populations are very diverse and possess numerous special characteristics distinguishing them from other student groups.

To summarize, the present study examined the lesson planning of experienced ESL teachers who were sponsoring inexperienced student ESL teachers in their ESL classes. The study aimed to determine which characteristics of their students both groups of these teachers considered important during their lesson planning, how important these characteristics were, and how the factor of student characteristics related to other aspects of their lesson planning. The study was exploratory and descriptive in nature; as a framework for analysis, possible differences between sponsor teachers and student teachers were also investigated.

The focus of this research was the lesson planning of individual ESL teachers. Although lesson planning is part of a teacher's curriculum
planning, it should be noted that lesson planning focuses on smaller units which make up a teacher's curriculum planning.

1.3 Practical Significance of the Study

Although there has been some research on teacher planning in education in general, little is known about what ESL teachers consider important during their lesson planning. The present study reports descriptive findings which may be useful for those who teach ESL and would like to refine their lesson planning practices; for those who work in ESL teacher training and would like to pass information on about what ESL teachers in their real working environment think is important to consider during lesson planning; or to those working in ESL curriculum development so that they can take teachers' concerns into consideration.

1.4 Definitions of Terms

This section defines a number of terms used in this thesis which are either specific to the field of ESL or which warrant clarification for the operational purposes of the research.

Adult or teenage ESL students are defined as students who identify themselves by enrolling in classes designed and advertised to be for adults or teen-agers whose native language is not English. ESL classes are distinguished from content classes in academic settings which are "classes of mathematics, social studies, and so on. These are the classes [ESL students] attend in addition to the language class" (Mohan, 1986, p. 6.) in academic settings. The acronym ESL refers to English learned as a second language and is contrasted with English learned as a mother
tongue (i.e. first language) or EFL, which is English learned as a foreign language. ESL is "learned and used within one country to which the term 'second language' has been applied" while EFL is a "non-native language learnt and used with reference to a speech community outside national or territorial boundaries" (Stern, 1983, p. 16). This difference is easy to see when an example is considered such as the teaching and learning of English for immigrants or visitors to British Columbia (ESL) as compared to the teaching and learning of English in Japan (EFL).

A lesson is defined as a period of time during which teaching goes on, marked by a break at the beginning and end during which students are expected to come and go. Lesson planning is considered as thinking or other preparation teachers do prior to teaching a lesson. Small group teaching "defines the class as a group of groups ... organized in groups of 2 to 6 students in order to fulfill a learning task cooperatively" (Bejarno, 1987, p. 485).

Three main aspects of lesson planning were investigated in this study: student characteristics, content, and activities. Student characteristics include a student's age, English proficiency, interests, first language, learning needs, purpose of study, motivation, gender, environment, and all other physiological or behavioral characteristics mentioned by the teacher in regard to the students. Content is the main topic of the lesson or instructional activity. Activity is "the equivalent of controlled behavior settings" for classroom participants which is largely controlled and created by the teacher ahead of time (Yinger, 1979, pp.
Yinger describes activity as having seven features: location, structure and sequence, duration, participants, student behavior, instructional moves (giving directions), and content and materials (what an activity is about and the means used to undertake it).

Also important in this study are two types of ESL teachers, distinguished by their pedagogical experience as well as specific operational criteria. A student ESL teacher in the present research is a student in an introduction to teaching English as a second language course and/or certificate program who is doing a first teaching practicum. Experienced ESL teachers are defined here as employed teachers who have been nominated by a supervisor on the basis of their instructional expertise to sponsor a student teacher in their class for the practicum period. It should be acknowledged here that experience is not synonymous with expertise. The sponsor teachers were not evaluated for their pedagogical expertise (beyond nomination) by the researcher. This study is therefore unable to distinguish levels of teaching expertise between the participants, a factor which may produce variation among the sponsor teachers.

1.5 Limitations of the Study

Because of the small number of people participating in this study (N = 12) the conclusions that may be drawn from it are limited to the local context and situation. Individual differences often obscure patterns in samples of this size, adding to the complication that small differences may go undetected or may be dismissed when they do indeed exist.
The study is also limited by the isolation of one classroom lesson per participant. In practice, pedagogical lessons do not exist in isolation (Yinger, 1980; Woods, 1989b), and there may be differences in planning as a course progresses. Since any teacher's attention may change throughout any course, investigation of the beginning or end of a course might show very different patterns of thinking and lesson planning.

1.6 Organization of the Thesis

Chapter one introduces the thesis and subsequent chapters. Chapter two is a review of literature related to the research questions. The remaining chapters explain the research methodology, describe the results, and then discuss these results, outlining the limitations of the study then making suggestions for future research.
CHAPTER TWO
REVIEW OF THE LITERATURE

The relationship of the present study to prior research will be discussed here in regard to studies on teachers' planning, relations of ESL instruction to content instruction, comparisons of the performance of experienced teachers and inexperienced teachers, and the rationale for the present research methodology.

2.1 Teacher Planning

Research on teachers' thought processes or teacher thinking has tried to describe teachers' mental activities to understand what teachers do and to explain why they do it (Clark and Peterson, 1986). Most studies investigating what teachers attend to when planning lessons suggest that teachers tend to focus on classroom activities and instructional content (Zahorik, 1971; Peterson, Marx and Clark, 1978; Morine-Dershimer, 1979; Yinger, 1979). Other influences in the planning process include student needs (McCutcheon, 1980), interests of self and students (Swartz, 1988; MacLeod, 1989), student characteristics (Yinger, 1980), control issues (Toomey, 1977), class size and available material (McCutcheon, 1980) or resources (Yinger, 1980). Yinger's (1980) recognition that pupil characteristics were a source of information used for planning lacks confirmation among these studies, although other researchers report information about students, especially student ability, as considerations when planning (Borko, 1978, and Russo, 1978, both cited in Shavelson
and Stern, 1981; Cooper et al., 1979). There is some support for the idea that the characteristics of students, including student abilities, needs and interests, are considerations for content teachers during lesson planning (McCutcheon, 1980; Yinger, 1980; MacLeod, 1989).

By definition, ESL students have characteristics which distinguish them from other student populations, e.g., wide variations in ability, interests, reasons for study, background and education levels, age. Recognition of this fact by their teachers and educational policy makes it worth investigating the extent to which ESL teachers pay attention to student characteristics during their lesson planning and what relationship this has to attention they give to lesson content and activities.

Devon Woods' (1989a, 1989b) naturalistic research on experienced teachers of adult ESL found their decision making to be very complex, consisting of numerous interrelated judgements and considerations. ESL teachers' planning was found to be dependent on previous lessons. Advance plans for lessons were more concrete as the time for the lesson approached. The teachers he observed tended not to plan too far in advance because they thought that many things might change in the meantime that might require altering their plans. In a case study Nunan (1988b) also reported that an experienced, well-educated ESL teacher had difficulty with long range planning when she was faced with a group of unfamiliar students. This same teacher mentioned that variability among students within the class also caused problems in her planning.
A problem with much research into teacher planning has been the narrow sampling and poor description of the teachers involved. Most studies have described the practices of elementary teachers (McCutcheon, 1980; Morine-Dershimer, 1979; Zahorik, 1971; Yinger, 1979, 1980). The generalizability of elementary teachers' planning to other teachers (e.g., of adolescent or adult students) is questionable. Another related problem is that the subjects used in previous studies have been mostly female with no explanation of why this is so; gender cannot be ignored as a possible factor in any research (Benston, 1981; Mabry, 1985; McCalla Vickers, 1982; Wine, 1982). Most research on teacher thinking and planning ignore gender altogether; a number of studies do not even report it (e.g. Feiman-Nemser and Buchmann, 1989; Carter, Cushing, Sabers, Stein and Berliner, 1988; Tabachnick and Zeichener, 1984; McCutcheon, 1980; Morine-Dershimer, 1979; Zahorik, 1971; Zahorik, 1975).

A further limitation in the existing research on teachers' planning is that some studies (e.g. Peterson, Marx and Clark, 1978) have been done under such unnatural situations that their results are questionable. Removal of the teacher from their real educational situation is unnecessary as well as ecologically questionable when studying teacher planning.

2.2 Differences Between ESL and Content Instruction

Many gaps exist in current knowledge about the lesson planning practices of teachers of English as a second language, at all levels from pre-school to adult education. As Richards (1990, p. 7) points out, research on successful content teachers does not "necessarily help us
identify what it takes to be an effective second language teacher" because the instructional goals in these two types of education are not the same. One specific area of lacking knowledge is information on differences in planning processes between experienced and student ESL teachers. Recent research on teacher planning in content areas provides a basis on which to begin such investigation, but within this perspective some problems are apparent. It is unclear whether ESL teachers and content teachers plan in the same way or attend to the same things during the planning process as do teachers in other domains.

Content teachers might not be expected to attend to the characteristics of their students as often or extensively as ESL teachers might do so for a number of reasons. Students in the school system or in specialized fields of adult education may be relatively homogenous because of grouping by age, neighborhood or specialized fields. Moreover, students' common interest in the subject matter is often considered of greater importance than individual differences. Instructional goals in language and content classes are not the same; consequently, strategies used by teachers in either situation may vary (Richards, 1987).

The same assumptions of homogeneity are rarely, if ever, possible with ESL students, whose special characteristics may more directly determine the focus of instruction. For instance, Bell and Burnaby (1984) note that ESL students' English level may preclude the use of any content without consideration of the students' abilities and the suitability of the material used. Cultural differences may be in the foreground of ESL
classes (Cantoni-Harvey, 1987). First language backgrounds give rise to recognizable problem areas or interaction patterns (Duff, 1986). Age and interests influence the topics with which language is introduced in second language classes, while the need to address the immediate concerns of immigrants tends to change program sequence and focus (Cray, 1988). Students' characteristics give teachers clues as to what learners need and want to learn.

Recognition of students' diverse range of needs in ESL classes has resulted in the current trend toward learner-centered and needs-based curricula (Stern, 1983; White, 1988; Ellis, 1989). This curriculum perspective is a change from language teaching practices over the last century which have not shown much concern for the special characteristics of students or their individual needs. Up until the 1980s ESL teacher planning was mainly described as planning to textbook material or exercise types. This approach revolved around six major "methods": grammar-translation, direct, reading, audio-lingual, audiovisual, and cognitive based theory (as defined in Stern, 1983, pp. 453-469). More recently there has been a change to learner-centered and needs-based curricula in which, by definition, the characteristics, goals and needs of individual learners receive special attention (Strevens, 1977; Munby, 1978; Brumfit, 1980; Buckingham, 1981; Littlewood, 1981; Nunan, 1988a, 1988b; White, 1988; Widdowson, 1988; Ellis, 1989).

Strong theories shaped language teaching practices in the grammar-translation method of translating phrases or sentences back and
forth between languages, the direct method where the target language was used in the classroom without the use of the student's first language, and the audiolingual and audiovisual methods in which language skills were separated and drilling, mimicry, and dialogues were used extensively (Stern, 1983). Students were fit into the language program; the program was not made to fit the students.

In principle, in more learner-centered curricula, "the learner occupies the central position ... everything starts from him and everything goes back to him" (Richterich and Chancerel, 1977, p. 4). This requires recognition of the learner's resources, specific background and learning objectives. Closely related are needs-based curricula which begin with an evaluation of what learners need to know and how they will use the language. In Munby's (1978, p. 32) words, to implement this approach: "one starts with the person ... and investigates his particular communication needs." By recognizing learners' characteristics, ESL course developers and teachers aim to provide language programs suited to their students, rather than merely imposing a framework upon them.

There may be other differences as yet undocumented between the performance of ESL and content teachers. For instance, Margaret Early's (1987) research on linguistic input and interaction in classrooms found differences between conversation in teachers' talk with native and non-native speaking students. Differences in ESL teachers' and content teachers' interaction patterns included such linguistic features as
frequencies of questions, statements, imperatives, comprehension checks, self-repetitions, other-repetitions, and expansions.

Although ESL teachers are often faced with a much wider range of student groups than are most content teachers, current research regarding the planning of ESL teachers provides no concrete evidence that ESL teachers plan their instruction in the same way that content teachers do. This question needs to be addressed.

2.3 Differences Between Experts and Novices

Expert-notice research tries to establish how differences in knowledge among unskilled and skilled individuals affect differences in their task performance in specific domains. The relevance this perspective has to studying teachers and teaching is that it provides a means to determine the kinds of knowledge that experienced teachers have and use in their pedagogical practice by comparing their performance against people who are just learning to acquire such pedagogical knowledge. The resulting information may be of value for teacher education and help to guide curriculum development and implementation. It is possible that more experienced teachers’ knowledge focuses on certain discrete aspects of instruction or perhaps entails differences in overall approach. New teachers might benefit from knowing what their more experienced colleagues know.

There are many ideas of what differentiates expert or experienced teachers from inexperienced ones. Borko (1989) suggested that expert teachers have more pedagogical and subject matter knowledge and they
are better able to organize and store their knowledge than novice teachers. Expert teachers appear able to draw on their knowledge of pedagogically relevant facts, principles, and experiences when planning, reflecting and reasoning (Borko and Livingston, 1989). Effective teachers also use their finely tuned observational and perceptual abilities in their teaching to productively interpret classroom events (Carter, Cushing, Sabers, Stein and Berliner, 1988). Shulman (1987) characterized expert teaching as also including depth of subject matter knowledge, pedagogical skill, use of a conceptual framework, and situational flexibility.

Research in cognitive psychology has shown two important differences between the performance of experts and novices in academic domains: those who know more about specific knowledge domains and who have a more organized mental data base usually remember better than those with less knowledge (Chi, 1985; Glaser, 1984), and those who think about their progress, evaluate their situation and clear up problems as they come up during task performance act more effectively than those who do not (Flavell, 1981). There are numerous other differences between experts and novices concerning the interaction of domain-specific and strategic knowledge in academic performance, though it is difficult to generalize about these (Alexander and Judy, 1988).

In terms of planning and teacher thinking, research into expert-novice differences has indicated that expert teachers' plans are more detailed, more interconnected and include greater numbers of teacher and student actions (Borko, 1989). Differences in planning were found in a
number of areas between expert and novice mathematics teachers, including planning efficiency, problems in moving away from scripted lesson plans and in the time needed for planning (Borko and Livingston, 1989). Teachers’ post-lesson reflections were also found to differ in selectiveness (Borko and Livingston, 1989). Differences were also found between novice and expert teachers in their perception and processing of visual classroom information (Carter, Cushing, Sabers, Stein and Berliner, 1988) and in their thinking about students (Berliner, 1987). When thinking about taking over a new class, expert teachers were found to differ in their thinking about the class and their plans for beginning the new class when compared to novice teachers as well as to people who had subject matter knowledge but not classroom experience (Berliner, 1987).

Certain findings about expert-novice differences relate directly to the research questions posed in this study. Regarding student characteristics, Shulman (1987) concluded that teachers’ knowledge of learners and their characteristics is one key aspect of experienced teachers’ knowledge base. Shulman suggested that experienced teachers transform or adapt their lessons to suit their students. Similarly, Pinnegar (1990) suggested there may be differences between experienced and inexperienced teachers’ understanding and response to students’ questions and also teachers’ attitudes to students who ask “real” questions versus those who ask other types of questions. Cumming (1990) reported differences between novice and expert ESL teachers in how they evaluated second language compositions, suggesting experienced teachers had a fuller
mental representation of this one pedagogical task. Of course while differences between experienced and student teachers are worth looking for, and group differences might be expected on some planning features, it should also be noted that every teacher is different from every other teacher and has unique background knowledge, experiences, skills, and habits. Indeed, Woods (1989b) described individual differences in teachers’ approaches to be "remarkable." Other studies have found great individual differences among ESL teachers’ approaches to instructional tasks (Cumming, 1989, 1990; Woods, 1989a).

2.4 Rationale for Methodology

Among the methodologies useful in studying thinking and planning processes are the use of rating scales, interviews, retrospective reports and concurrent think-aloud protocols. Concurrent think-aloud protocols give more direct information on people’s decision-making processes than methods which restrict analysis to the beginning and end of the planning process only. Likewise, they offer a rich data base and allow insight into some aspects of people’s thinking processes which are otherwise difficult to observe (Ericsson and Simon, 1984). The present study used concurrent think-aloud reports and retrospective interview reports to document teachers’ planning processes. These methods were combined with observation of one planned lesson for each teacher, a rating scale in questionnaire format, and interviewing of individual teachers. Rating scales offered a way of obtaining information that was not verbalized in a think-aloud protocol or that could not be expected to occur naturally in every
protocol. Pre- and post-lesson interviewing also provided a chance for elaboration on and verification of the reported thinking processes.

Think-aloud protocols are self-sustained reports where the speaker is asked to verbalize their thought processes while performing a task. In this case participants were asked to verbalize their thoughts during lesson planning. The resulting verbal behavior produced a type of recordable data that could be observed and analyzed like other behaviors. Different situations and instructions result in think-aloud protocols of varying degrees of completeness and reliability. Verbal reports in which participants are asked to report only information to which they normally attend while doing the task are said to create the least interference in thought processes (Ericsson and Simon, 1984). This type of think-aloud was used in the present study. Ericsson and Simon (1984, p. 16) conclude that "cognitive processes are not modified by" thinking aloud, although their view has been challenged (for example, Nisbett and DeCamp Wilson, 1977).

There are limitations to think-aloud protocols as a data source, however. These limitations include time restrictions, the constraints imposed by task sessions, awareness of the researcher, and the restriction that only cognitive processes that are easy to report are revealed. People are obviously not conscious of all their cognitive processes, and differences do appear in the extent to which people find protocols to be obtrusive or the extent to which individuals tend to verbalize their thoughts (Hayes and Flower, 1983; Rankin, 1988).
2.5 Summary

The present study was designed to address a distinct gap in the research to date regarding ESL teachers' lesson planning. Previous research into teacher thinking has suggested that the characteristics of students are an important consideration in lesson planning. Of particular concern in this study were the student characteristics which ESL teachers paid attention to during lesson planning and how important ESL teachers considered identified student characteristics to be in relation to other aspects of their lesson planning, such as concerns for instructional content and activities.

Existing research and theory suggest that ESL teachers and content teachers cannot be assumed to think or plan in the same ways. The present study investigated ESL teachers because of well-documented changes in ESL teaching methodology away from fixed instructional "methods" towards student-centered and needs-based curricula which require considerable planning and other kinds of decision-making on the part of ESL teachers. This study also inquired into the patterns of attention displayed by experienced and inexperienced ESL teachers during lesson planning. A review of related research showed differences between experts and novices in performance, perceptions, and processing of information, suggesting there may be important differences between experienced ESL teachers and student ESL teachers during such activities as lesson planning. The research undertaken in this study was designed to address these issues in reference to the planning of experienced and
student teachers of adult and teenage ESL students. A small sample of teachers and student teachers was studied in detail in order to account carefully for individual behaviors, given the range of individual differences cited in previous analyses of ESL instructors' pedagogically-oriented thinking (Cumming, 1988, 1990; Woods, 1989a, 1989b).

In comparison to Woods' (1989) longitudinal analyses, the present study is limited in that it did not document the complex processes of decision making as they occurred over lengthy periods of time. Nonetheless, the present study did account for several other issues which have posed limitations in research on teaching planning, such as what ESL teachers think about when they plan in a natural situation and also what ESL teachers think about their lesson before beginning to plan it. Although subject to the unpredictability of volunteer participation, the present study clearly reports on the sex, education and experience of the participants.

Problems of unnatural task situations were avoided by the present research maintaining the natural classroom setting, students, and pairing of student and sponsor teachers. The present research did not impose external limitations on the knowledge the teachers had of the students, the classroom environment, or the instructional materials. The teachers taught and planned their lessons as usual. Moreover, the teachers' reflections were not restricted by the imposition of any preconceived categories during think-aloud protocol production. Categories for analyses were derived from an earlier pilot study.
Although individual differences in a small sample such as this one (twelve participants) make general patterns difficult to detect, the literature presents a strong case for investigation here. The present study offers detailed information on the processes of ESL teachers' lesson planning in the context of their naturally occurring teaching practices, rather than testing results of reduced data from large groups, because little prior research exists on ESL teachers' thinking and nothing like hypotheses or theories have been proposed to account for their instructional behaviors.
CHAPTER THREE

METHODOLOGY

This chapter explains the purpose of the study and its methods, including information on the research design, participants, research questions, experimental procedures and instrumentation, measures and analysis. A summary concludes the chapter.

3.1 Purpose of the study

The purpose of the present study was to gather data on the information that inexperienced student teachers of ESL and experienced sponsor teachers of ESL consider in regards to their students during lesson planning, to describe how these considerations relate to other aspects of the teachers' lesson planning, and to determine if these two groups of ESL teachers vary in significant ways. Knowledge of what ESL teachers think about during their lesson planning could be useful to ESL teachers, those learning to be ESL teachers, those educating potential ESL teachers, and curriculum planners.

3.2 Research Design

After a demonstration and training session in thinking-aloud, participants in this study were asked to produce a think-aloud protocol while planning one lesson they were to teach. This concurrent verbal report was audio taped, and observation notes were taken by the researcher during the verbal protocol.
Immediately after protocol production, a short interview with each teacher was also audio taped. Subsequently, participants filled out a rating scale regarding the lesson that they had just planned, using a paper and pencil, Likert type scale.

The planned lesson was taught at the usual time in the teachers' classes, within a few days of the protocol and interview. This lesson was observed and field notes were taken by the researcher on what went on during the class. Finally, a short interview took place after the lesson and this was audio taped. For a schematic presentation of the basic methodology of this study, please refer to Figure 3.1.

3.3 Participants

The target population for this study was (1) students doing their teaching practicums in teenage or adult ESL classes and (2) their sponsor teachers. Student teachers were recruited from the summer and winter sessions in 1990-91 of an introductory course in teaching English as a second language at a university in a large city in Canada and the 1990 fall practicum placements for an ESL Certificate Program at a college in the same city. The students in these education programs ranged from those doing their first course in ESL to those who had been teaching academic subjects or ESL and wanted to upgrade their qualifications.

Permission to conduct the study was obtained from university or college personnel in charge of these programs and all other institutions where participants were either working or doing their practicums.
Figure 3.1. Outline of methodology for the study

<table>
<thead>
<tr>
<th>What the participants did</th>
<th>Methods of documentation used</th>
</tr>
</thead>
<tbody>
<tr>
<td>think-aloud production during lesson planning</td>
<td>audio tape</td>
</tr>
<tr>
<td>post-planning interview</td>
<td>audio tape</td>
</tr>
<tr>
<td>rating scale</td>
<td>response on paper</td>
</tr>
<tr>
<td>planned lesson taught and observed</td>
<td>observation notes</td>
</tr>
<tr>
<td>post-lesson interview</td>
<td>audio tape</td>
</tr>
</tbody>
</table>
Participants were briefed about the study and told that the study was concerned with ESL teachers' lesson planning; if they agreed to participate, they signed a consent form (see Appendix 1). Only when all concerned parties agreed was a student teacher/sponsor teacher pair included in the study. Student teachers were sometimes hesitant to volunteer because they felt over-burdened already in their course work and felt that another project might increase their stress. Some sponsor teachers were uncomfortable about being observed. In one case a student teacher did offer to participate, but his sponsor teacher did not, so the pair was excluded. Another student teacher volunteered, but her practicum period was not within the time frame of the present study, so she was also not able to participate.

All sponsor teachers were nominated by a program supervisor. Participating student teachers were only those doing their first teaching practicum. A profile of each of the twelve participants is presented in Figure 3.3. Among the student teachers there was a range of experience in teaching ESL or EFL from none to one and a half years. ESL related training also varied from one student doing her very first course in education to one student who had finished all her ESL certificate courses and was doing the practicum as her last requirement before graduation. Among the sponsor teachers there was also a range of ESL teaching experience: from three to thirteen years, with one teacher having only one and a half years of ESL teaching experienced but combined with twelve years of teaching English and an extended degree in ESL. One sponsor
teacher worked in a settlement language program for new Canadians, one in a public school and the others in community and private colleges. The student teachers did their practicums in the same environments as their sponsor teachers worked in. As indicated in Figure 3.2, the student teachers numbered one to six were paired respectively with sponsor teachers 12, 7, 11, 8, 9, and 10.

Although both males and females were in the target population, only females fulfilled all requirements for participation in the study, so this is an entirely female sample, and any interpretation of the findings must acknowledge the possibility of gender bias. Student teacher number six could not be included in calculations dependent upon think-aloud protocol data since she did her planning in conversation with her sponsor teacher rather than as a think-aloud protocol. However, data for student teacher number six were included in other types of calculations where think-aloud reports were not involved. The sponsor teacher (#10) was also excluded from these calculations. For information on the classes and the students, please refer to Appendix V, part 4, which gives a summary of what sponsor teachers said about their students.

3.4 Research Questions

Three sets of research questions were posed in this study. They fall into three groups concerned with: student characteristics which ESL teachers attend to during lesson planning and what ESL teachers think is important to consider about their students; the relationship between
student characteristics, lesson content and lesson activities; and
differences between inexperienced and experienced ESL teachers.
**Figure 3.2. Profile of Participants**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Sex</th>
<th>Years of Experience Teaching ESL or EFL</th>
<th>ESL/EFL Education &amp; Related Training</th>
<th>Working Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>F</td>
<td>0 yrs.</td>
<td>doing first ESL or education course</td>
<td>practicum, paired with # 12</td>
</tr>
<tr>
<td>2.</td>
<td>F</td>
<td>0 yrs.</td>
<td>finished most college program courses</td>
<td>practicum, paired with # 7</td>
</tr>
<tr>
<td>3.</td>
<td>F</td>
<td>0 yrs.</td>
<td>finished all college program courses</td>
<td>practicum, paired with # 11</td>
</tr>
<tr>
<td>4.</td>
<td>F</td>
<td>2 months overseas</td>
<td>education undergraduate, university</td>
<td>practicum, paired with # 8</td>
</tr>
<tr>
<td>5.</td>
<td>F</td>
<td>1 yr. overseas</td>
<td>finished college program core courses</td>
<td>practicum, paired with # 9</td>
</tr>
<tr>
<td>6.</td>
<td>F</td>
<td>1.5 yrs. overseas</td>
<td>finished all college program courses</td>
<td>practicum, paired with # 10</td>
</tr>
<tr>
<td>7.</td>
<td>F</td>
<td>3 yrs. in Canada</td>
<td>ESL Certificate</td>
<td>settlement English, paired with # 2</td>
</tr>
<tr>
<td>8.</td>
<td>F</td>
<td>1.5 yrs. ESL; 12 yrs. English in Canada</td>
<td>B.Ed. English and P.E., Extended Baccalaureate in ESL</td>
<td>public school, paired with # 4</td>
</tr>
<tr>
<td>10.</td>
<td>F</td>
<td>6 yrs. in Canada</td>
<td>B.A. Applied Science with a major in Early Childhood Education, M.A. in Early Childhood Education</td>
<td>college, paired with # 6</td>
</tr>
<tr>
<td>11.</td>
<td>F</td>
<td>10 yrs. in Canada</td>
<td>B.A. Linguistics, undergraduate ESL</td>
<td>college, paired with # 3</td>
</tr>
<tr>
<td>12.</td>
<td>F</td>
<td>13 yrs. in Canada</td>
<td>B.A. English, B.Ed., currently working on M.A. in ESL</td>
<td>college, paired with # 1</td>
</tr>
</tbody>
</table>
Previous research has suggested that teachers consider the characteristics of their students when planning, but this research was not done on ESL teachers. Because of the special nature of ESL education, student characteristics may take on added significance for teachers of English as a second language. The changing curriculum orientations in ESL teaching also put a greater emphasis on individual students than was true in the past. Question set one grew out of these concerns.

Q1: a) Which student characteristics do ESL teachers attend to during lesson planning?
   b) How important do ESL teachers consider identified student characteristics such as age, English proficiency, personal interests, first language, needs, purpose of study, motivation, gender, cultural background, and length of residence in an English speaking environment in their lesson planning?
   c) How closely related are considerations of student characteristics reported verbally during think-aloud reports of lesson planning, reports made in interviews, and rating scales concerning the importance of the above identified student characteristics?

The second set of questions evolved from the idea that it is important to know not only which student characteristics ESL teachers attend to during planning and how important they are, but also to what extent these ESL teachers pay attention to two other significant aspects of lesson planning -- content and activities. The relationship of content, activities and student characteristics is of interest here in terms of their
proportional relations to each other in teachers' decision making as well as how complex ESL teachers' attention to them is (i.e., how many of these elements teachers attend to at one time).

Q2: a) To what extent do ESL teachers attend to student characteristics in relation to other aspects of lesson planning (specifically, content, and activities)?

b) How frequently do ESL teachers tend to consider these aspects of planning individually or in conjunction with each other?

The third grouping of research questions concerns differentiation between experienced and student ESL teachers. Particular questions addressed relate to differences between the two types of teachers in the extent to which student characteristics are attended to, the importance given to student characteristics, the relationship among the three aspects of planning (content, activities and student characteristics), and the complexity of participants' thoughts while planning lessons.

Q3: a) Are there significant differences between experienced and student ESL teachers in the extent to which they attend to student characteristics during their planning of ESL lessons?

b) Are there significant differences between experienced and student ESL teachers in the importance they attach to student characteristics during their planning of lessons?

c) Are there significant differences between experienced and student ESL teachers in the extent to which they attend to other aspects of lesson planning (specifically, content, and activities)?
d) Are there significant differences between experienced and student teachers in the number of aspects of lesson planning they attend to concurrently when planning ESL lessons?

3.5 Experimental Procedure and Instrumentation

All participants were asked to do a think-aloud protocol during their planning session for a single one hour small group lesson. The scheduling of the think-aloud session for sponsor teachers was at their convenience and usually occurred a few days before the lesson itself. Planning sessions were also at the convenience of the student teacher but with the criterion that the lesson be toward the end of the practicum period when the student teachers would be most familiar with the class and most comfortable being observed. An original intention of the research had been that the lesson planned would be for small group work but this proved untenable for a variety of reasons. Some of the participants were working with materials they felt unsuited to group work or with students who they did not think would respond well to group work. To insist on small group work proved to be an unnatural constraint and against the better judgement of the teachers involved.

To restrict planning to a one hour lesson, as originally conceived for this study, also proved to be an unnatural constraint, so teachers planned at one sitting for whatever block of time they would be teaching the same students. The period of intended lessons planned for varied from fifty-five minutes to close to three hours in the various institutions involved. The think-aloud reports included the entire plan regardless of the intended
length of the lesson. Both constraints of time and group work were dropped in the interests of maintaining a natural and workable situation for the teachers and also to eliminate confusion caused by extraneous factors. The original reason for using both constraints was to increase comparability between lessons without creating an artificial instructional environment, but the constraints did prove unnatural so they were eliminated.

All participants received training in think-aloud protocol production (following Ericsson and Simon, 1984, p. 240). This training included an example given by the researcher of entering her home and what she could see as she opened the door and went into the first room and looked around. The participants tried the same type of think-aloud protocol as a short training session. Verbal production then began immediately and ended according to the participant's statement of completion. The protocol was audiotaped for later transcription and coded for mentions of student characteristics, activities, content and combinations of these categories.

Notes were taken by the researcher concerning what the participant did during protocol production. These notes were used for verification of the protocol and to help with later coding. This procedure was useful for identification of such things as when a participant was reading from a book during her planning, interruptions from colleagues, or blank time on the tape due to an extensive search for something like a pencil.
After completion of the think-aloud protocol a short interview was also audiotaped (see Appendix 2 for the interview schedule). This interview was used to enquire about what the teachers had been thinking in regard to the lesson before they began their protocol, what they thought was important to consider when lesson planning, and what they thought it important to consider about their students when planning. These interviews were also used to gather information on the class and the teachers' experience and training.

Following the interview the participants completed a one page rating scale concerning their perceived importance of certain student characteristics in the lesson they had just planned (Appendix 3). Ten student characteristics were rated in importance from 1 (not important at all) to 5 (very important): age, English proficiency, personal interests, first language, language learning needs of student, students' long term purpose of study, personal motivation, gender, cultural background and length of residence in an English environment. These terms were used in their everyday sense and teachers probably interpreted them according to their own understanding rather than in a technical way.

The planned lesson was observed as unobtrusively as possible in the teacher or student teacher's usual class time and location. Extensive field notes were taken during the classroom observation which were later used to guide a short taped interview (see Appendix 3) following the lesson. The observation documented the events that occurred in the classroom and also made it possible to enquire regarding differences
between the planned and actual lessons. The interview allowed the teacher to comment on what they had done in the class, to explain the relationship their actual teaching had to their plan, and also to describe any deviations from their plans. This taped interview was also later transcribed.

3.6 Measures and Analyses

The research questions and the types of measures used to answer them are outlined in Figure 3.7 and follow an explanation of each data source and analysis for each question. A coding system was devised to identify mentions of student characteristics, activities, and content in the think-aloud protocol data. The basic unit of analysis was a clause plus any dependent clauses. A clause was defined as: "a group of words containing a subject and a verb" (Azar, 1989, p. 238). A dependent clause was defined as the subordinate clause in "a non-symmetrical" relationship "between two clauses in such a way that one is a constituent or part of the other" (Quirk and Greenbaum, 1978, p. 309).

Only selected aspects of the think-aloud protocols were coded. Exclusions were made of explanations that were an artifact of the research method or the researcher’s presence, references to lessons other than the one being planned, reading passages from books and interruptions or conversation with other people. Some examples of such exclusions are:

I don't know exactly what BES is going to be ending up with tomorrow, she's doing another full class day and what we have her doing is she's reviewing some of my old work which is brushing teeth.
I don't know if you've ever played with the, they're those wooden rods that you probably studied denominations of 10 or factors of 10 and there are 10 different rods varying in size and represented in colors as well.

For examples of the verbal reports included in the coding please refer to Figure 3.3.

Reliability was checked in both cases by dividing the think-aloud transcripts into sections of 10 type-written lines each which were then assigned numbers. A random number table was then used to select one section for each think-aloud for re-coding by the researcher (intra-rater reliability check). Comparison was then made with the previously coded think-aloud data. Intra-rater agreement was 96%.

Inter-rater reliability was checked by random selection of one section per think-aloud and coding by an independent graduate student who was familiar with the coding system. The graduate student's coding was then compared to the researcher's previously coded think-aloud. Inter-rater agreement with an independent graduate student was 89%.

3.7 Research Questions, Data, Measures, and Analysis

Here follows a description of the research questions, data, measures and analysis used in this study.

Q1: a) Which student characteristics do ESL teachers attend to during lesson planning?

First the think-aloud protocols were coded using the coding system (for examples see Figure 3.6). Student characteristics, activities and content
**Figure 3.3.** Examples of Coding Categories

**Student Characteristics**

C probably can use more practice...

J’s a funny guy and he’s very verbal but he’s not all that accurate in his written work, he’s kind of sloppy...

Try to zero in on some of the needs of the kids...

**Content**

The weather, it’s something we’ve sort of practiced every day...

I’ll leave out recycling, they seem to have to have gone over that in school...

I need to think about what has been missed in their regular class work or whether just to re-emphasize some of the more difficult aspects of their work during the year...

**Activities**

So, I’ll review whatever she did...

I don’t want them to be just doing written exercises so I think we’ll play a game at the beginning...

Have a group of words, uh subjects and verbs in a matching set of activities so I can give them that...

**Two or More Aspects Considered in Conjunction**

a) **content/activities**

A lot of worksheets they’re doing are grammar...

I’ll review the ecosystem...

I’ll just skim through here and see what game will relate to some of the stuff we’ve already covered...
b) content/student characteristics

I think I need to find a book that will be more appropriately challenging for them...

Present simple and pronoun agreement, that would be very easy for some but boring for others...

Irregular verbs good for some and not for others...

c) content/activities/student characteristics

I found that playing this song is a real motivator for them, it's right at their level and they're very interested in it...

The ones who are advanced did well in the sequencing so I think I'll get them to draw a food chain...

I want to find some basic sentence-making exercises for tomorrow for the beginners...
were identified in the data. An impressionistic comparison was then made between the student characteristics identified in the protocols and those made in the first interview for verification purposes.

Q1: b) How important do ESL teachers consider identified student characteristics such as age, English proficiency, personal interests, first language, needs, purpose of study, motivation, gender, cultural background, and length of residence in an English speaking environment in their lesson planning?

Each participant filled out a rating scale (Appendix 3) judging the importance of the ten student characteristics listed in Q1 (b). (1, not important at all, to 5, very important). This information was then ranked for all participants. Space was given at the bottom of the scale for participants to add any student characteristics that they felt had been overlooked on the scale. Because the response rate to this additional section was close to zero, this information was not included in the analysis.

Q1: c) How closely related are considerations of student characteristics reported verbally during think-alouds of lesson planning, reports made in interviews and rating scales concerning the importance of the above identified student characteristics?

This question used an impressionistic qualitative analysis and comparison of the information from the protocols, interviews and rating scales. Data of each participant was reviewed. In order to compare these sources the ten student characteristics on the rating scale were used as a check list. The
think-aloud reports were then read through for mentions of student characteristics and tallied. An accurate tally was not possible since some characteristics were not mentioned as discrete units. Characteristics not on the list but verbalized in the protocols were also noted. The interview was then reviewed to see what the individual participant said and if these data supported the information in that person's think-aloud protocol.

Q2:  a) To what extent do ESL teachers attend to student characteristics in relation to other aspects of lesson planning (specifically, content and activities)?

The coded protocols were examined for the proportional relationship of the three above-mentioned aspects of planning. Significant differences were assessed by t-tests between the mean percentages of content and activities, and also between content/activities and student characteristics in the verbal report data.

Q2:  b) How frequently do ESL teachers tend to consider these aspects of planning individually or in conjunction with each other?

The three aspects of planning mentioned above were examined in the concurrent verbal reports for consideration of aspects individually and in conjunction with other aspects. Tallies were made of single mentions and combinations of mentions of each aspect of lesson planning.

Q3:  a) Are there any significant differences between experienced and student ESL teachers in the extent to which they attend to student characteristics during their planning of lessons?
The mean percentages of mentions of student characteristics of experienced and student teachers were compared in the concurrent verbal report data. A t-test was computed to check for significant differences.

Q3:  

b) Are there any significant differences between experienced and student teachers in the importance they attach to student characteristics during their planning of ESL lessons?

The mean scores of experienced and student teachers on the rating scale were compared. Within group comparisons were also made. Statistical analysis was not possible on ten variables for two such small groups.

Q3:  

c) Are there significant differences between experienced and student ESL teachers in the extent to which they attend to other aspects of lesson planning (specifically, content, and activities)?

Mean percentages of mentions of categories in the concurrent verbal reports were compared by t-test to determine significant differences between experienced and student teachers.

Q3:  

d) Are there significant differences between experienced and student teachers in the number of aspects of lesson planning they attend to concurrently when planning ESL lessons?

A comparison was made of the number of aspects considered individually and in conjunction with others by both experienced and student teachers in their concurrent verbal reports. Comparisons were made using a t-test of the components of aspects of lesson planning considered concurrently by experienced and student ESL teachers.
3.8 Summary

The research design used a variety of approaches to describe the thinking of experienced and student ESL teachers while they each planned a single lesson they would teach in the coming few days. Experienced and student teachers produced think-aloud protocols during the lesson planning process, then these teachers were later interviewed, and all participants filled out a rating scale on the importance of students' characteristics in their lesson planning. The planned lessons were observed and followed up with a final interview. Transcripts of the concurrent think-aloud protocols were transcribed and coded for mentions of student characteristics, content and activities. T-tests were used to check for significant differences in the proportions of mentions of student characteristics, activities and content. Differences within groups were investigated. Finally, comparisons were made between groups of experienced and student ESL teachers. Figure 3.4 provides a summary of the measures and analyses, the data types and the research questions.
**Figure 3.4.** Summary of the research questions, data and analyses

<table>
<thead>
<tr>
<th>DATA</th>
<th>ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a) 1. think-aloud protocols</td>
<td>- tally of mentions of student characteristics using coding scheme, t-tests</td>
</tr>
<tr>
<td>2. post-planning/pre-lesson interviews</td>
<td>- tally of mentions of student characteristics in the interview compared to 1.a.1</td>
</tr>
<tr>
<td>1.b) 1. five-point rating scale</td>
<td>- rankings, mean rankings calculated, for 10 identified student characteristics</td>
</tr>
<tr>
<td>2. post-planning/pre-lesson interviews</td>
<td>- review of comments about the 3 most important things considered about students during lesson planning (for verification of think-aloud protocol)</td>
</tr>
<tr>
<td>1.c)</td>
<td>- comparison of 1.a and 1.b</td>
</tr>
<tr>
<td>2.a) 1. think-aloud protocols</td>
<td>- tally of mentions of student characteristics, content, and activities coded in protocol and compared proportionally, t-tests</td>
</tr>
<tr>
<td>2. post-planning/pre-lesson interviews</td>
<td>- review of mentions in interviews of the 3 most important things considered when planning a lesson; mentions of student characteristics, content and/or activities used as verification</td>
</tr>
<tr>
<td>2.b) think-aloud protocols</td>
<td>- coded protocols (3 aspects of lesson planning above) examined for consideration of aspects individually and in combination, t-test</td>
</tr>
<tr>
<td>3.a) think-aloud protocols</td>
<td>- comparisons of expert and student ESL teachers on student characteristics mentioned in protocols and interviews, rough tally</td>
</tr>
<tr>
<td></td>
<td>- comparisons within groups and across groups</td>
</tr>
</tbody>
</table>
3.b) five-point rating scales
- comparisons of means and rankings of expert and student ESL teachers,
- comparisons within and across groups

3.c) think-aloud protocols
- comparisons of the proportional relations of aspects of lesson planning considered individually and in combination by expert and student ESL teachers, t-test

3.d) think-aloud protocols
- comparisons of the number of aspects of lesson planning considered individually and in combination by expert and student ESL teachers, t-test
- comparisons of the components of aspects of lesson planning considered in combination by expert and student ESL teachers
CHAPTER FOUR
RESULTS

This chapter presents results for all the research questions with qualitative and quantitative findings, where appropriate, described for each question. Results will be discussed for each research question individually grouped under the three main question sets: (1) the student characteristics teachers attended to during lesson planning and reported as important; (2) attention to content, activities and student characteristics; (3) differences between student and sponsor ESL teachers.

4.1 Preliminary Analyses of Attention to Student Characteristics

The research questions grouped here developed out of the idea that the special nature of English as a second language students may require ESL teachers to give particular attention to the characteristics of their students. Also of interest was which student characteristics were attended to and whether the information gleaned from the think-alouds, interviews and rating scales was consistent. Initial analysis of the data required coding the teachers' mentions of this aspect of planning, rather than using a priori categories, before the formal research questions could be addressed.

Below are definitions and examples from the think-aloud protocols of the categories of content, activity and student characteristics. These definitions were suggested by the data in a pilot study then were confirmed and refined from analysis of the data in the think-aloud protocols of the
present study. These definitions were used to categorize the think-aloud protocols and to answer the first set of research questions.

**Content** was mentioned as a topic or intention of what was to be taught during the lesson, covering both subject matter and topics (Burns and Anderson, 1987). For example:

We'll be going on to 'make, ask, tell, and want'...

It's a unit about the future ...

We're going to practice the imperative with brushing teeth ...

**Activity** was the intended behavior of the students and teacher during the lesson as stated by the teacher. This included explaining or presenting information, student grouping, and student assignments (Burns and Anderson, 1987). For example, some teachers mentioned pages in textbooks or exercises they would cover in the lesson:

Reading page 83 ... have the students do it silently ...

Other teachers tended to mention in more general terms what the students would do in class:

They're going to be interviewing each other ...

T is going to talk about Taiwan ...

We'll be watching a video ...

**Student characteristics** were mentions or descriptions of students' behavioral, psychological or cultural characteristics by the teacher. Many examples are given below.

**English proficiency** was the teachers' perception of the level of student's English and in interviews was often described by teachers as
being beginner, intermediate, or advanced. In the think-aloud protocols English proficiency was often mentioned more in terms of students' relative levels or in regard to whether they would be able to do an activity or not. For example, one teacher mentioned students' abilities in relation to each other:

I would say that R and N, C and J are the lower ability students in terms of their command of English...

P, cause he's a little more advanced than some of the other beginners ...

Another teacher was concerned with proficiency in terms of the rate that students would be capable of going on to the next task:

I just monitor the students and I know how to if they're ready for it okay...

Language learning needs were mentioned by teachers in regard to what students needed to be able to do with the English language or what they would probably use English for in their lives outside the classroom. Teachers sometimes considered whether the lesson would be useful for the class, as in this case:

I don't know if it'll be all that useful with this group because it's fairly abstract ...

Another teacher was more concerned with the needs of individuals, for example:
So I've got individual ideas on where each student's at
and what their particular needs are...

**Long term purpose of study** was what the student was planning to
do in the future, the reason for studying English in relationship to another
more distant personal or educational goal:

A lot of them have had some college education and are
going to school here for various reasons, just to study
English or work on a TOEFL or just the experience ...

The **personal interests** of the students referred to what the students
liked to do, talk about, and think about. Teachers' comments sometimes
included students' hobbies, or their interest in current issues or music. In
the examples below, teachers mentioned what kind of music the students
liked and whether the students might be interested in environmental
issues:

Since they like contemporary music I think I'll start out
with Bruce Cockburn's song 'If a Tree Falls in the
Forest'...

I wonder how many of them are really concerned from
that kind of an eastern mind set if they're really
concerned about the environment ...

**Cultural background** referred to where students came from or what
kind of cultural influences were noticeable to the teacher. For example,
one teacher commented on the nationalities of her students:

They're mainly Japanese, Korean, Taiwanese...
Q1:  a) *Which student characteristics do ESL teachers attend to during lesson planning?*

A large variety of student characteristics were mentioned during lesson planning by the teachers. As described above, these included: English proficiency, language learning needs, long term purpose of study, personal interests, and cultural background. Because these student characteristics are interrelated they were not tallied individually in the data, but some general trends were noticeable.

The student characteristic receiving the most broad recognition was English proficiency which was mentioned by eight of eleven teachers (72%). Teachers verbalized their thoughts about English proficiency when they were thinking about grouping students. For example:

I’ll start by grouping students according to their ...

levels...

R, N, C, and J are the lower ability students in terms of their command of English ...

Some comments about English proficiency related to what students could do:

They can do [page] 84 ...

They cannot do page 72 yet ...

Other comments concerned relative English proficiency or how to structure an activity so that students would be able to do it and the activity’s appropriate difficulty level:
Two of the groups seem to be advanced from the others...

I think for some of the lower students it would just be better to start out with the picture ...

Teachers also mentioned student interests in terms of activities that had been done before or what they thought students liked. Examples are:

They're tired of it ...

From this I hope to have their interests, their story, what they think makes a story ...

Student's needs were mentioned in connection with the suitability of the lesson or activity for the students:

I don't know if this will be useful with this group...

C can use more practice in conversation ...

Other student characteristics did not form strong patterns but did receive mention in the think-aloud reports. Life circumstances, personal habits and patterns of classroom behavior were also commented on, as in the examples below:

They're housebound women ...

A lot of them don't read the newspaper, they listen to a little more TV I guess, and radio ...

They seem to respond better to teacher fronted stuff than in groups ...
Personalities were mentioned in connection with individual's work and whether a group would be mature enough to make good use of unsupervised time. For example:

J's a funny guy and he's very verbal but he's not all that accurate in his written work, he's kind of sloppy ... I think they are sensible enough and mature enough, they can deal with that hour by themselves ...

One teacher also talked about the reaction expected from students to something she was planning to do in class. She thought her students would be surprised by a quiz and said:

I'll give them a quiz, that'll shock them ...

Q1: b) How important do ESL teachers consider identified student characteristics such as age, English proficiency, personal interests, first language, needs, purpose of study, motivation, gender, cultural background, and length of residence in an English-speaking environment in their lesson planning?

After their lesson planning session, concurrent think-aloud reports, and an interview, teachers filled out a one-page questionnaire which asked them to rate how important they thought the above-mentioned student characteristics were in the lesson that they had just planned. Teachers gave each student characteristic a rating on a scale from 1 (not important at all) to 5 (very important). A copy of this questionnaire appears in Appendix III.
Teachers rated English proficiency the highest for importance, followed by personal motivation, language learning needs, and personal interests. The complete teachers' ratings are shown in Figure 4.1 ranked from the student characteristic rated as most important to that rated least important. The score reported is the grand mean score for all 12 teachers. There were two ties; age and student’s long term purpose of study tied, and gender and first language tied. Ties in these overall rankings were eliminated by ranking the item with the lowest standard deviation higher. For graphic representations of this information broken down into student teachers and sponsor teachers please see Figures 4.2 and 4.3.

The rankings the teachers gave the different student characteristics, make clear that these ESL teachers considered English proficiency important in their lesson planning. The personal motivation of the students, their language learning needs and their personal interests were also of some importance. The large standard deviations for all but “English proficiency”, “personal motivation” and “first language” indicate considerable differences between individuals’ consideration of these characteristics. The post-planning interviews indicated that the participating teachers may have conceived of personal motivation and student interests as being very closely related. One teacher said it was important to choose topics that would enhance motivation: “what is going
Figure 4.1 Rankings of identified student characteristics

<table>
<thead>
<tr>
<th>Rank</th>
<th>Student Characteristic</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>English proficiency</td>
<td>4.58</td>
<td>.90</td>
</tr>
<tr>
<td>2</td>
<td>Personal motivation</td>
<td>4.25</td>
<td>.75</td>
</tr>
<tr>
<td>3</td>
<td>Language learning needs of student</td>
<td>4.00</td>
<td>1.21</td>
</tr>
<tr>
<td>4</td>
<td>Personal interests</td>
<td>3.58</td>
<td>1.00</td>
</tr>
<tr>
<td>5</td>
<td>Age</td>
<td>3.50</td>
<td>1.23</td>
</tr>
<tr>
<td>6</td>
<td>Student's long term purpose of study</td>
<td>3.50</td>
<td>1.31</td>
</tr>
<tr>
<td>7</td>
<td>Length of residence in English environment</td>
<td>3.00</td>
<td>1.13</td>
</tr>
<tr>
<td>8</td>
<td>Cultural background</td>
<td>2.83</td>
<td>1.14</td>
</tr>
<tr>
<td>9</td>
<td>First language</td>
<td>1.83</td>
<td>.84</td>
</tr>
<tr>
<td>10</td>
<td>Gender</td>
<td>1.83</td>
<td>1.19</td>
</tr>
</tbody>
</table>

to get them interested, and want to get them listening and talking." The same teacher mentioned finding out what students were interested in was important to their motivation or as a way to give students motivation. Firm distinctions between these two characteristics on the rating scale may not be possible.
Figure 4.2. Mean rankings and standard deviations on 10 identified student characteristics for Inexperienced Student Teachers (St) and Experienced Sponsor Teachers (Sp)

1. English Proficiency
2. Personal Motivation
3. Language Learning Needs
4. Long term Purpose of Study
5. Personal Interests
6. Age
7. Length of Residence
8. Cultural Background
9. Gender
10. First Language
Figure 4.3. Comparison of Mean Scores (1-5) of the Importance of Student Characteristics for Inexperienced Student Teachers and Experienced Sponsor Teachers

1. English Proficiency
2. Personal Motivation
3. Language Learning Needs
4. Long term Purpose of Study
5. Personal Interests
6. Age
7. Length of Residence
8. Cultural Background
9. Gender
10. First Language
Q1:  c) How closely related are considerations of student characteristics reported verbally during think-aloud reports of lesson planning, comments made in interviews and reports on the rating scale concerning the importance of the above identified student characteristics?

Impressionistically, there appeared to be agreement concerning the importance teachers gave to the identified student characteristics in their verbal reports during think-aloud protocols, comments made during interviews, and ratings given on the rating scale. Student teachers and sponsor teachers frequently mentioned English proficiency in the think-aloud protocols (see Figure 4.4), rated it highly on the rating scale (see Figure 4.1 for specific rank and Figure 4.4 for general rating), and supported these mentions and ratings in interviews (see Appendix IV). Personal interests were also mentioned in the protocols by both groups, (Figure 4.4) rated highly (Figures 4.1 and 4.4), and supported in interviews (Appendix IV). Figure 4.4 gives details concerning the consistency in the data for all ten identified student characteristics.

Other student characteristics mentioned spontaneously during the think-aloud protocol did not have a clear, one to one relationship to what the teachers reported in their interviews and on the rating scale (see Figure 4.4). One obvious example of this was personal motivation which received little mention in protocol reports but was rated as high in importance by both groups of teachers. Likewise, language learning needs were seldom
Figure 4.4. Consistency of data for sponsor teachers and student teachers

T.A. = think-aloud protocol

very few = one mention
few = two to five mentions
some = five to ten mentions
frequent = over ten mentions

<table>
<thead>
<tr>
<th>Student Characteristic</th>
<th>Mentions in Think-Alouds</th>
<th>Rating</th>
<th>Support for T.A. in Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>English proficiency</td>
<td>frequent</td>
<td>high</td>
<td>yes</td>
</tr>
<tr>
<td>Personal motivation</td>
<td>none</td>
<td>high</td>
<td>*</td>
</tr>
<tr>
<td>Language learning Needs</td>
<td>few</td>
<td>high</td>
<td>yes</td>
</tr>
<tr>
<td>Personal interests</td>
<td>some</td>
<td>high</td>
<td>yes</td>
</tr>
<tr>
<td>Age</td>
<td>very few</td>
<td>medium</td>
<td>**</td>
</tr>
<tr>
<td>Long term purpose</td>
<td>very few</td>
<td>medium</td>
<td>no</td>
</tr>
<tr>
<td>Length of residence</td>
<td>none</td>
<td>medium</td>
<td>yes</td>
</tr>
<tr>
<td>Cultural background</td>
<td>very few</td>
<td>low</td>
<td>yes</td>
</tr>
<tr>
<td>Gender</td>
<td>none</td>
<td>low</td>
<td>yes</td>
</tr>
<tr>
<td>First language</td>
<td>none</td>
<td>low</td>
<td>yes</td>
</tr>
</tbody>
</table>
Figure 4.4. Continued

Consistency of Data for Student-Teachers

<table>
<thead>
<tr>
<th>Student Characteristic</th>
<th>Mentions in Think-Alouds</th>
<th>Rating</th>
<th>Support for T.A. in Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>English proficiency</td>
<td>frequent</td>
<td>high</td>
<td>yes</td>
</tr>
<tr>
<td>Personal motivation</td>
<td>very few</td>
<td>high</td>
<td>*</td>
</tr>
<tr>
<td>Language learning Needs</td>
<td>none</td>
<td>high</td>
<td>yes</td>
</tr>
<tr>
<td>Personal interests</td>
<td>frequent</td>
<td>high</td>
<td>yes</td>
</tr>
<tr>
<td>Age</td>
<td>none</td>
<td>medium</td>
<td>**</td>
</tr>
<tr>
<td>Long term purpose</td>
<td>none</td>
<td>medium</td>
<td>yes</td>
</tr>
<tr>
<td>Length of residence</td>
<td>none</td>
<td>medium</td>
<td>yes</td>
</tr>
<tr>
<td>Cultural background</td>
<td>few</td>
<td>low</td>
<td>yes</td>
</tr>
<tr>
<td>Gender</td>
<td>none</td>
<td>low</td>
<td>yes</td>
</tr>
<tr>
<td>First language</td>
<td>few</td>
<td>low</td>
<td>yes</td>
</tr>
</tbody>
</table>

Mentions of additional student characteristics in the think-aloud protocols were not on the rating scale and therefore cannot be assessed for consistency in all three data sources. These included: life circumstances, classroom behavior, personalities, personal habits, and reaction to materials.

* It appeared that participants conceived of personal motivation and student interests as being very closely related.

** Although age was not mentioned in the think-alouds, there were a few mentions in the interviews.
mentioned in think-aloud protocols, but teachers rated this student characteristics as highly important on the 1 to 5 scale.

All teachers reported in the post-planning interview that they had been thinking about the lesson before beginning their think-aloud protocol. This shows the time boundary limitation of their verbal reports clearly. This thinking reportedly ranged from suitable topics to choice of materials. Appendix IV lists detailed information on what each teacher said about their pre-think-aloud ideas. All student teachers had discussed the lesson with their sponsor teacher. Sponsor teachers were often working with a unit plan or overall course plan; correspondingly, their think-aloud protocol was not for a lesson in isolation but was very much dependent on the lesson before it and those to follow. Student teachers viewed their lessons much more as single events since they were not responsible for anything more in the course curriculum than their own lessons. They relied on their sponsors to tell them what to do to fit into the course. This functional distinction was a natural artifact of the roles of sponsor and student teachers.

During the same interview (after the planning session and prior to teaching the lesson) teachers were asked: What do you think is important to consider about your students when you are planning a lesson? The teachers' replies to this question are found in Appendix V. Student interests, proficiency, needs, and an understanding of who the students are each received a number of comments. None of the student
characteristics rated (later) at the lower end of the rating scale received comment at this point in the data collection.

During the post-planning/pre-lesson interview teachers were also asked to "tell me about your class". No direction was suggested by this question and teachers largely responded to it with comments on student characteristics, examples of which are given below.

The age of the students was sometimes referred to specifically in these interviews when it had not been mentioned in the think-aloud protocols. One teacher was concerned that her teenage students needed fast pacing because they had limited attention spans. One participant voiced her concern that her materials not be childish since the students were adults. Another teacher mentioned that her materials had to be adapted for teens since they had been designed for adults. An example of an explicit comment on age is:

They’re mostly between about 19 and 22. I have one 30-year-old Taiwanese lady in there ...

In the interviews, the teachers also frequently evaluated the English proficiency of their students. Sometimes this was explained using a test score and sometimes in more general terms:

I’m not sure how advanced they are because it’s a 300 level and we have 400 level, we have no 200 level this summer ... (referring to TOEFL scores)
I guess the range I would say would be from a kind of low intermediate to a high intermediate in terms of ability...

At times the teacher mentioned the gender of the students:

I have 16 students, 16 wonderful women that have strong functioning personalities ...

The cultural background of the students was also often mentioned by the teachers in the interviews:

Three from Viet Nam, three women from Poland, two Czechoslovakian women, a woman from the Honduras, three Taiwanese, an Iraqi woman, Irani woman ...

There are six Cantonese, five Taiwanese, three Korean and one Spanish ...

They're from Korea, Japan, no Korea, Taiwan, Hong Kong and Venezuela, and oh, and mainland China ...

The students' first language was not mentioned as often as their cultural background although this may be because these two characteristics were usually assumed to go together, such as when a student was described as coming from Japan, the assumption being that he or she spoke Japanese as a first language. Sometimes this assumption could not be made. An example of this distinction was:

She is Chinese from Venezuela but she does speak Spanish and has a lovely Spanish accent...

Students' long term purpose of study received comment:
A lot of them want to go on and go to university, uh, in North America or take up some sort of career study in North America...

**Personal motivation** was mentioned by only one teacher:

Also attendance is sporadic with them, I don't know what it is, if they're not receptive or a lot of them are also quiet...

The students' **personal interests** also received some comment as teachers described their students:

It's not just finding something that they're interested in talking about because I don't know, they're kind of boring teenagers again, you know, so they talk about shopping, like they don't read the news ...

**Length of residence in an English-speaking environment** was explained in terms of how long students had already been in Canada or how long they were to stay:

I think they're international students and most of them are here for a year to stay ...

**Language learning needs** of the students were sometimes recognized by the teachers and related to what the teacher was doing to fill those needs:

I'm turning to doing more formal note taking and more formal lectures now in the note, in the listening part, a lot of the students are a lot better at speaking then they are
at listening, their listening skills are quite weak, I'm quite shocked at how weak they are ...

4.2 **Attention to Content, Activities, and Student Characteristics**

Questions grouped in this section concern the extent to which ESL teachers considered content, activities and student characteristics. These questions grew out of previous research which has shown that these three elements are important in lesson planning. Their relative importance and interrelationships were of particular interest here.

Q2: a) **To what extent do ESL teachers attend to student characteristics in relation to other aspects of lesson planning (specifically, content and activities)?**

Mean percentages of mentions by all teachers in the think-aloud protocols were: content, 44.8% with a standard deviation of 11.1; activities, 39.3% with a standard deviation of 8.9; and student characteristics, 15.9% with a standard deviation of 12.8. Differences in these frequencies were not, however, statistically significant. Comparisons by one-tailed t-tests showed $t = .35, p = \text{n.s.}$ for differences between activities and content; $t = .89, p = \text{n.s.}$ for differences between content and student characteristics.

See Figure 4.5 for a visual presentation of this information plotted for individuals. Considerable differences among individuals show clearly. Few clear patterns emerged since the range of percentages of coded mentions of student characteristics, activities, and content by individual teachers is quite large. These percentages represent the proportion of mentions of the planning element (student characteristics, activities, and content) to
total coded elements in individual think-aloud protocols. Student characteristics ranged from zero to 40%, activities from nearly 30% to nearly 60%, and content from about 30% to 60%. Figure 4.6 presents this information by group means rather than by individual mentions and shows clear group trends exist despite large individual differences. In both the student teacher group and the sponsor teacher group the trend was to mention content most often, followed by activities, then student characteristics least often.

Q2: b) How frequently do ESL teachers tend to consider these aspects of planning individually or in conjunction with each other?

The ESL teachers in this study considered content, activities, and student characteristics in conjunction with each other more than half the time in their concurrent verbal reports. Various combinations of the three aspects of planning were mentioned in the think-aloud protocols for a grand mean of 55.6% for all coded mentions of aspects of planning. Percentages here are of complex mentions, and reflect the proportions of each type of complex mention to other complex mentions only, not to planning considerations considered individually. The most frequent combination was content and activities, which occurred from 25% to 100% in individuals' totals of all coded combination mentions. In the case of three teachers, the content and activity combination was their only consideration of multiple aspects of planning.

Aspects of planning elements considered in conjunction during planning broke down as shown in Figure 4.7 showing content and activity
to be the most common complex consideration with a mean of 65.6% of all complex mentions. Means for other complex mentions were: content, activities and student characteristics, 17.2%; content and student characteristics, 14.1%; and activities and student characteristics, 4.6%. The trend in the data show few complex mentions of any combination which included student characteristics.

4.3 Differences Between Sponsor and Student ESL Teachers

The third set of research questions asked if differences existed in the extent to which the experienced and inexperienced ESL teachers attended to student characteristics; in the importance they attached to student characteristics; in the division of their attention among content, activities and student characteristics; and in the complexity of their thoughts about these aspects of lesson planning.

Q3: a) Are there significant differences between experienced and student ESL teachers in the extent to which they attend to student characteristics during their planning of lessons?

Variance within each of the groups, as indicated by large standard deviations, precluded statistical testing of this research question. The mean percentage of mentions in the think-aloud protocols was 17.7% for sponsor teachers and 11.0% for student teachers, with standard deviations of 15.4 and 10.6 respectively. In sum, no significant differences appeared between the two groups because of great individual differences within the groups.
Figure 4.5. Percentage of Mentions of Student Characteristics, Activities, and Content in Think-Alouds for Individuals.
Figure 4.6. Mean percentages of Student Characteristics, Activities, and Content for Inexperienced Student Teachers and Experienced Sponsor Teachers
Figure 4.7. Percentages of complex mentions in think-aloud protocols.
c = content  a = activities  s = student characteristics

<table>
<thead>
<tr>
<th>Teacher</th>
<th>%c/a</th>
<th>%a/s</th>
<th>%c/s</th>
<th>%c/a/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>60</td>
<td>10</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>3.</td>
<td>89</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>44</td>
<td>8</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>5.</td>
<td>77</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>7.</td>
<td>25</td>
<td>0</td>
<td>17</td>
<td>58</td>
</tr>
<tr>
<td>8.</td>
<td>32</td>
<td>9</td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td>9.</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10.</td>
<td>45</td>
<td>9</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>11.</td>
<td>50</td>
<td>10</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>12.</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>65.6</td>
<td>4.6</td>
<td>14.9</td>
<td>16.1</td>
</tr>
<tr>
<td>S.D.</td>
<td>28.5</td>
<td>4.6</td>
<td>14.1</td>
<td>17.2</td>
</tr>
</tbody>
</table>

Q3: b) Are there significant differences between experienced and student teachers in the importance they attach to student characteristics during their planning of lessons?
A two-tailed t-test resulted in \( t = .03, p = \text{n.s.} \). Differences between the two groups were not significant seemingly because of the large differences between individuals or the small sample size. Experienced sponsor teachers had a mean of 3.3 and standard deviation of 1.0; inexperienced student teachers had a mean of 3.3 and a standard deviation of .87.

**Q3: c)** Are there significant differences between experienced and student ESL teachers in the extent to which they attend to other aspects of lesson planning (specifically, content and activities)?

The mean percentages and standard deviations (S.D.) of mentions of content and activities in the think-aloud reports for both groups are shown in Table 4.1

<table>
<thead>
<tr>
<th></th>
<th>Sponsor Teachers</th>
<th>Student Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean %  S.D.</td>
<td>Mean %  S.D.</td>
</tr>
<tr>
<td>Content</td>
<td>45.83  12.88</td>
<td>43.60  9.26</td>
</tr>
<tr>
<td>Activities</td>
<td>36.50  10.74</td>
<td>42.60  7.85</td>
</tr>
</tbody>
</table>

One-tailed t-tests were done since it was expected that content would receive more attention than either activities or student characteristics. Results of these tests were \( t = .35, p = \text{n.s.} \) for comparisons between the teachers' attention to activities and content; \( t = .89, p = \text{n.s.} \) for
comparisons between attention devoted to content and student characteristics. In sum, the inexperienced and experienced teachers tended to focus on content and activities to about the same extent in their lesson planning.

Q3:  

d) Are there significant differences between experienced and student ESL teachers in the number of aspects of lesson planning they attend to concurrently when planning ESL lessons?

Student teachers' mean percentage of mentions of complex aspects of planning was 50.0%, with a standard deviation of 16.3. Sponsor teachers showed a mean of 60.3% with a standard deviation of 5.6. Because it was expected that experienced teachers would have more complex thinking than inexperienced teachers, a one-tailed t-test for correlated means was run. Results were $t=2.33, p = \text{significant at .05.}$

In sum, experienced sponsor teachers did significantly more complex thinking about student characteristics, activities and content than did inexperienced student teachers during their verbal reports of their lesson planning.

4.4 Additional Observations

The impression that quantitative analyses of these data give is one of great individual differences among the ESL teachers who participated in this study. In addition to the results mentioned above, other qualitative differences, also emerged in the data.

The ESL teachers who participated in this study planned a large variety of activities. Some examples from the teachers' lesson plans are:
review of a previous lesson or concept; a game called "the rod game"; written exercises to be done in class; a game called the "rub out and replace game"; interviewing of students by other students; student presentations; free time for students to make plans about a video they were making; watching a video; discussion; a verb game with cards; a dice game; a teacher demonstration or model of what the students would later be expected to do; writing; drawing a flow chart; listening to a song; reading aloud or reading silently. Generally, these activities could be categorized as games or reading, writing, speaking or listening activities.

Activities were usually chosen either because of a relationship to the content of the lesson or some other aspect of the lesson or previous lessons. Some activities were mentioned as being chosen for variety or contrast with some other activities, for example, one teacher said:

I think I'd like to do something active, something to get them up and around, because lately I've just been doing a lot of exercises and I think I need something a bit more energetic.

The content of the lessons also varied greatly. In their think-aloud protocols, teachers mentioned a wide spectrum of content or topics, some of them of a broad nature and others much more specific. One teacher mentioned using the weather as her topic during a daily warm-up. Other content areas were specific grammatical points (e.g., prepositions, the imperative, conditionals, verb phrases, gerunds), the names of colours, "the future" as a topic, commercials and advertising, women's issues,
education, Halloween and pumpkins, newspapers and headlines, ecology and issues related to conservation.

Teachers varied in how they planned their lessons and in the order they gave consideration to lesson components. During their think-aloud reports, some teachers first focused on the material that they wished to cover during the lesson. These teachers generally got out their texts and other materials, then thought about what they would do in the lesson and how they could effectively do so with their students. For example, one teacher who was using a required textbook first looked at her text and quickly decided how much could be covered during the time period, then looked at the text again and picked out vocabulary the students would know and what would need to be explained (see Appendix VI for an excerpt from this teacher's think-aloud report). Another teacher first thought about the students and what would be useful for them or what they might be interested in. This teacher spent some time just thinking about the individuals in the class and what they would benefit from, then grouped some students together who had similar needs and then considered how she might help these students and what individual students would do during the class (see Appendix VII for a think-aloud excerpt from this teacher). It is not clear if this difference was caused by teachers or external factors. In the two cases above, the first teacher had a required textbook and the second did not. In some classes, the teacher did not determine the curriculum and students were required to write exams on specific content decided by the program administrators, leaving these
teachers little room for flexibility or recognition of their students' needs and interests. Although it is not possible to see the extent to which this factor influenced the teachers in this study, it should be recognized as a possible confound. Some of the differences noticed among individuals in this research may be because of such differences in curriculum.

Variations also appeared between sponsor teachers' planning and their student teachers' planning. This variation may be a consequence of what the sponsor teacher saw as their pedagogical role. For example, one sponsor teacher asked her student teacher to teach a set of lessons on ecology and allowed the student teacher considerable freedom within that topic. The sponsor teacher then felt that left her to attend to the more grammatical, remedial aspects of the course herself. She perhaps felt such grammar instruction would be harder for the student teacher to do since the sponsor knew the students' language proficiency better and she had materials available she had used in the past. In this case, the two teachers' plans varied by design. This was not the case in every sponsor-student teacher pair but sponsors nonetheless chose or guided their student teachers toward lessons that would be within their ability to teach. It seemed that some sponsors did not expect their student teacher to be able to do the same sort of lesson that the sponsor might do.

Also of particular interest was the interconnected way that teachers considered content, activities, and student characteristics. These three aspects of lesson planning seem to be very intricately interrelated. These aspects were often considered in combination and when considered
individually they were often given sequential attention. An example was one teacher who looked at the chosen topic or content of the lesson, then thought of an activity to introduce the topic, decided it was too complicated for the students, and then modified the activity. One student teacher did this when she was planning a verb game to review imperative forms (deletions are indicated by ellipses):

So first of all review the flash cards for the verb game, actually I'm trying to think of an introduction, how to get started ... I could start out with 'can you' and elicit answers from 'yes, I can' and 'no, I can't', I'm aiming at, I want to put these patterns on the board ... then have a word-picture match ... and I have a questions-word-picture match, which is picture word, question, picture flash cards, word flash cards and then question flash cards, and I'm just wondering if that's a good order to do that in ... I think for some of the lower students it would just be better to start out with the picture, picture flash cards that they already have, and then give the words ...

First the teacher thought she would review the flash cards used in the game, introduce the game, put some words on the blackboard and then hand out the flash cards. Later she decided it would be better for the students with less ESL proficiency if she let them begin with the picture flash cards they already had before giving them the words.
4.5 Summary

The present data show that the ESL teachers in this study tended to consider content and activities more than student characteristics during lesson planning, although differences evident in the teachers' verbal reports of this behavior were not statistically significant. The small number of teachers in the sample may have made small but significant differences impossible to detect, however. Nonetheless, these teachers reported the English proficiency of their students, student interests, personal motivation, and their language learning needs to be important considerations during their lesson planning.

Teachers considered content, activities and student characteristics in conjunction about half the time, and individually about half the time, while planning their ESL lesson. Statistically significant differences were found between student and experienced ESL teachers in the complexity of their thinking about student characteristics, activities, and content in conjunction during their lesson planning. Experienced sponsor teachers more often verbalized (in their think-aloud reports) complex thoughts about these student characteristics than did inexperienced student teachers.
CHAPTER FIVE
DISCUSSION AND IMPLICATIONS

This discussion is organized into sections that summarize the main points of the present research and its relations to previous research. Also included in this chapter are sections on the limitations of the present research and implications for further research and for ESL teacher education.

5.1 Summary of Main Results

Student Characteristics

The teachers participating in this study made many different mentions of student characteristics in their think-aloud protocols during lesson planning. The most frequent comments concerned the English proficiency of the students. This result makes sense since without acknowledgement of their students' ability levels, planning pedagogical content and activities would be difficult, if not impossible, for teachers to consider in any detail. As noted by Bell and Burnaby (1984), ESL students' English level may preclude the use of any content without consideration of the suitability of the material used to the students' language proficiency.

Student needs and student interests were also commented on. Sometimes teachers mentioned student interests in their think-aloud protocols when they were trying to make the chosen content more interesting by using the students' interests as a sort of connection to the topic. For example, one teacher included a song about the rainforest in
her lesson on ecology because the students enjoyed modern music. Other teachers made efforts to personalize grammar or a discussion topic by using the students' own lives as reference points. The students' life circumstances, e.g., whether they were housebound women, or young students, also received recognition. Students' classroom behavior, their personalities, ages, and their personal habits also received spontaneous mentions in think-aloud protocols.

Post-planning interviews revealed other student characteristics not verbalized in the think-aloud protocols. During the interviews when teachers were asked to "tell me about your class", there were not only mentions of the above student characteristics but also students' cultural backgrounds and first languages as part of the explanation of who the students were. It may be that these student characteristics are only given active consideration in ESL courses when teachers form their first idea of the character of their classes, and are not actively considered during individual lesson plans again since these are not things that change from week to week or lesson to lesson. In terms of importance on the rating scale of identified student characteristics, these characteristics were also rated very low.

The top four ranked items on the rating scale were English proficiency, personal motivation, language learning needs of student and personal interests. Of these four characteristics only personal motivation received no comment in the think-aloud protocols, possibly because the present teachers recognized this as a factor but did not feel it was
something they could manipulate or do much about. Although teachers may think it important to recognize what motivates students, this is not always easy to discover, and once discovered it might not be easy to influence. One teacher reported during her interview that she was at a loss with a particular class and had felt all semester that she had not been able to please them or get them motivated. She commented that she had given up trying to figure out what her students liked since they showed little or no enthusiasm for anything. If a teacher does put a lot of effort into thinking about a student characteristic (like motivation) and finds it confusing or pointless to try to affect something that remains a problem, perhaps that characteristic will not get any further attention from that teacher.

**Relation of Student Characteristics to Content and Activities**

The ESL teachers in the present study gave more attention to content and activities in their lesson planning than they did to student characteristics (although this difference was not statistically significant). The characteristics of their students were certainly given careful consideration by the teachers but their main concerns during planning sessions for the single lessons investigated in this project were the content of the lesson and what activities were to be done.

The three aspects of planning, content, activities, and student characteristics were considered in conjunction with each other about half the time during concurrent verbal reports. This finding suggests that these three considerations are very highly interconnected mentally.
The importance of content and activities was also reflected in the kinds of complex considerations these ESL teachers made during their lesson planning. In the teachers' verbal reports, the complex mental representation of content considered along with activities occurred most frequently. Common sense allows that the content of a lesson and any activity done to present the content must be closely connected. In fact, a teacher must necessarily consider both in any lesson. This interpretation does not, however, explain how content and activities are related, merely that some sort of relationship exists.

Expert-novice Differences

Despite many similarities between the present experienced ESL sponsor teachers and inexperienced ESL student teachers, a statistically significant difference appeared in the complexity of thinking between the two groups as documented in their verbal reports while lesson planning. Experienced sponsor teachers tended to think more often about student characteristics, content and activities in combination than did inexperienced student teachers. This difference may be because expert teachers are better able to organize and store their knowledge, as suggested by Borko (1989), or that expert teachers are able to use their more extensive pedagogical knowledge and experience when they plan (Borko and Livingston, 1989). This finding relates very closely to Shulman's (1987) suggestion that teachers' knowledge of students and their characteristics is a key aspect of an experienced teachers' knowledge base. Being able to think about complex issues and to include student
characteristics in this thinking is an advantage if a lesson is to be tailored to specific students. Alternatively, these results may also be because experienced ESL teachers verbalize differently than do inexperienced ESL teachers, using a more developed repertoire of professional terminology, which was then reflected in the data collection technique of using verbal reports as a measure of thinking processes.

It seems self-evident that sponsor teachers would know more about their students than a student teacher could possibly learn in a short practicum. Shulman (1987) considers experienced teachers’ knowledge base to include knowledge of learners and their characteristics and suggests that teachers adapt their lessons to suit their students. During their planning, both groups of teachers in the present study paid attention to what they saw as the characteristics of the students. The present study made no attempt to evaluate the accuracy of the teachers’ assessments of the students, or to interpret how well the teachers applied what they knew about their students to their lesson planning or the subsequent "success" of the lesson. Rather, the study only assessed whether teachers considered student characteristics in their lesson planning. Likewise the teachers’ lesson plans were not evaluated to see how the teachers executed them. Comparisons between teachers’ intended plans and actual instructional sequences might profitably be assessed in future research.

Qualitatively, differences between student and sponsor ESL teachers appeared in the independence of their thinking about their lesson
plans before they did their think-aloud protocols. This difference may be due to the very different roles that these teachers have to play in their temporary relationship during a practicum. The sponsor teacher remains in control of the general direction of the class and course, whereas the student teacher is invited to take on only a limited amount of responsibility for a few lessons. Student teachers are well aware of their guest status and look to the sponsor for guidance about what is appropriate for them to teach. Information about the students often comes to student teachers second hand from their sponsor teachers.

For example, some sponsor teachers in the present study gave very specific requests concerning their student teacher's lessons, seemingly in order to connect the lesson to a larger unit the sponsor teacher was working on. Some sponsor teachers offered material they wanted student teachers to use in the classes, and one teacher planned the complete lesson with the student teacher, leaving only the making of some materials up to the student. Student teachers often referred to consultation on their lesson that they had already had with their sponsors, or said they would like to ask their sponsors about the appropriateness of something they were considering doing in their lesson (in both think-aloud reports and during interviews). Student teachers were also conscious of staying within the boundaries of pedagogical responsibility allocated to them. For example, when asked by her sponsor teacher to teach a lesson about gerunds, one student teacher planned largely as she was requested to do, rather than exercising her own initiative.
Levels of teaching expertise were not investigated in this study so distinctions between those teachers with greater and lesser amounts of actual skill at ESL teaching cannot be made. Teachers were distinguished by their experience, not their expertise nor their effects on student learning.

5.2 Relations to Previous Research

The teachers in the present study made many comments in their think-aloud reports on the English proficiency of the students. This finding lends support to previous studies which reported pupil characteristics as a source of information used when lesson planning (Yinger, 1980) and student ability as a consideration during instructional planning (Borko, 1978, Russo, 1978, cited and Shavelson and Stern, 1981; Cooper et al, 1979).

Student needs received some attention in agreement with McCutcheon (1980), and student interests were also cited in the lesson planning sequences, concurring with Swartz (1988) and MacLeod (1989). This also confirms Cray’s (1988) observation that the need to address the immediate concerns of immigrants tends to change ESL program sequence and focus, and that age and interests influence the topics with which language is introduced.

This result also is in agreement with Bell and Burnaby (1984) who described the importance of English proficiency in ESL curriculum planning, and others describing the importance of student ability (Borko, 1978; Russo, 1978 in Shavelson and Stern, 1981; Cooper et al, 1979),
language learning needs (Cray, 1988; McCutcheon, 1988) and personal interests (Cray, 1988; Swartz, 1988; MacLeod, 1989).

Nonetheless, content and activities proved to be the most frequent considerations in the participating teachers' lesson planning, as documented in other studies (Zahorik, 1981; Peterson, Marx and Clark, 1978; Morine-Dershimer, 1979; Yinger, 1979).

Although not all the differences between experts and novices that are cited in other research literature were apparent in the areas considered in this study, one significant difference was found between the experienced and inexperienced ESL teachers. In the present study, experienced ESL teachers considered aspects of lesson planning in complex ways more often than inexperienced student teachers did so. This result may be because expert teachers have more pedagogical and subject matter knowledge (Borko, 1989), or use richer conceptual frameworks flexibly (Shulman, 1987).

Perhaps over time inexperienced student ESL teachers develop a greater ability to think of aspects of lesson planning in combination. However, this area needs more research since reasons for and qualities of this difference remain undocumented (see Cumming, 1989). Differences between experienced and inexperienced teachers were not, however, reflected in the present study in terms of the student characteristics these teachers attended to, the importance teachers gave to student characteristics, or the relative attention they gave to content, activities and student characteristics.
The research literature reports experts' planning to be more detailed, and to include greater numbers of teacher and student actions (Borko, 1989). These characteristics were not evident in the lesson plans made by the participants in this study. In fact, large differences appeared in the amount of detail in the individual teachers' lesson plans. Some student teachers made very detailed plans and included many teacher and student actions, while others included almost no details at all. Sponsor teachers also varied greatly; some did work their plans out in detail, whereas other sponsor teachers who had already taught the same course (including a very similar lesson) before did not include many details in their lesson plans. Details in these cases would have been unnecessary since the teachers had a good idea of how the lesson would progress from their past experience.

5.3 Limitations of the Research

Although I have mentioned variations in the teachers' classroom environments and some of the different constraints they functioned under, it is important to again note that teaching, teachers and their classrooms represent complex social situations. This study does not account for many of the complex influences in these educational situations. Generalizing from this study to ESL teachers at large is not possible.

Relations such as the interconnectedness between subsequent ESL lessons (cf. Woods, 1989a, 1989b) were impossible to assess in this study since student teachers taught isolated lessons and the person responsible for interconnecting these lessons was always the sponsor teacher. If the
sponsor teacher did not insist on a connection of the student teacher's lesson to lessons before and after it, then it would be unlikely that the student teacher would have the information to perform the instruction on their own.

Another limitation is that although the lessons documented had clear beginnings and endings, important variables that relate to them may have occurred outside the lesson or the time frame allotted to planning. In some ways pedagogical lessons are distinct and separate entities, but at the same time we must recognize the connection lessons have to other lessons both preceding and following them (Woods, 1989a). Whether a lesson is at the beginning, middle, or end of a course might also affect its qualities. All the lessons analyzed in this study were in the middle of courses. Differences in lesson planning at different points in ESL courses need to be addressed in future research.

Similarly, because the teachers were studied in their natural educational environments it was not possible to compare student teachers and sponsor teachers on the same lessons, classes, or on equally novel lessons. In order to investigate truly comparable differences of this kind within a natural environment it would be necessary to study experienced teachers and inexperienced teachers through a course that was new to both of them.

During the data analysis, the present researcher became increasingly aware that teachers' focus on content, activities and student characteristics were very much interdependent in their lesson planning.
These aspects can be analyzed separately but division of them reduces important properties of the whole mental process of lesson planning. Further analyses of their interrelated nature would be very worthy of investigation in the future.

Think-aloud protocols themselves as a data collection technique, as do all measurement instruments, have limitations. Thoughts that are unverbalized are not recorded at all in a think-aloud protocol. Perhaps thoughts that are underlying a task are never verbalized in this procedure. The question of what might be "given" knowledge to experienced versus inexperienced teachers remains unanswered. Combining open-end style interviews with think-aloud reports was an attempt to address this problem. Using verbal behavior as a measurement of thinking processes is a limitation when interpreting the data.

Although it was not evident until after the study had been completed, the amount of control that the teachers had over their curricula did vary substantially from person to person. Some teachers followed required textbooks and content that had to be covered in order that their students could take a final exam in conjunction with a number of other classes. Other teachers had only a basic outline of topics to cover during the program and thus made a wider number of choices themselves. What effect this had on people's lesson planning is difficult to assess and adds another limitation to this research. Investigation of this factor beforehand and then matching of programs on the criterion of pedagogical
independence offered to the teachers may help avoid this confound in future research.

The timing of the think-aloud protocols was not precisely measured because they were often subject to interruptions and conversation with colleagues, but in general the time needed for lesson planning was shorter for the experienced teachers than for the student teachers (in agreement with Borko and Livingston, 1989). This comparison is, however problematic since most of the sponsor teachers were planning under external time constraints such as getting a number of lessons planned or fitting their planning sessions in between classes. Sponsor teachers also had a work environment in which to plan, e.g., an office or a desk at school, and the advantage of having materials available to refer to. Some of the sponsor teachers had very hectic offices with many other teachers coming and going, borrowing materials, interrupting with comments and so on. Student teachers planned for one lesson at home and did not have a library of materials on hand. Many decisions were already made for the student teachers in consultation with their sponsors.

The small sample of teachers used in this research posed a severe limitation since it may have made differences between groups impossible to detect. Practically, a larger volunteer population was not possible to obtain in the circumstances of the research without waiting another six months until the next class practicums. Although detailed descriptions were possible to obtain for the twelve teachers who volunteered, a larger sample of teachers may have allowed more distinct patterns in lesson
planning to emerge, particularly between experienced and inexperienced teachers.

The present sample may also include bias due to the participants all being of one gender. All the ESL teachers in this study were women. There were men in the student teacher population and in the sponsor teacher population from whom volunteers were recruited, but they either did not volunteer or for scheduling reasons were unable to participate. Although the English as a second language profession does seem to be dominated by women at the classroom teacher level in Canada, it cannot be assumed that a female sample will accurately describe all ESL teachers. Generalizations are not possible to make from such a small, gender-biased sample, composed entirely of self-selected volunteers.

5.4 Implications for Future Research

Obviously a larger sample would benefit any further investigation as would the inclusion of members of both sexes. The present methodology could be improved by expanding the scope of the think-aloud production to include all the lessons in a course. There may be differences in how ESL teachers plan lessons or think about their students and their lessons at various points in a course.

If it were logistically possible, it would also be of value to compare experienced and student ESL teachers as they progressed through the same course, using the same curriculum of equal familiarity to all participants. Some of the sponsor teachers in this study had taught the
same course many times; this in itself could be expected to influence their lesson planning.

It would also be of value to compare what ESL teachers plan, what they actually do in their subsequent teaching, and why they make changes in their plans. Teachers' recognition of the need to change their lesson plans and their formulation of pedagogical problems would be a useful direction for future research.

In the present study, inexperienced student ESL teachers were compared to experienced sponsor teachers. This is a slightly different focus than if differences between "experienced" and "inexperienced" ESL teachers were the major focus. Future researchers could profitably compare teachers doing their first year of teaching to experienced teachers to get around differences which are artifacts of the levels of pedagogical autonomy between sponsor and student roles. This would allow purer comparisons between teachers with more and less experience. Some language institutes have two teachers who teach classes alternately, one teacher in the morning and one in the afternoon; such an environment would maintain the same student population for both teachers and thereby allow such comparisons. This arrangement would also ensure that all teachers had the same knowledge of and familiarity with the students, rather than one being a "guest" for a limited period of time in the other teacher's class.
5.5 Implications for ESL Teacher Education

The current popularity of "student-centered programs" rather than adherence to a single instructional method shows the increasing understanding that student characteristics are integral to second language education (Strevens, 1977; Munby, 1978; Brumfit, 1980; Buckingham, 1981; Littlewood, 1981; Nunan, 1988a, 1988b; White, 1988; Widdowson, 1988 and Ellis, 1989). The present research makes clear that ESL teacher thinking is more complex than mere methodology. ESL teachers consider their students extensively when they plan their instruction, and this thinking bears on ESL lesson content and activities.

One application of the findings from the present study might be to ESL teacher training. It may be useful to include in such education information regarding the student characteristics that experienced ESL classroom teachers consider important and what influences lesson planning in ESL. One way of situating this proposal would be in reference to Richards' (1990) division of approaches to teacher preparation into "macro" and "micro" foci. The micro approach focuses on specific skills that are thought to be integral to effective teaching, while the macro approach looks at the total context of classroom teaching and learning and the interactions among the participants. An example, using the information gleaned from the present study, would be to give student ESL teachers the information that students' abilities and interests are important in lesson planning particularly in conjunction with lesson content and activities (at the micro level) and then have the student teacher plan a lesson, give the
lesson and then consider how these elements interacted with the actual students, the teacher and the classroom tasks for a broader analysis (at the macro level). This suggestion also conforms to Ellis' (1990) distinction between teacher preparation practices as those that raise awareness and those that are experiential; he suggests a need for both to be used in combination.

5.6 Summary

The present research, although limited in scope, supported previous findings in that ESL teachers attended to content and activities during their lesson planning. Participants also attended to student characteristics while they planned. Differences in amounts of attention given to these three aspects of lesson planning were not, however, statistically significant.

Among the student characteristics that the ESL teachers in this study gave attention to, students' English proficiency was an important consideration during planning. Students' needs and interests also received attention.

A statistically significant difference was found between experienced sponsor ESL teachers and student ESL teachers in that experienced sponsor teachers more often thought about the aspects of lesson planning in complex combinations than did inexperienced ESL student teachers.

Further research would profit from a larger sample composed of both men and women. Research including lesson planning throughout an entire course would also be a useful extension of the present research to
describe processes and change in ESL teachers' lesson plans over time. Experienced and inexperienced ESL teachers could also be compared in their lesson planning for equally novel courses.

Information concerning student characteristics might be of use in ESL teacher training and could be incorporated into micro and macro approaches to teacher preparation.
References


Cooper, H.M., Burger, J.M. and Seymour, G.E. (1979). Classroom content and student ability as influences on teacher perceptions of


Dear Ms MacLeod,

I have read your letter of July 15, describing the research project, "English as a Second Language Teachers' Lesson Planning for Group Activities" and kept a copy of it for future reference.

I would/would not (circle one) like to participate.

name __________________________

telephone _______________________

date ____________________________

signature _______________________
APPENDIX II

POST-PLANNING/PRE-LESSON INTERVIEW

1. What were you thinking about before doing the think-aloud protocol in regard to the lesson you just planned?

2. What are the three most important things in lesson planning?

3. What do you think is important to consider about your students when you are lesson planning?

4. Could you please tell me about your class?

5. Could you please tell me about your experience and training in ESL?
APPENDIX III

RATING SCALE

Below is a list of student characteristics. How important were these to your planning of the lesson you just planned?

On a scale of 1 to 5, please circle the number which best describes how important these student characteristics were for you and for this one particular lesson.

1 - not important at all
2 - slightly important
3 - somewhat important
4 - important
5 - very important

students' age
students' English proficiency
students' personal interests (hobbies, sports, work, etc.)
students' first language
students' language learning needs
student's long term purpose of study
students' personal motivation
students' gender
students' cultural background
students' length of residence in an English-speaking environment
APPENDIX IV

PROMPTS FOR POST-LESSON INTERVIEW

1. Could you please describe your lesson and how what you did relates to your lesson plan?

2. (In the case of any differences between the plan and the lesson) How did what you did differ from what you had planned? Why did you make such a change?
APPENDIX V

POST-PLANNING/PRE-LESSON INTERVIEW

Summaries of taped interviews.

Part 1. What were you thinking about before doing the think-aloud protocol in regard to the lesson you just planned?

Participant one talked with her sponsor teacher about using the video and said that some questions about the video needed to be made up. The topic of the video was education but the details were not discussed.

Participant two was given some pictures of the sequence of pumpkin carving by the sponsor teacher that she looked at. She read some stories about Halloween and thought about using a Jack-o-lantern. Because the class would use the imperative verb form later on, this had to be included.

Participant three discussed the lesson with her sponsor teacher and they discussed reading news headlines and relating them to the story. Participant three then considered methodology.
Participant number four considered that the previous lessons had used sequencing and, that this topic would be of interest to them and would be meaningful and familiar. She also picked up some books that might be useful but did not look at them.

Participant five reported that the sponsor teacher asked that the lesson be concerning gerunds and photocopied grammar sheets and a story were provided from the students' texts.

Participant six said that the curriculum was set and so the lesson content was decided. Planning was immediately after the previous lesson so there was no time for her to think about this plan, she just started in on it.

Participant seven had a planning routine. On Mondays the week was roughly blocked in a plan book to ensure that resources were on hand or so that materials could be produced in time. The general direction of the lesson was decided.

Participant number eight had already made a needs assessment sheet also based on student writing the teacher thought she wanted to focus on individualizing class work since the class had multiple levels of ESL proficiency.
Participant nine was following the format of her class text so she knew what would be coming up, and what the students needed for the next test.

Participant ten thought about how to incorporate previously studied material into her lesson and how to make a quiz of what the students had been doing. She also thought she might continue comparatives and superlatives would be better. She also had considered which text to use to add some variety and more activity.

The week's plan was roughed in since teacher eleven was sick the day before and had time to do so she also made projections about next week and what the class might be able to do, but no details were decided.

This lesson is part of a unit and long range plan that started 2 to 3 weeks ago and participant twelve had known since starting the course that she wanted the students to make a commercial although it wasn't clear how things would go exactly and at what point this would be appropriate. There was also some allowance for student reactions to the project and if they thought it was boring, things would be moved along quickly.
POST-PLANNING/PRE-LESSON INTERVIEW

Summaries of taped interviews

Part 2. What are the three most important things in lesson planning?

Organization, group involvement, and meeting one's objectives were reported as the most important things in this teacher's lesson planning.

Teacher two said that materials, an idea for the lesson plan, a fairly concrete idea of an activity, and what kind of activity is wanted (listening, reading, speaking, writing) were important. She also mentioned timing and moving smoothly and what the students know as considerations.

Participant three gave only two comments regarding the important things to consider in lesson planning: to be clear about the objective and to create a kind of unit plan.

Teacher four reported it was important to get students' attention, and that a relevant motivating activity is crucial. Also the lesson must be in digestible form and include varied activities.

Participant five reported the following to be important in lesson planning: to be organized, to stay on topic, that things flow and that exercises should
fit together. A variety of activities keep interest (e.g., active, quiet). She mentioned that time was not so important.

Participant six regarded making the lesson interesting, presenting the material clearly, and having follow up activities for practice to be the most important things in lesson planning.

Participant seven said she thought it important to give consideration to what students in the past have needed, and also to what students tell you that day, what students have been taught, what they need to know, how they're doing with it, and whether review is needed. It's also important to have materials that students can relate to at a practical level, and to use real and authentic sources that have some humour and versatility.

Participant eight said it was important that the students are interested in the lesson and that it is meaningful for them. This teacher also thought it important to order her lesson to accomplish her goals and to make decisions about what is important for students to learn.

Participant nine considered the following things important: making sure there is some kind of logical progression beginning with something tightly controlled and broadening it out, trying to make the lesson interesting and personalizing it, being flexible in teaching style.
Participant ten said she thought it was important to have enough material for the class time and to have a variety of group structures (e.g., groups, pairs, solo work). Variety was also important for activities. She also liked to put her plan in order of how it would be done.

What students are interested in and enjoy learning was reported by teacher eleven as important. She also mentioned students' needs and that the teacher should be organized, know exactly what to do and have enough material prepared.

Participant twelve reported it important to know what students could do, what they feel comfortable doing and what they were embarrassed about doing. She also felt it important to be sensitive to the students and the dynamics of the classroom.
POST-PLANNING/PRE-LESSON INTERVIEW

Summaries of taped interviews

Part 3. What do you think is important to consider about your students when you are planning a lesson?

Interesting and practical material and that students will use outside was mentioned by teacher one as important. She said this requires matching student needs and interests with the lesson.

Participant two considered how interested students are in a topic to be important.

Teacher three thought it important to understand the students as people, their backgrounds and to be sensitive to that but also to challenge the students.

Teacher four considered students’ interests, their outside lives and the varying levels of proficiency in the class to be important considerations.

Teacher five mentioned only what students are willing to do and what they would want to do as important.
Teacher six considered pacing to the students important, as well as being flexible as a teacher.

Teacher seven reported two considerations as important: student proficiency levels and student needs.

The individuals in a group, their social and emotional needs at the moment and how they relate to the group were reported as important considerations by this teacher. She also mentioned students' individual English proficiency and specific needs, what they had done before, and how they felt about it, e.g., if they were bored or needed a change. She also said students should guide curriculum change.

Teacher nine considered students' age and their interests and she adapted materials to suit her students.

Important considerations for teacher ten were her students' age and ability to concentrate, their attention spans and their individual needs.

Participant eleven mentioned students' interests, students' needs and variety as important. She also thought whether students enjoyed things, were bored or interested in class was important.
Teacher twelve mentioned only two important considerations: student proficiency levels and student needs.
POST PLANNING/PRE-LESSON INTERVIEW

Summaries of taped interviews.

Part 4. Could you please tell me about your class?

<table>
<thead>
<tr>
<th>Class identified by sponsor teacher</th>
<th>School Type</th>
<th>Program</th>
<th>Students' Age</th>
<th>Students' Home Countries</th>
<th>Students' English Proficiency</th>
<th>Students' Gender</th>
<th>Students' Interests</th>
<th>Students' Long-term Language Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Settlement English</td>
<td>Survival English</td>
<td>Adults up to 60 years</td>
<td></td>
<td>Poland, Czechoslovakia, Taiwan, Iran, Viet Nam, Honduras, Venezuela, Iraq</td>
<td>Variety of levels of English proficiency and education backgrounds also mentioned as widely varied</td>
<td>women</td>
<td>no comment</td>
<td>no comment</td>
</tr>
<tr>
<td>8. Public High School</td>
<td>Academic Prepar</td>
<td>Grade 8's and 9's (age not identified)</td>
<td></td>
<td>Taiwan, Korea, Cantonese, Spanish (countries not identified)</td>
<td>Students grouped by grade, not by English proficiency and a wide range of abilities were apparent</td>
<td>mixed</td>
<td>no comment</td>
<td>no comment</td>
</tr>
<tr>
<td>9. Private College</td>
<td>Academic Prepar</td>
<td>from 14 yrs to late 20's</td>
<td></td>
<td>Korea, Taiwan, Hong Kong, China, Venezuela</td>
<td>no comment</td>
<td>no comment</td>
<td>no comment</td>
<td>no comment</td>
</tr>
<tr>
<td>10. Private College</td>
<td>Academic Prepar</td>
<td>from 15 to 22 yrs.</td>
<td></td>
<td>Korea, Japan, Hong Kong, Taiwan</td>
<td>no comment</td>
<td>mixed</td>
<td>no comment</td>
<td>no comment</td>
</tr>
<tr>
<td>11. Private College</td>
<td>Communication and Conversation</td>
<td>19 yrs and over, &quot;mature&quot;</td>
<td></td>
<td>no comment</td>
<td>variety of levels, low to high Intermediate</td>
<td>mixed</td>
<td>a large range mentioned</td>
<td>academic English for careers or university or to go home and use English at work</td>
</tr>
<tr>
<td>12. Community College</td>
<td>Academic Prepar</td>
<td>from 19 to 22, one 30-yr.-old</td>
<td></td>
<td>Taiwan, Japan, Hong Kong</td>
<td>combined class of 300 and 400 TOEFL level</td>
<td>no comment</td>
<td>no comment</td>
<td>most students plan to go to college or university in North America</td>
</tr>
</tbody>
</table>

Please note that "no comment" means only that this teacher did not spontaneously comment on these elements when asked this question.
APPENDIX VI

THINK-ALOUD PROTOCOL EXCERPT ONE. SPONSOR TEACHER #10

Note: Short pauses are indicated by 3 ellipses, longer pauses by 6.
Inaudible or unclear sections are indicated by xxx.

Um, okay so we finished, that might be in your way, okay so homework is workbook page 71 ... they were to decide, decide they were to do this homework for tomorrow Side by Side page 82, start to begin and so on then they can do , they can do this and I also, in pairs, I want them to do number 4 ... xxx my book is written and then in the reading page 83, reading ... have the students do it ... silently. Then, can do the workbook workbook page 72 and 73 ... then I think I'd like to have a little change so they can do 84 also and true an false and that's enough Side by Side for now ...... then we go back to superlatives, superlatives, 44 and 45 from Side by Side 1B and I need another new idea to get them moving, get them talking so I think I will try expressing agreement or disagreement with comparisons, pink grammar text page 247, in pairs or perhaps groups would be better and I want language groups so they don't speak the same language and get some conversation.

Can I photocopy this?
(teacher gets up and goes to the photocopier)
I normally don’t xxx well I do, plus talk to myself, I do talk to myself a lot ... okay this, then ... let’s see; more than enough work for tomorrow because they’re a kind of xxx group ... don’t want to hear what I normally say ...... (another trip to the photocopier) ...... so this is also working comparison and it should get some discussion going ... then ... let’s see, I’ve got textbook, workbook, superlatives, grammar text, discussions, might be almost enough, okay work a little bit more on the gerunds, see if I have an exercise on gerunds to use xxx for review, I have a quiz, practices xxx (reading quiz) xxx let me see my textbook again, maybe I can give them this quiz ... decide, continue, stop, xxx, yes I think I will give them this quiz, so that means I have, if I have time, and of course depending on the class, xxx, I would say my mother really enjoys avoid doing to learn practices decide consider they know that keep on have to over that one, should stop, likes, can’t stand, continue to start, I’m going to sneeze (sneeze) excuse me, keep on afford suggested hope and refuse okay, so I’ll go over a few verbs first to be sure and then there’s matching the meanings of a and b and they should know from Side by Side men, engage feed a teenager raise a big appetite patience, refuse, yes, I’m going to give them that, that will shock them ...... put this here ... (making copies) ...... I think I’ve probably got as much as I’m going to do with them, for this class, in fact I’m almost sure I’ve got more than enough but I like to have more than, better than not enough. (end)
APPENDIX VII

THINK-ALOUD PROTOCOL EXCERPT TWO. SPONSOR TEACHER #8

Note: Short pauses are indicated by 3 ellipses, longer pauses by 6.
Inaudible or unclear sections are indicated by xxx.
Names have been indicated by an arbitrarily chosen capital letter only.

Okay, first thing I will be doing is generally assessing where it is we're going so far, how much we've accomplished of what I sent out to accomplish in earlier on in this summer school and reclarify some of my objectives, evaluate the individual students as to whether or not they're meeting some of my objectives for them and basically trying to assess where we've gone and try to zero in on some of the needs of the kids, um and whether they're being met accurately by the kinds of exercises and activities I'm doing, um ... I want to think about what needs to be covered in the future given that I now have a student teachers it makes my time frame different, and I also have to fit in and balance with what she's doing so I've got individuals idea on where each student's at and what their particular needs are and given that my new time frame is only 1 and a quarter hours a day puts a different slant on what I'm actually doing because I don't have to cover the comprehensive needs of the students because S is going to be focusing more on the conversational aspect of the lessons which leaves for me some of the more detailed grammatical, practical written work, um ... so first of all I've got to do a bit of an overview
of the students as a whole and what's going to be beneficial for each of them so I'll start by um ... grouping the students according to their, what I see as their general levels, I would say ay that R and N, C and J are the lower ability students in terms of their command of English, that'll be what I'll call group 3, group 2 will be the middle group with J, C, who else? I'll have to look at my list here, remember everybody's name? I'm trying to find my list ... do you want that on your tape? ...... Well, the list isn't handy so I'll just go by memory thinking bout who around the class, oh yeah, I'll put P in the lower group, and then we've got C, the highest group will be E, C, L, C, and we definitely need some more challenge in terms of the kinds of exercises they do so I think I need to find a book that will be appropriately challenging for them and I think I'll probably use the grade 11 regular English text ... now I need to think about what actually has been missed in their regular class work or whether just to reemphasize some of the more difficult aspects of their work during the year so I need to make a decision there as to what it is actually I'll focus in teaching them seeing I only have about 6 more days of teaching what can I do with those 6 days that's actually going to enhance and develop their English in a new way ...... it's good to recognize I only have 6 more days with any of these kids basically to give them something useful from this summer school. Um, the lower group I can, they need to work on the basics sentence making and developing, just the ability to put things into ordered sentences, ...... they also need more vocabulary work and their conversation which will come through that S does, um,, I need to be careful with those kids that they are
actually participating as much as the other kids in S's work because they can easily be lost in the shuffle because their English isn't that strong, um, C probably can use more practice in conversation and I think what I'll end up doing with my hour and a half is setting up a variety of lessons geared to each individual's needs and where they cross over kids can work together, um so I need to work out some way C can practice conversation. (continued)
APPENDIX VIII
THINK-ALOAD PROTOCOL EXCERPT THREE. STUDENT TEACHER #7

Note: Short pauses are indicated by 3 ellipses, longer pauses by 6.
Inaudible or unclear sections are indicated by xxx.

First off have, I'll be starting off reviewing, K's, she asked me to review Chris Clark's verb game and, Chris Clark's verb game and that'll be the bulk of the review lesson and the rest of it is comparisons which K said I didn't have to worry about that much, she does have some materials so if I don't get my ideas done for some activities then I can just use hers and the um ... the new lesson will be, the pumpkin story. How to carve a pumpkin, and that's a brand new lesson starting from scratch ...
Okay and the lesson plan, first off what materials I need, I thought I might bring in a pumpkin just to show and I might cut out a face and stick it on, she doesn't want me to cut out the whole pumpkin. Just cut it out of black paper or something and um ... what else did I need, oh I need the verb game ... and there are other things that I need too but I'll have to get that as I go along.
First off all the warm-up and K's asked me to spend more time on the warm-up, I tend to do that very quickly, xxx getting started, and I had some ideas for the warm-up. K usually begins with the date, today, tomorrow, yesterday, and because it was the weekend have to do weekend. I did a lesson on the weather so I'll see, what, if, what is it like today, is it cloudy, is
it clear ... and um ... and then I'm going to go into the imperative ... with the prepositions cause I want the imperative for the pumpkin lesson plan ... and for the imperative, I like to map these things out because I don't have that much practice so I was going to do the imperative with me to the class, teacher-class, and then teacher-student, student-student then the class asking me, giving me that directions using prepositions and motions ... and ... so I want to try and spend 10 minutes on that cause Mondays are hard to get started ... and the first part of the review is the verb game and I had some of xxx, I have most of the materials prepared but I haven't organized how to do them ...... so I'm just looking over some notes, I had some ideas written down for activities but I want to organize them and have a rough idea of time. So first of all review the flash cards for the verb game, actually I'm trying to think of an introduction, how to get started ...... I just was thinking that ... I could start out with can you and use the verbs from can you and elicit answers "yes, I can," "No, I can't", I'm aiming at, I want to put these patterns on the board ... students can refer to them and then get the students flash cards. And let them practice ... for about 10 minutes probably at the most, that, um this thing they've already done it should be probably enough, just to get them started. And then I have a word picture match with word flash cards and picture flash cards and the idea is to match the word, verb or verb phrase with the picture, verb, from the verb flash cards and I have a questions word picture match, which is picture word question, picture flash cards, word flash cards and then questions flash cards, and I'm just wondering if that's a good order to do that it, so ...
review the flash cards for the verb game, introduce, put it on the board, hand out the flash cards, let them practice, that'll be ... I think for some of the lower students it would just be better off to start out with the picture, picture flash cards that they already have, and then give them the words, I have them, do you want to see these?

(continued)