

A MICROETHNOGRAPHY OF INDIGENOUS STUDENT PARTICIPATION DURING
READING INSTRUCTION

by

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ABSTRACT

This research is a microethnographic study of how four Indigenous students participated in a series of reading lessons. The study was conducted in a grade six/seven classroom in an urban elementary school. Data were collected using audio recordings, video recordings, observations and interviews. The data were stored, retrieved and analysed with the assistance of a microcomputer.

The results of the study indicate that the level of participation varied for individual Indigenous students in different classroom contexts. However, it was also found that Indigenous students generally participated more often in teacher directed whole class sessions than in small group sessions. Indigenous children appear to both know and abide by the implicit rules governing verbal interaction during reading instruction. However, the ability to describe the organization of reading lessons, to articulate the rules and to accurately describe personal level of participation was found to be related to overall level of participation. Students who participated frequently in most situations also tended to provide a more articulate description than students who participated less often. It was concluded that lack of knowledge of the tacit rules governing turntaking could not fully account for the observed individual differences in participation. Data analysis revealed that a matrix of elements including a student's relationship with the teacher; real or perceived knowledge of and/or interest in the subject content; willingness to risk; social status with his/her peers; and personal-cultural history was able to account for

individual differences in participation patterns. In order to increase Indigenous student participation in urban classrooms, it was recommended that the technique of using "rapid-fire" questioning to introduce a new or abstract concept be abandoned; the technique of "spotlighting" individual Indigenous students where it is apparent that it makes the student uncomfortable be abandoned; students be given special tasks in peer groups in order to increase their social status within the group; teaching discussion skills be included in the curriculum; the number of Indigenous teachers in urban classrooms be increased; and special educational facilities be made available for urban Indigenous students experiencing difficulty in public school classrooms.

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DEDICATION

To all those who are actively working towards changes in the politics and practice of education in hopes of providing greater educational opportunity for all.

CHAPTER 1

INTRODUCTION

The overall aim of this thesis is to answer the question: "How do Native Indian¹ children participate during reading instruction?".

This chapter will define and discuss student participation during instruction, the purpose and rationale for the study, explain the significance of the question, outline the assumptions underlying the methodology used to answer the question, and indicate what information will be found in the remaining chapters.

Student Participation During Instruction

Like other classroom procedures, verbal participation during instruction is structured according to a tacit set of rules (Mehan, 1984). These rules are part of an implicit cultural code operating in classrooms. In order to be successful in school, children must be able to operate within this cultural code and utilize the interactional rules to present themselves and what they know in the best possible light (Mehan, 1984). Children who do not share the knowledge of the code and who are unable or unwilling to interact according to the rules are probably less likely to succeed in school than those who do (Hymes, 1972; Mehan, 1984; Philips, 1972).

¹ The terms *Native Indian*, *Native*, *Indian* and *Indigenous* will be used interchangeably throughout the thesis. The word *Indian* is used in both the United States and Canada but it excludes Inuit and Métis peoples. Thus when referring to the aboriginal peoples of North America be they of Indian, Inuit, Aleut or mixed race descent, the more inclusive term *Indigenous* is preferred by many young, political and academic writers. While the word *Native* is considered somewhat colonial and patronizing, it is still in common use, especially in Northern Canada.

Language use has been cited as a potential factor in the chronic underachievement of Native Indian students (Philips, 1972). A constellation of linguistic features makes the variety of English spoken by various Indigenous groups distinctive from the variety of English valued by schools. Also, expectations about how verbal interaction should take place and the underlying rules governing verbal interaction are aspects of language use that make Indigenous speech communities distinctive from other English speech communities (Philips, 1972, 1983; Wild, Nakonechny & Saint-Jacques, 1983). These sociolinguistic differences may place Indigenous children at a disadvantage in certain instructional settings, such as reading lessons, where interaction is structured in a way that is incongruent with the interactional rules operating in the Indigenous speech community. These differences in sociolinguistic behaviour have been suggested as a partial explanation for school failure for many Indigenous students (Erickson & Mohatt, 1982; Philips, 1972).

The Purposes of the Study

The purposes of this study are twofold: first, to expand current understanding of how Indigenous children participate in the structured interaction of reading instruction; and second, to discover what aspects of the rules governing classroom participation can be articulated by the Indigenous students in an interview situation.

To achieve the stated purposes, a qualitative study of four Indigenous children in a racially integrated, inner city, grade 6/7 elementary classroom was carried out.

This study attempted to answer three main questions:

- (1) What participation structures are utilized during reading instruction and what rules govern participation within each structure?

- (2) How do Indigenous children participate verbally during a reading lesson?
- (3) What are Indigenous children able to articulate about the nature of their participation and about the implicit rules which are inherent in the way participation is structured during reading lessons?

In addition, the relationships, if any, between the students' knowledge of normative rules governing interaction in classrooms and the way in which they participate in a reading lesson were examined.

Rationale for the Study

This study approaches the issue of social and verbal interaction in the classroom from the perspective of an ethnographic tradition in sociolinguistics. The approach focuses on how language is used in social contexts (Hymes, 1972) such as teachers' and students' use of language in the classroom (Wilkinson, 1982). In defending the need for such a theoretical framework for the study of language use in educational settings, Hymes (1980) suggests that to look exclusively at the formal properties of language without recourse to social reality does not reflect the relation of language to social life and divorces linguistics from the contribution it might make to the study of language as a human problem. Streeck (1983) argues that all behaviour that conversational participants display to one another is part of the process of organizing a communicative event and as such the content of talk and the context in which it is embedded cannot be analysed as distinct enterprises. Streeck (1983) suggests:

"The form and content of linguistic utterances are in part shaped by the interactive processes whose primary functions are regulatory; also talk is embedded in a web of social relations among the participants (relations of affiliation, alignment, and relative rank) which bear upon the distribution of attention; the structure of attention shapes, in turn, shapes the . . . organization of the floor for talk." (p. 6)

Eleven assumptions underlie this approach to the study of language use in the classroom.

1. Dialects or speech varieties vary systematically on the basis of a constellation of linguistic factors (Dittmar, 1976; Hymes, 1980).
2. Interactional style/etiquette varies between speech communities (Darnell, 1979; Mehan, 1984; Wild, et al., 1983).
3. Although speech varieties cannot be logically evaluated on the basis of linguistic or cognitive merit, they are evaluated socially.
4. Schools reward and stratify children on the basis of their ability to participate (i.e. act and talk) in the status culture (Mehan, 1984).
5. The classroom is a unique communicative context (Wilkinson, 1982) with a specific set of tacit rules governing interaction, the mastery of which is important for school success and status attainment (Erickson & Mohatt, 1982; Mehan, 1984; Philips, 1972).
6. Students differ in their ability to communicate effectively in classroom contexts (Wilkinson, 1982) and minority children in particular do not adjust well to the prevailing social interaction patterns in the classroom (Mason & Au, 1981).
7. Verbal participation in formal reading lessons is structured in particular ways - generally with the teacher assuming the role of directing turn-taking, assigning the conversational topic and evaluating what is said (Au & Mason, 1982; Mehan, 1979; Philips, 1972).
8. Classroom language rules such as the ones governing turn taking are not communicated directly but must be inferred by students from contextual cues (Mehan, 1984).

9. To understand language in its social context requires understanding the meanings that social contexts and uses of language have for their participants (Hymes, 1972).
10. Metacommunication is the use of language to describe and/or evaluate communicative events and processes; and to draw attention to communicative norms and processes (e.g. "we don't talk like that in school") (Briggs, 1984).
11. Teachers and students who are dissatisfied with the way in which language is used to maintain social control and perpetuate social order in classrooms can collaborate to bring about change (Fisher, 1984).

Significance of the Question

How participation is structured is a major aspect of the underlying social organization of the classroom (Au & Mason, 1982). Incongruent styles of communication between the instructor and the instructed may contribute to lower academic achievement generally for Native Indian students (Erickson & Mohatt, 1982) and, specifically, may result in failure to learn to read well (Au & Mason, 1982). Definitive knowledge about how Indigenous students participate in reading lessons and what Indigenous students know about that participation is not generally available. Such knowledge is important, however, because it will contribute to an understanding of how the relationship between student-teacher interaction contributes to school failure and school success.

In this context then, it is important to understand how Indigenous students use, define, interpret and feel about the rules governing interaction in the classroom. If Indigenous students are making "conscious" decisions about the level and nature of their verbal involvement in the classroom, it is important to know from their perspectives what they are doing and why they are doing it.

If Indigenous students are lacking knowledge about how to participate effectively, it may be that communication and organizational rules must be made explicit, and better yet, be overtly negotiated if minority students are to succeed in school.

Methodology for the Study

The methodology required in qualitative research design includes a set of theoretical assumptions (see pages 3-5) and data collection procedures (Bogdan & Biklen, 1982). The following section outlines the methodological assumptions underlying the procedures for data collection and analysis employed in this study.

Methodological Assumptions

This research is both qualitative and phenomenological in research design as well as sociolinguistic and educational in theoretical construct. The following are the methodological assumptions underlying the research design:

1. Meaning and process are crucial to understanding human behaviour (Bogdan & Biklen, 1982).
2. In order to understand the social use of language, it is important to collect descriptive data in natural contexts (Dittmar, 1976).
3. Quantitative data analysis, such as a frequency count, is a useful tool for establishing trends in classroom language use (Au & Mason, 1982; Hymes, 1980).
4. A person's beliefs about the phenomena under study and their personal biography which may have led to them having those beliefs, can, to some degree, be acquired through open-ended interviews (Bogdan & Biklen, 1982; Hammersley & Atkinson, 1983; Spradley, 1979).

5. Interview questions prompt informants to construct explicit, conscious statements about the range of social/cultural knowledge which lie within the conscious control of speakers (Briggs, 1984).
6. Interviews become highly problematical when the assumptions underlying the purposes of interviews and the communicative norms governing the interview situation go unexamined; and when researchers fail to familiarize themselves with the meta-communicative repertoire of the society under study (Briggs, 1984).
7. Research can be a collaborative enterprise (Carr & Kemmis, 1983; Hymes, 1980).
8. Ethnographic researchers are bound by certain ethical obligations: (a) anonymity - to keep all information confidential and not to report harmful information (b) honesty- to obtain the informed consent of the participants (c) responsibility - to minimize the disruption to the participants and to write up the results (d) fair return- to provide a previously agreed upon commitment to the participants for allowing access to the research site (Dobbert, 1982).
9. As the research proceeds, redesign of the research methods, is a requirement of and central to an ethnographic approach (Dobbert, 1982).
10. The observer must have a conceptual framework into which to try to fit the data (Dobbert, 1982; Miles & Huberman, 1984a).

Data Collection and Analysis

This study was conducted in a Grade 6/7 classroom, where Native students comprise about 20% of the student population. Data pertinent to aspects of Native students' participation in reading lessons were collected and analysed in the manner described below.

A. What participation structures are utilized during reading instruction and what rules are governing participation within each structure?

In data collection, reading lessons were observed; audio and video recordings taken to obtain information about:

1. the general organization of reading lessons
2. the structure of participation
3. the rules governing participation.

B. How do Indigenous children participate verbally during a reading lesson?

The reading lesson was observed by using audio and video recordings to obtain information about:

1. how often Native students participated during reading lessons
2. the contexts in which they participated.

C. What are Indigenous children able to articulate about the nature of their participation and about the implicit rules which are inherent in the way participation is structured during reading lessons?

Interviews were conducted with four Indigenous students to obtain information about:

1. their understanding of how student participation is structured in reading lessons
2. their specific knowledge of the rules governing participation during the reading lesson.

In addition to the above means for data collection, a diary was maintained throughout the course of the study to record all meetings, telephone conversations, agreements, ongoing interpretations, questions, decision points, reflective comments and researcher memoranda.

Bogdan and Biklen (1982) state that "Data analysis is the process of systematically searching and arranging the interview transcripts, fieldnotes, and

other materials that you accumulate to increase your own understanding of them and to enable you to present what you have discovered to others" (p. 145). Initial data analysis begins in the field during data collection (Bogdan & Biklen, 1982; Dobbert, 1982). In the study, preliminary data analysis was carried out through the daily transcription of audio recordings, the documentation of on-going interpretation and insight into the observer's comments in the fieldnotes and memos; and through searching of the theoretical and methodological literature.

Bogdan and Biklen (1982) recommend that novice, qualitative researchers leave the bulk of the analysis until most of the data has been collected. This researcher followed that advice. When data collection was completed, the data were completely reviewed in order to ascertain whether or not there were emerging patterns. The data were categorized and labelled using both "common sense" categories (Becker, Gordon & LeBailly, 1984) arising out of the data, as well as categories, gleaned from the theoretical framework.

Summary

Participation during classroom instruction is crucial to the academic success of students. Verbal participation is socially organized talk that reflects the social reality of the classroom. For most instructional situations such as reading instruction, the teacher is the person with the most social prestige and power and thus is in linguistic control. She determines the topic of discussions and turntaking and evaluates what is said. In such instructional situations, students are expected to display their knowledge by responding to the teacher's requests for information and action.

It is important for educators to know if Indigenous children are mastering the tacit rules that are necessary for successful participation in classroom

instruction. It appears that some Indigenous children are able and/or willing to adopt the conversational style required in instructional situations while others are not. By both observing Indigenous children involved in reading lessons and interviewing them about their involvement, it is anticipated that there will be improved understanding of how urban Indigenous children participate in classroom instruction and of their personal interpretation of why they participate the way they do. This information should provide a small addition to the large puzzle of why the public school system has failed overwhelmingly in its attempts to educate Indigenous children successfully.

Succeeding Chapters

Chapter 2 will outline the theoretical and methodological framework of the study.

Chapter 3 will deal with the methodology employed in the study, outlining each step taken to complete the study.

Chapter 4 will describe the school, the classroom, the reading program, the Native students, and the data gathered regarding the participation structures and the rules governing interaction during reading instruction. Interpretations of the meaning of these data in relation to the research question will be made.

Chapter 5 will provide conclusions about the methodology used and make recommendations about these methods. Explanation for the findings will be offered and recommendations for educators and educational researchers will be made.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter provides an overview of the differences in verbal interactional style that may be a potential source of difficulties for Native Indian children in the public school system. In addition, the theoretical and methodological framework employed in the gathering and analysis of data is described. A rationale for computer assisted analysis of nonnumeric data is offered.

Success, Failure and the Language Use of Indigenous Students

Ninety-five per cent of all Native Indian students in Canada leave school without completing Grade 12 (Darnell, 1979). Achievement scores for Indigenous students are as much as two and three years behind grade norm averages (Mallet, 1977; Sharpes, 1982) and this deficit in scores appears to accumulate (McLaughlin, Williams, Cady & Bement, 1982; Mickelson & Galloway, 1971; Philion & Galloway, 1969). In relation to the percentage of the student population they comprise, Indigenous students continue to be overrepresented in special education classes (Barth, 1979).

The cultural gap between the school and the Native child has been cited as the most probable cause for the wide spread academic failure of Indigenous children (Forester & Little Soldier, 1980; Miller & Johnson, 1974; Scollon & Scollon, 1979; Wild et al., 1983). Language is the specific aspect of culture to which academic failure is most often attributed. The sociolinguistic rules underlying language use is an aspect of language which varies between speech communities and causes difficulties in interethnic communication situations such as Native Indian children taught by Anglo teachers in Anglo classrooms (Philips, 1972, 1983; Scollon & Scollon, 1979; Wild et al., 1983).

Philips (1972) conducted an extended ethnographic study of the Warm Springs Indian reservation in Oregon which compared the cultural organization of social relationships in the reservation community with that of four different classrooms. Philips' (1972,1983) found the Warm Springs reservation to be an English-speaking community with culturally distinctive interactional patterns. Although the three Indigenous languages of the reservation (Sahaptin, Chinookan and Paiute) had shifted to English, many of the interactional patterns which originated in the Indigenous languages had been maintained as part of the tribal members' English speech.

The speech of Indigenous communities can be distinguished from middle class Anglo speech communities in empirically observable ways. For example, Indigenous speakers generally use a lower volume of speech and slightly slower pace of speech with fewer occurrences of false starts and rephrasings. All speakers generally talk about the same length of time rather than one or two persons dominating a verbal exchange. In addition, Indigenous people do not use variation in loudness of voice to attract attention to themselves in the way Anglos do (Philips, 1983).

The regulation of speaker change during conversation is an additional aspect of speech difference which has ramifications for classroom behaviour. The pauses between speakers are longer in Indigenous speech communities (Philips, 1983; Scollon, 1979; Wild et al., 1983). Philips (1983) suggests that it is because there is virtually no interruption amongst Indigenous conversational interactants that "speakers control not only when they will speak, and what they will speak about, but also how long they will speak and when they will finish speaking" (p. 59).

Philips (1983) found that children on the reservation were socialized to these distinctive cultural communication patterns through an "interactional

network [that] is largely Indian" (p.38). People living on the reservation, especially the children, see and interact with very few non-Indian people. Thus these culturally distinctive ways of communicating are maintained and reinforced through socialization. The Indigenous community appears to place more emphasis on learning through physical activity than auditory channels and a concomitantly greater emphasis on physical rather than verbal control in young children. It is when people are older, perhaps approaching middle age, that they are expected to begin utilizing their verbal abilities in such public events as Tribal/Band Council meetings.

There appear to be differences in the manner in which Indigenous children are socialized into verbal interaction with adults. Philips' (1983) study revealed that Indigenous children were given many directions in imperative form such as "Give me this". It is the child's physical response to the command, rather than his/her verbal response which is taken as a measure of comprehension. In socialization there is more emphasis on learning through physical activities than auditory ones; and more emphasis on physical control rather than verbal control. It is this author's belief as a result of classroom observation, that classroom teachers place greater emphasis upon the ability to demonstrate comprehension verbally or in writing than upon the ability to indicate comprehension by physically responding to a request.

The Scollons (1979) report that Athapaskan people assign different sociolinguistic roles to the questioner and the answerer in conversational situations where the interactants possess unequal amounts of social power such as in an adult-child interactional situation. According to Athapaskan interactional patterns, a subordinate person, such as a child, is expected to observe while a dominant person, such as an elder, is expected to perform verbally. However the situation is reversed in classroom situations such as the

reading lesson, where the dominant person, the teacher, asks the questions and the subordinate person, the student, is expected to display his/her knowledge.

In a study conducted in a Vancouver high school, Wild et al. (1983) found differences in the way Indigenous teenagers, who had recently migrated to an urban centre from the reserve, interacted amongst themselves and in the way they were expected to interact with teachers in classrooms. The pupils studied responded with silence to a question that a fellow student had failed to answer, peer solidarity apparently being more important than approval from the teacher. Most of the Indigenous students did not like to be singled out for attention and protected themselves by being silent. Wild et al. (1983) suggest that Indigenous students are aware of the consequences of at least some of these differences in interactional etiquette and that there are times when they consciously choose not to participate in classroom interaction.

Thus, research has revealed important differences between the interactional patterns of homogenous Indigenous speech communities such as a particular reserve/reservation and the interactional patterns normally used and demanded by the school situation.

Participation Structures

In order to compare the verbal interactions of Indian and Anglo students in classroom settings, Philips (1983) observed and compared four classrooms: a grade 1 and a grade 6 Anglo classroom and a grade 1 and a grade 6 predominately Indian student classroom. Her study revealed fundamental features of classroom interaction that children must learn in order to communicate in the classroom in socially appropriate ways. Philips (1983) describes the official classroom structure as constituting "the interaction between teacher and students through which curriculum content is transmitted"

(p. 74). It is the official classroom interaction which is controlled by the teacher; that is, the teacher initiates, regulates, and terminates all of the encounters. The teacher is either the addressor (designating all, some or one as the desired listeners) or the addressee (requiring students to direct all their speech towards the teacher in order to have their talk ratified as official classroom interaction). Philips (1983) underscores this point when she states "a child's claim to the floor is validated by the teacher, both verbally and visually, or not at all, in the official structure" (p. 76).

Based on her observations of classrooms and the community of the Warm Springs Reservation, Philips (1972) developed a model of the reciprocal obligation and rights in classroom interaction called participation structures. This model provides a comprehensive analysis of interactional events that encompasses not only what the speaker is saying, but also how the listener is listening, how turntaking is allocated, and the appropriateness of questioning and answering strategies. In classrooms, participation structures vary according to the number of students interacting with the teacher and the principles regulating students' turns at talk. There appear to be four common, classroom participation structures which vary according to the number of students engaged in the interaction and the principles or rules regulating interaction in each.

In the first participation structure the teacher interacts with the whole class. In this structure, the teacher usually elicits student participation by inviting students to respond as a group or individually. The teacher typically nominates individuals who bid on a first-come-first-served principle.

In the second participation structure, the teacher interacts with a small group of students mostly using the "round robin" principle for allocating turns. A

variant of the small group structure is the peer group where students are assigned to groups and required to complete a task cooperatively.

A third participation structure is noted when students request an opportunity to speak to the teacher on a one-to-one basis. These encounters usually occur when the rest of the class is engaged in desk work. The first-come-first-served principle is more strictly enforced in this structure than in any other.

Philips (1983) described the fourth participation structure as "desk work". As the name implies there is no verbal interaction taking place during a desk work participation structure; the teacher expects the students to be engaged in silent reading or writing.

Allocating Turns at Talk

Within the broader conceptual framework of each participation structure are the processes and face-to-face interactions of teachers and students which create specific participation structures. These processes are governed by a set of rules or principles. Green and Weade (1985) redefine the rule governed nature of classroom communication in this way:

"Rules in this sense are not static prescriptions comparable to the rules of grammar. Instead, they take the form of expectations about how to talk, about what, to whom, when and for what purposes. . . expectations of this sort are constructed through verbal and nonverbal messages delivered simultaneously with the presentation of academic content" (p. 15).

The manner in which turntaking is allocated is one aspect of the rule-governed nature of classroom interaction. Some turntaking rules utilized in classrooms have been identified through ethnographic and microethnographic research. In a one year study of a mixed Black and Hispanic third grade classroom in San Diego, for example, Mehan (1979) identified turntaking as a classroom procedure governed by a set of normative rules. Access to the floor was governed by different rules at different times and in different contexts.

There were times when all students could respond ("invitation to reply" rule) and other times when they had to be invited to participate ("individual nomination rule" or "invitation to bid" rule) (Mehan, 1984).

In the first turntaking allocation procedure the teacher invites students to bid in order to obtain access to the floor (Mehan, 1979; Philips, 1983). In the 'invitation to bid' procedure the teacher offers a question and either directly invites bidding by saying "Put up your hands" or implicitly indicates that bidding is required by saying for example "Who knows the answer to this question?". Under this rule, students who bid are nominated to speak using a modified version of the first-come-first-served principle. However, as a lesson proceeds, teachers tend to show a preference for students who have not yet been nominated over those who have already been nominated (Philips, 1983).

When the "invitation to reply" rule is in effect, teachers indirectly invite students to state what they know directly without having to be individually nominated (Philips, 1983; Mehan, 1979). This turntaking allocation procedure can be accomplished by sentence completion elicitation, a 'choral response' or a "wh" question (Mehan, 1979). An example from the present study provides an illustration:

- T: the other meaning we might have [for noble] is "being ____?"//
 UC: royal// (chorus of voices)
 T: royal// (Text A; p. 14)

In this example, the teacher has used a sentence completion form to invite the students to reply as a group. She was requesting an alternative definition for the word /noble/. Students recognized the invitation to reply, and without raising their hands, they simply called out the answer.

In the "individual nomination" procedure, teachers individually nominate the next speaker by directly naming the student or indicating through body orientation, pointing or eye gaze that a particular student has the floor. In a variation of the 'individual nomination' rule, turns are automatically allocated by going up and down the rows or all around a circle, for example. Mehan (1979) suggests this variation to be a regular pattern in reading groups.

These three ways of structuring interaction through allocation of turntaking can be used separately or combined within a single participation structure. For example in a reading lesson the 'invitation to bid' rule may be in effect when a teacher nominates a student to speak. However, after the nominated student has correctly answered the first question, the teacher may employ the 'individual nomination' rule to nominate the same individual to speak again perhaps to provide an elaboration of the initial question.

Mason and Au (1981) studied how four preschool children learned to utilize existing social patterns to participate in a prereading lesson. In a fine-grained analysis of two video-taped lessons, three turntaking structures were identified: (a) child-initiated remarks (CIR); (b) teacher question-child response-teacher evaluation (QRE); and (c) teacher direction-child listen (TDL). Both Mason and Au (1981) and Mehan (1979) found the QRE to be the predominate structure while TDL occurs primarily at the opening and closing of lessons. In Mason and Au's (1981) study, CIR was found mostly during a drawing and printing task in the prereading lesson. Au and Mason (1981) concluded that in time, children are able to make more accurate and extensive use of existing participation structures in order to participate in reading lessons.

Indigenous Student Participation in Classroom Interaction

Philips (1983) found differences in the way Indigenous and Anglo students participated in classroom interaction. Although these differences were in part accounted for by cultural differences in interactional patterns, Philips (1983) also attributed certain observed differences to the Indigenous students' non-comprehension of the material being presented. The Indigenous students were observed to talk less often in the official classroom structure. They responded less often to questions posed by the teacher to determine whether the students understood the curriculum. A greater frequency of Indigenous student responses was not positively evaluated by the teacher. Indigenous students asked more clarification questions of the teacher than did Anglo students. In the 6th grade class, clarification questions occurred more often in the one-to-one participation structure. Indigenous students paid less attention to the teacher and more attention to their peers. Philips (1983) concluded that lack of attention to the teacher during official classroom interaction may have been a deliberate rejection of the teacher's authority in the classroom.

Philips (1983) concluded that the generally poor school performance of Indian children might be attributed, at least in part, to "cultural differences between Indian and Anglo systems of communication in face-to-face interaction" (p. 95). Participation that is directed by a single individual, such as the teacher in the classroom, did not exist in the Indian community. It was in whole class and small group structures where the teacher overtly directed participation that the Indigenous children showed the most reluctance to respond. However, as Philips (1972) noted, it is these two participation structures, the teacher-directed whole class and teacher-directed small group, that Native Indian children must master in order to be successful in school.

Ethnographic Research in Studying Classroom Interaction

Recently reading has come to be viewed not only as a psychological but also as a sociolinguistic process (Bloome & Green, 1984; Harste, Woodward & Burke,1984; Stubbs, 1980). This conceptualization of reading has expanded the notion of context beyond the skills and knowledge of the individual reader to include the organization of the reading event (Bloome & Green, 1984). A sociolinguistic perspective of reading has given rise to the use of qualitative research methods in the study of reading and language in the classroom (Bloome & Green, 1984; Harste, Woodward & Burke, 1984; Hymes, 1980).

Qualitative research, including the present study, reflects a phenomenological perspective. In the phenomenological approach, researchers attempt to understand the meaning of events and interactions to ordinary people in particular situations (Bogdan & Biklen,1982). Phenomenologists hold that reality, especially that which relates to human behaviour, is socially constructed through personal interpretation of experiences and interactions with others. This position holds that human experience is mediated by interpretation. Bogden and Biklen state:

"The meaning people give to their experience and their process of interpretation is essential and constitutive, not accidental or secondary to what the experience is. To understand behavior, we must understand definitions and the process by which they are manufactured." (p. 33).

As one form of qualitative research, ethnography has as its main goal the description of a culture (Dobbert, 1982). The present study is not an ethnography but as McCutcheon (1981) suggests a study "employing ethnographic methods" (p. 5) or what Hanson, Beschner, Walters and Bovelle (1985) refer to as "a modified ethnographic research approach" (p. 7). While modified ethnographic research still aspires to the goal of obtaining the insiders' view of cultural reality, data collection does not necessarily involve

living among the participants as would be the case in a traditional ethnography (Hanson et al., 1985). The ethnographic approach used in this study is modified both in scope and in the procedures used for data collection. Data collection procedures in this study combine traditional ethnographic techniques such as participant observation and interviewing with video and audio recording, a data collection procedure more common to the microethnographic approach.

Microethnography involves case studies done on very small units of organization or on very specific organizational activities (Au & Mason, 1982; Bogdan & Biklen, 1982) or "cultural scenes within key institutional settings" (Erickson & Mohatt, 1982, p. 137). These scenes or events, such as reading lessons, are chosen for study because they are naturally existing units within the larger whole. Whereas much research in education focuses on outcomes of events, microethnography attempts to specify the processes that lead to an outcome. For example in reading instruction, rather than addressing an outcome such as a test score, a microethnography would examine the face-to-face interaction by which the outcome was produced. Microethnography in classrooms has included the study of the social organization of reading instruction (Au & Mason, 1982; Mason & Au, 1981); cultural differences in the way Native and non-Native teachers organize classroom instruction (Erickson & Mohatt, 1982) and analysis of the communicative processes of five Black and Hispanic children during 'peer teaching' events (Streeck, 1983).

Interviews are used in both general ethnography (Bogdan & Biklen, 1982; Dobbert, 1982; Hammersley & Atkinson, 1983; Hanson et al., 1985; Rist, 1982; Spradley, 1979) and in microethnography (Erickson & Mohatt, 1982) to acquire descriptive information about how the subjects interpret some aspect of their world (Bogdan & Biklen, 1982). Bogdan and Biklen (1982) suggest open ended interviews for studying situations where individuals share a particular

trait but do not necessarily behave as a group. What individuals share as group members may emerge more clearly in individual solicitations of their perspectives rather than solely through observations of their activities (Bogdan & Biklen, 1982).

Classroom observation can be recorded both manually through the use of fieldnotes and mechanically with the aid of recording devices. Bogdan and Biklen (1982) define fieldnotes as "the written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the data in a qualitative study" (p. 74). Fieldnotes are the standard data recording tool of the ethnographer while mechanical recording devices such as cameras, tapes and video recorders have traditionally been used to supplement fieldnotes (Bogdan & Biklen, 1982; Hammersley & Atkinson, 1983). In the growing tradition of observing reading in the ongoing social context in which it occurs, the mechanical recording and preserving of data for fine grained analysis are important data collection tools. In the past, teacher-student interaction were recorded on audio tape (Duffy, 1983). More recently the use of video recording has become common (Au & Mason, 1982; Eder, 1982; Erickson & Mohatt, 1982; Mehan, 1979; Van Ness, 1981; Wallat & Green, 1979).

In summary, the study of reading in its social context and the participation of a group of students within that context can best be served by a qualitative research paradigm. Microethnography is one approach within that paradigm which is well suited to the study of student participation during reading instruction. Data collection in a microethnography includes the traditional procedures of participant observation and interviewing as well the use of audio and visual equipment to mechanically record the rapidly occurring verbal and non-verbal interaction. The use of multiple research methods enables the researcher to draw conclusions from a variety of data sources and increase

confidence in his/her interpretation of the data (Atkins, 1984; Dobbert, 1982; Goetz & Lecompte, 1984; Hammersley & Atkinson, 1983; McCutcheon, 1981; Rist, 1982).

Rationale for Computer-Assisted Data Management

As microcomputers become affordable, increasing numbers of researchers are using them for managing and analyzing nonnumeric data (Conrad & Reinharz, 1984; Miles & Huberman, 1984b; Sproull & Sproull, 1982). The most notable features of microcomputers are that they enable efficient and systematic storage and retrieval of text based data (Becker, et al., 1984; Conrad & Reinharz, 1984; Sproull & Sproull, 1982). However, any rationale for the use of microcomputers must be predicated on the assumption that computer-assisted data analysis will be more effective than manual procedures in terms of money and time saved (Becker et al., 1984). For computer-assisted data analysis to be worthwhile, the capital invested to computerize and the time required to learn the software must be offset by savings earned through more efficient data storage and retrieval.

There are three advantages of using microcomputers in qualitative research that were particularly relevant to this study: increased efficiency, confidentiality and analytical rigor.

Efficiency

One of the major reasons cited for using a computer in qualitative data analysis is efficiency (Becker et al., 1984; Conrad & Reinharz, 1984; Sproull & Sproull, 1982). It is not intended by this author or others (Becker et al., 1984; Conrad & Reinharz, 1984; Sproull & Sproull, 1982) that computers will automatically analyze qualitative data. However, computer systems can

efficiently prepare data and make it available for analysis by "theoretically informed workers" (Becker et al., 1984, p. 17).

Computers can make three phases of fieldwork more efficient: data collection, data reduction and data retrieval (Becker et al., 1984). The mechanical tasks of data collection, such as typing fieldnotes and transcribing tapes, as well as making infinite copies of both, are done easily, quickly and accurately with a microcomputer. With the editing facilities of a word processing program, the researcher can easily correct errors. With a computer, inadvertently omitted data can be easily be inserted into the notes in correct chronological order. Word processing allows the researcher to prepare fieldnotes and transcriptions in different formats for different purposes; for example, a single spaced text can be used for filing but a triple spaced copy of the same text used to enable easier reading, editing and coding (Becker et al., 1984).

A qualitative study yields vast amounts of data some of which may be repetitive and irrelevant to the research question (Becker et al., 1984; Miles & Huberman, 1984b). Cutting, pasting and filing the raw data to reduce the original bulk of the notes can be done on a computer terminal more rapidly than by hand.

When considering the taxing job of organizing and retrieving data in preparation for analysis, Conrad & Reinharz's (1984) image of the computer as a "tireless worker doing what we tell it to: save this here, fetch this there, match this and that, get me all those that say this but not that, and so forth " (p. 7) seems particularly apt. Once the data have been coded and the codes entered into the computer files, the computer can quickly and effortlessly retrieve whatever subset of the data the researcher wishes to view. Given the command to do so, both a data management and a word processing program will retrieve

and display all those items in the data set containing the requested descriptor, code or label. The data can be retrieved in various forms: as a whole, in parts, or word by word (Conrad & Reinhartz, 1984).

Confidentiality

The global "search and replace" features on most text and data processing programs allow researchers to substitute names and other information which is to remain anonymous. A microcomputer can produce two or more versions of fieldnotes; can prepare a master file and can produce the required number of copy documents. The master document would remain unedited and confidential, locked up for safekeeping. The disk copy, which would preserve anonymity through editing, could be made available for distribution to other people.

Analytical Rigor

Researchers analyze a body of data to see what propositions, statements (Becker et al, 1984), generalizations (Dobbert, 1982) or interpretations (McCutcheon, 1981) can be made with what evidential support. It is incumbent upon the researcher to demonstrate that she has followed a systematically rigorous routine for assessing all the relevant evidence (Becker et al., 1984). With a computer, researchers are better able to meet this criterion. All pieces of evidence which support or refute a particular proposition can be systematically retrieved without rereading the entire corpus of data. First, the data are coded; that is, items are labelled to indicate in which category they belong. These codes are then used by the computer to locate items in the data base. When testing a proposition, all items which are more likely than not to contain evidence related to the proposition will be pulled up.

Counting the frequency of particular words or behaviours is one way of summarizing data which supports a particular proposition or generalization (Atkins, 1984; Becker et al., 1984; Conrad & Reinhartz, 1984; Dobbert, 1982). Once the observations have been coded, a computer aided by a data management program can tirelessly count and recount instances of observations from the data set. Counting is not affected by researcher oversight or fatigue thus increasing the accuracy of the supporting evidence. Becker et al.(1984) state that if all the retrieved items support a proposition "we have a rigorously formulated statement and all of the evidence which supports it immediately at hand to be summarized in some appropriate way: by counting the number of instances and giving representative examples in an accompanying text" (p. 28).

If both the expense required to buy the necessary computer hardware and software and the time required to learn to use them are not too great, a computer can be an efficient tool in analyzing qualitative data. The use of a computer in the management, preparation and retrieval of data for analysis can assure that all evidence supporting or refuting the generalization has been reviewed. The result is greater confidence in the researcher's interpretation of the data.

Summary

In summary, in order to ensure maximum student participation in classroom lessons, teachers vary the types of interactional encounters in which the students are involved. Four participation structures dominate the classrooms studied: whole group, small group, one-to-one and desk work. Within a single classroom encounter, the teacher controls access to the floor through a set of turntaking allocation procedures or rules. Such participation structures and the rules which govern participation within them must be inferred

and utilized effectively, if children are to succeed in school. As Mehan (1984) has stated:

"...school success is not limited to academic matters. Although it is incumbent upon students to display what they know, they must also know how to display what they know. This involves knowing that certain ways of talking and acting are appropriate in certain contexts, knowing with whom, when and where they can speak and act, and interpreting classroom rules that are often implicit." (p. 179)

Ineffective functioning within the framework of the rules governing interaction in reading lessons contributes to failure in learning to read well (Au & Mason, 1982) and may account in part for school failure of many Indigenous children (Philips, 1972). Recently, some of the tacit rules guiding interaction in elementary school reading lessons have been identified (Mason & Au, 1981; Mehan, 1979; Mehan, 1984; Philips, 1983). However, how Indigenous children function within the rules governing the reading lesson has not been examined. In addition, the metacommunicative competence of Indigenous students, that is their ability to describe or evaluate the communicative norms and processes involved, has not been utilized in developing an interpretation of how Indigenous students communicate during reading instruction.

Viewing reading and learning to read as sociolinguistic processes, has given rise to the use of qualitative research methods in the study reading and language in the classroom. From the wide range in naturalistic methodologies, microethnography has been frequently employed to study participation in reading instruction in classrooms. Microethnography utilizes methods from the ethnographic research tradition such as participant observation and interviewing, as well as audio and video recording of particular cultural scenes such as reading lessons. Such data collection procedures yield data that is primarily nonnumeric requiring qualitative analysis. However, some aspects of the data such as the frequency of certain behaviours is amenable to counting.

Microcomputers can ensure that all aspects of a qualitative study are conducted more efficiently. In addition, with a computer, data can be easily managed and distributed without compromising the anonymity of the participants. Computers increase analytical rigor by enabling the researcher to view all aspects of the evidence when preparing a generalization about the data. Also, computers enable easier display of the data in the form of figures, tables, graphs and matrices. It is not necessary to have access to a computer in order to conduct a qualitative study. However, if readily available, then silicon chip technology can reduce the manual labor involved in qualitative research as well as increase confidence in the results.

CHAPTER 3

METHODOLOGY

This chapter describes the steps involved in actually carrying out the study. The framework for reporting the design of the study was gleaned from textbooks which provide an overview of qualitative research methodology (Bogdan & Biklen, 1982; Dobbert, 1982; Goetz & Lecompte, 1984; Hammersley & Atkinson, 1983; Miles & Huberman, 1984a). In effect, the subsections provide a chronological overview of the steps taken in carrying out the research process. Each sub-section provides a rationale for the procedure used as well as an explanation of what was done.

Gaining Access to the Site

Hammersley and Atkinson (1983) astutely note that access is "not simply a matter of presence or absence" (p. 56) of the researcher. Obtaining access involves obtaining permission for the research to be conducted and gaining the confidence of the study's participants. Rist (1982) suggests that gaining access can be one of the most crucial stages in qualitative research and is not to be taken lightly. Initial negotiations for access to the research site are focused on the "gatekeepers" (Bogdan & Biklen, 1982; Hammersley & Atkinson, 1983; Rist, 1982) who can legitimately grant or withhold the necessary permission for access (Hammersley & Atkinson, 1983). In this study such key personnel were the teacher, the principal and the superintendent of the school district.

The choice of ABC Elementary as the school in which to conduct this research arose out of the pilot study. My son has attended ABC Elementary for the past two years, the first year of which he was in Miss Mac's classroom. Through a parent-teacher relationship, I gained initial access to the school and to Miss Mac's classroom in order to conduct a pilot study. During the pilot study, the teacher and I developed a congenial working relationship. She expressed

an interest in the project and a willingness to participate in any further research. As the research questions for the present study were formulated, I began initial observations in two classrooms one of which was in ABC elementary. After Christmas it became apparent that I would be unable to conduct the study in the other school. At that time I met Miss Mac and another teacher from ABC Elementary chaperoning their students at a local hockey game. I made arrangements to come to the school to discuss conducting the study in Miss Mac's classroom.

I gave the principal and the teacher a five page abstract of the research proposal to read. At our first meeting, the teacher and I discussed the proposed study in some detail. The teacher stated that she "really liked the proposal" and that she would be willing to have me in her class.

During the initial negotiations, it became apparent that the teacher was planning a change in the format of the reading program which would have ramifications for the study. Therefore when we negotiated data collection procedures and a timeframe for the study, I agreed to complete the data collection by the time the new reading program was to be implemented. We agreed on a tentative five week timeframe for data collection.

Upon reading and discussing the abstract with the teacher, the principal gave his verbal approval for the project. Written approval would be forthcoming pending word from the superintendent. At that point, I contacted the superintendent of the school district who requested I submit to his office, a letter of intent, the research proposal and the abstract of the proposal. Within a few days I had received written approval from both the superintendent and the principal. The gate was open.

Honesty is one of the main ethical considerations in doing fieldwork (Bogdan & Biklen, 1982; Dobbert, 1982). To acquire the informed consent of the

participants, Dobbert (1982) suggests that a researcher honestly explain the purpose of the research, how it is to be done, how the researcher would benefit and what the possible risks to the participants were. Once the participant understood these issues she/he would be able to give their informed consent.

Rist (1982) stresses the importance of gaining the confidence of the people in the setting where the actual work is to be conducted. Bogdan and Biklen (1982) note that simply because a researcher has gained official access from the gatekeepers is no guarantee that the subjects of the study are going to cooperate. The experience of the pilot study confirmed these observations. Under the assumption that informing the students of what I was doing would be harmful to the pilot study, I entered the classroom and began tape recording and taking fieldnotes without any explanation to the students. The students became uncooperative, shutting off the tape recorder during a recording session and refusing to speak when I was around. I found out later that the students thought I was a spy and that the contents of my fieldnotes were to be reported to the teacher and/or the principal. Through this experience I learned that the success of this study would depend in part on the rapport and cooperation I was able to develop with the students. In an effort to solicit the cooperation of the students, I employed the two principles of honesty and acquiring informed consent.

I prepared two letters explaining the study: one for the parents and one for the students (see Appendix). Attached to the letter to the parents was a permission slip. All permission slips were signed and returned. After an extended illness, the teacher returned to the school and at that time I made arrangements to meet with the grade six students, to explain the study and give them the letter.

At a time suggested by the teacher, I accompanied the grade six group to the library where we sat on the floor in a circle. I briefly explained that I was required to do this research in order to graduate. I made an analogy between my research and the projects which they had recently completed for the "Science Fair". I explained that I was interested in the teaching and learning of reading and how I intended to collect the data. After this explanation, I passed out the letter and asked them to read it. The letter emphasized that their anonymity would be maintained and that their participation was voluntary.

My verbal and written explanations were followed by a series of questions from the students. The students asked such perceptive questions as: What would the final report of the study look like and would they be able to see it? What does "completely confidential" mean? What measures would be taken to protect their anonymity? How difficult are the interview questions? They wondered if their behaviour would change in front of a video camera and we discussed problems involved in allowing students to view the video tapes. One girl queried "Then do you want us to act normal?". When the session was about to end, I gave the student the letters and permission slips addressed to their parents.

Throughout the session with students, I stressed that I would not report any of their actions to their parents, their teacher or the principal if such a report might be harmful to them. This approach of actively soliciting the cooperation and trust of the students was effective. When I entered the classroom, the students spoke freely to me and treated me as simply another person in their environment. Schwartz and Jacobs (cited in Reid, 1982) suggest that a participant observer attempt to acquire "nominal status . . . as someone who is part of their daily lives" (p. 69). The nominal status I was able to achieve reduced the intrusive effect of the research process.

At this point, access to the site had been achieved. The principal, the superintendent, the teacher, the students and their parents were aware of the goals of the project, how the research would be carried out and how the researcher would benefit. They were assured of anonymity and that their participation was voluntary. The informed consent of each participant had been obtained.

Narrowing the Research Focus

Before Data Collection

Researchers begin data analysis by forcing themselves to narrow the focus of their study (Bogdan & Biklen, 1982; Dobbert, 1982; Hammersley & Atkinson, 1983; Miles & Huberman, 1984b) and ultimately reduce the amount of data that will be collected (Miles & Huberman, 1984a, 1984b). One of the first steps in narrowing the focus is deciding upon the type of study to be undertaken (Bogdan & Biklen, 1982). From all the various qualitative research techniques available for an educational researcher (see Bogdan & Biklen, 1982 for a review) it was decided to conduct a microethnography. This approach would allow the researcher to generate statements about general social processes from minute details of classroom interaction.

Several different aspects of initial data reduction resulted from the preparation of the research proposal: the development of a conceptual framework arising out of the review of the literature; the preparation of a set of research questions arising out of the conceptual framework; and the making of certain sampling decisions.

The development of a conceptual framework is one means of reducing data (Miles & Huberman, 1984b). Dobbert (1982) states that "the observer must know what to look for, must have a conceptual scheme into which to try to fit the data" (p. 270). In the research proposal, the assumptions underlying both the

theoretical and the methodological framework of this study were clearly explained. These have been included in the introductory chapter of this thesis. Refining the research questions which arise out of the particular conceptual framework is an additional means of data reduction (Miles & Huberman, 1984b). Again the development of a research proposal, aided the clear delineation of the research questions.

Sampling decisions are also an important means of narrowing the research focus (Miles & Huberman, 1984b). The decision was made to focus upon four Native students in a grade six class during reading instruction. The decision was made to focus on reading instruction because;

- a) of the theoretical interest in factors affecting successful English literacy acquisition amongst students from minority cultures and language groups;
- b) of the recommendation by Au and Mason (1982) that the social organization of student participation be studied in structured instructional settings such as reading or mathematics groups;
- c) the pragmatics of collecting data with mechanical and somewhat stationary recording equipment precludes a stationary and predictable teaching situation; and
- d) of the important role of student participation in successful reading instruction as established in the literature.

The decision to focus on Indigenous students arose out of two general but related theoretical interests. First the relationship between language use and academic success; and secondly, the inability of the public school system to meet the academic needs of large numbers of Indigenous students.

Before data collection began, the decision was made to focus primarily upon the grade six reading group because four of the six Indigenous students in the class were in that particular group and the logistics of recording more than one reading group was not feasible.

During Data Collection

All of the above decisions narrowed the focus of the data collection thus limiting the amount and kind of data that were collected. Miles and Huberman (1984b) refer to this process of initial analysis as "anticipatory data reduction" (p. 24). It is anticipatory in that analysis occurs both before and during data collection; it is reduced in that by "selecting, focusing, simplifying, abstracting, and transforming raw data" (p. 23) the massive amounts of data, both real and potential, becomes manageable.

Analysis of qualitative data is difficult work which requires rigor and discipline (Miles & Huberman, 1984a; Patton, 1980). Perhaps it is this aspect of analysis which prompts Bogdan and Biklen (1982) to suggest that the initial problems of being in the field and collecting the data do not leave novice researchers with the time to actively pursue data analysis. "In our judgement, the beginning researcher should borrow strategies from the analysis-in-the-field mode, but leave the formal analysis until most of the data is in" (p. 146).

Following this advice, formal analysis of the data in this study was not done until data collection was completed. However, certain data analysis strategies such as changing data collection procedures based on observations, writing of reflective comments and memos, and continuing to review the literature were employed while the researcher was still in the field.

The proposed data collection strategy was to rely mainly on audio recordings supplemented by weekly video recordings. However changing data collection procedures in light of what is found during previous observations sessions is central to ethnographic research (Bogdan & Biklen, 1982; Dobbert, 1982). Therefore when it became apparent that data collected with video were more suitable to the research questions than were the data collected only with audio recordings and fieldnotes, the data collection strategy was altered.

Another example of flexibility arose in the content of the lessons observed. Although the original intention was to primarily collect data during teacher-directed small group participation structures, this was not always feasible. This discovery led to the alternative strategy of recording a variety of participation formats during reading period.

Observers' comments (Bogdan & Biklen, 1982) or reflective comments (Miles & Huberman, 1984a) provide the researcher with an opportunity to stimulate his/her thinking about what is being observed and to insert these "analytic insights" (Patton, 1980 p. 296) into the fieldnotes. In the study, observer comments were included in notes written during observations; in entering the notes into the computer; and in the transcription of tapes on the computer. These comments contained possible interpretations of what was being observed and how it related to the research questions. Areas requiring further investigation and possible insights into the research questions were noted. These comments were valuable during data analysis as they provided spontaneous insights into possible trends and interpretations of the data. The prospect of beginning analysis of hundreds of pages of data would have been overwhelming without these bits of initial analysis.

After some time in the field, the researcher writes memos (Bogdan & Biklen, 1982; Miles & Huberman, 1984a) which allow reflection on how aspects of the data are connected with each other or to larger theoretical or methodological issues. Periodic memos were written summarizing and speculating about what was being observed as well as identifying issues to be pursued. Memos were written both during data collection and during analysis (Miles & Huberman, 1984a; 1984b) and were particularly helpful in the analysis of the data.

Bogdan and Biklen (1982) suggest that after the researcher has been in the field for a while, a review of the literature will enhance analysis. In this study, a major review of the literature was done for the proposal. However, this was laid aside until after much of the data had been collected. The methodological literature was actively explored while the researcher was in the field in an effort to improve data collection and subsequent analysis. Once data collection was completed and initial coding of the data had been done, previous and additional literature relating to theoretical issues were thoroughly reviewed. This body of literature provided the theoretical and methodological framework for analysing and interpreting the data. These frameworks assisted the analysis in moving from substantive theory, that is theory based upon data from the particular study, to more formal theory (Bogdan & Biklen, 1982).

All of the above were steps towards the initial reduction and analysis of the data. It was these processes which ensured the manageability of the study and consequently its ultimate completion.

Data Collection Procedures

The following section describes all the procedures utilized for the collection of data in this study. Data were collected from February 25th until April 24th, 1985. Audio and video recordings were made between March 14th and March 27th of the same year. Two audio recordings and two video recordings were chosen for detailed analysis: the recordings chosen were those which contained the greatest amount of teacher-student interaction and which were technically of high quality. After mechanical recording was complete, one open-ended interview was conducted with each of the four Indigenous students in the study.

Field Relations

Both the gatekeepers and the participants in a study attempt to place the researcher within the framework of their experience (Hammersley & Atkinson, 1983). An ethnographer will try to shape her/his role in order to develop a comfortable and profitable position within that framework thus ensuring necessary access to the data (Hammersley & Atkinson, 1983).

Bogdan and Biklen (1982) reflect that changing one's appearance to be more like one's hosts is one way of blending into the setting. On my first day in Miss Mac's classroom during the pilot study, I wore my best skirt and blouse together with high heeled dress shoes. This manner of dress reflected my perception of how adults in a city school would dress. However looking around the school I soon realized that the staff were dressed more casually than I. I became quite uncomfortable when I realized that I was overdressed. From that day on, I dressed simply often wearing cotton slacks or a skirt with flat heeled shoes. A more casual manner of dress assisted me in blending into the setting. Bogdan and Biklen (1982) suggest that gatekeepers are rarely threatened by student researchers. Thus I wanted to cultivate the role of an "acceptable incompetent" (Hammersley & Atkinson, 1983); a student who lacked expertise. Living within walking distance to the school meant that one of my children attended the school. As a parent I had been in the school often to see both the principal and the teachers in regard to my son's academic and behaviour problems. The fact that I was having difficulty with my son reinforced my image as someone "who did not have all the answers" to educational issues. I was simply another parent who also happened to be a university student.

Role as Observer

Observation is one of the key methods of data collection in the qualitative research paradigm (Rist, 1982). Such observations are made by the researcher assuming a physical position and a role within the situation to be studied. The roles which an observer can assume differ with the level of involvement of the researcher in the particular situation (Bogdan & Biklen, 1982; Hammersley & Atkinson, 1983; Rist, 1982). At the far end of the involvement continuum is the observer who is a full participant in the activities being observed. At the other end is the researcher who remains detached from the situation and does not interact with the participants. In most studies, as in this one, the researcher's level of involvement lies somewhere between these two extremes.

My level of involvement was closer to the detached end of the continuum, a position that Hammersley and Atkinson (1983) have termed "marginality" (p. 97). In a marginal position, I was able to openly assume the role of researcher which allowed me free access to the staff and students. I spoke freely to the teacher and other school staff as they did to me. I was more reticent with the students especially when class was in session. Bogdan and Biklen (1982) suggest that a researcher's level of involvement is somewhat restricted by the situational constraints of classrooms. I found this to be true. I did not initiate conversations with the students unless the student began speaking first. The exception to this was when the situation was one-on-one or when I was approaching the students about being interviewed.

Bogdan and Biklen (1982) point to the special problems created by observing children. As they suggested, I made special efforts to avoid being viewed as an authority figure. I did not reprimand nor would I answer questions in class. I did not circulate among the students when they were working. I remained at all times at the side or the back of the classroom observing, taking

fieldnotes or watching the mechanical recording equipment. Although I did interact with the participants, I remained detached in a special effort to maintain my role as an observer and to avoid cultivating the image of an authority figure.

Fieldnotes

Fieldnotes were taken at a variety of times and places. While actually in the classroom, I often carried a stenographer's notepad upon which I would write cryptic notes about the interaction of the students with each other and with the teacher as well as descriptions of the classroom context and the students. However, I was reluctant to take notes in the more public places in the school such as the staffroom or the hallways. Therefore, I recorded my observations upon returning home.

Notetaking is an important aspect of interviewing. In casual encounters with participants, I did not take notes but rather recorded what had transpired at a later time. In previously arranged meetings with the teacher or principal I felt comfortable taking notes. During the tape recorded interviews, I informed the students that I was taking notes so that I would remember what was said (Bogdan & Biklen, 1982; Spradley, 1979). However, I found it difficult to take notes and to do the conversational work required for the interview at the same time. The conversational work included such tasks as maintaining eye contact, monitoring responses and planning the next question. In addition, the conversational work of these interviews were compounded by differences in culture, race, age, social status and sometimes sex. As I had already decided to fully transcribe the tape recordings of the interviews, I made fewer notes as the interviews proceeded.

The focus of the research question upon the participation of Indigenous students during reading instruction narrowed the scope of fieldnotes while

observing in the classroom. When sessions were only audio recorded, fieldnotes were primarily used to maintain a record of what the Indigenous students were doing and saying during the reading lesson. All bidding and nomination procedures involving the Indigenous students were recorded, for example. When the video recorder was in use, I sometimes chose not to take fieldnotes but to monitor the equipment.

Mechanical Recording of Data

Although the original intention was for the major data collection technique to be audio recordings supplemented by fieldnotes, this changed as soon as the study began. First of all, the Faculty of Education Curriculum Laboratory made available video recording equipment at no cost to the researcher. Secondly, the students' interactions were more accurately recorded on video than with audio recordings supplemented by fieldnotes. Because of the accuracy of the visual record, it became apparent that it would take fewer video recordings than audio recordings to arrive at the same level of generalization. Thirdly, the major objection to the use of video is its intrusive presence in the classroom. However, there were no discernible differences in the actions of the teacher or the students when a video recorder or an audio recorder was in use. In addition, the teacher was forthright about her belief that video recording would collect data superior to that collected simply with audio recordings.

A Hitachi VK-C870 color video portapack with a tripod was set up at different locations in the classroom, in order to find a position in which all four Indigenous students would be within camera range. Given the set-up of the room, including the positioning of electrical outlets, the best position for the camera was at the west end of the room, near the cloakroom and the rear

entrance to the classroom. This was a high traffic area during transitional periods of the day such as recess. However, in this position the camera was the least conspicuous and it provided the best view of the students during the actual lesson.

The camera was set up during the morning recess because the reading period was usually held directly afterwards. Otherwise the camera was set up in the hallway and moved into position during an appropriate break in the flow of the lessons. One hour video tapes were sufficient to record a forty minute period. Recording either began when the students returned from recess or when the reading lesson was officially started by the teacher and it continued until the tape was finished or the lesson was over.

An AKG D109 lavalier microphone produced the quality of recorded sound required for accurate tape transcription. Generally the teacher wore the lavalier microphone which was attached to the audio recorder. If the teacher was working at the blackboard or at the overhead projector, the length of the microphone cord and the position of the camera were such that she could not wear the lavalier while it was directly attached to the video camera. When small group sessions held near the camera were video recorded sometimes the lavalier microphone was attached directly to the video camera. In a small group session where the teacher was not present, a student was asked to wear the microphone.

A Sony TC-142 portable cassette recorder with 1 hour Sony HF-S60 minute normal bias tapes was used for recording the audio portion of the lessons. The Audio/Visual Department of the Faculty of Education at the University of Victoria donated the use of the tape recorder free of charge. Although the recorder was portable, to assure quality recordings, it was plugged in at all times. The quality of the built-in microphone of this model of recorder is

such that once when the lavalier microphone did not work, the tape was still transcribable.

Interviews

Bogdan and Biklen (1982) define an interview as "a purposeful conversation usually between two people (but sometimes involving more) that is directed by one in order to get information" (p. 135). Informal and formal interviews are two of the interviewing options available to a researcher (Rist, 1982) and both were used in this study. All informal encounters with persons while in the field were later recorded in as much detail as possible in the fieldnotes. Such interviews were not always initiated by the researcher but sometimes by the principal, the host teacher, other persons in the staffroom or the students.

Hammersley and Atkinson (1983) point out that "insider's accounts" (p.105) of the situation under study allow the ethnographer to get information that is not directly observable to the researcher; to substantiate inferences that have been made from observations; and to find out something about the person giving the account. In this particular study, interviews were used for all three purposes.

The reading program was in a period of transition. The lessons which were being observed were different in content and organization from the reading lessons that had been taught up to that point in the year. With this in mind, the interviews were structured so as to elicit a student description of a typical reading lesson before the reading program began to change. In this way the subjects provided data about the organization of reading instruction which could not be directly observed.

Secondly, the notion of participation structures and the rules governing participation within them are theoretical constructs. The researcher inferred from classroom observations that this theoretical framework adequately accounted for the organization of student participation in this classroom. Thus the interviews provided an opportunity to substantiate the observer's inferences based upon classroom observations.

Finally, the interviews provided information about who the participants were; that is information about their personal background; their view of reading; their likes and dislikes and their view of their participation.

Spradley (1979) states there are three elements to an ethnographic interview: its explicit purpose, ethnographic explanations and ethnographic questions. Each of the interviews consisted of these three elements. As part of the preliminary discussion, I informed each student of the purpose of the interview. Two types of ethnographic explanations were provided: project explanations and recording explanations (Spradley, 1979). In the first instance, I repeated a description of the study. In the second instance, I explained why I wanted to take notes and tape record the interview and then I asked permission to do so. The interviews also contained the third element, the ethnographic questions.

Spradley (1979) maintains that to create an ethnographic description the interview questions must arise out of the informant's culture rather than from a predetermined theoretical framework and body of research knowledge. By asking informants to talk about a particular cultural scene the ethnographer can discover the appropriate questions to ask (Spradley, 1979). In order to discover the culturally appropriate questions, the ethnographer asks a set of descriptive questions which are like offering an informant "a frame and canvas and asking them to paint a word-picture of their experience" (p. 85).

Two types of descriptive questions were used; grand tour and mini-tour questions. Spradley (1979) defines a 'grand tour question' as one which asks the informant to provide "a verbal description of the significant features of the cultural scene" (p. 85) under study. Two grand tour questions were asked: Could you tell me about a typical day at school? and Could you tell me about a typical reading lesson? The second arose out of the first. When students provided a general description of their day at school, if they included reading "period" as part of a typical day, I would then ask the second question. If they did not mention reading, which happened in one interview, I then used my knowledge of the situation to ask the additional probe "What happens after recess?". This question then precipitated a discussion of reading. Both grand tour questions provided a cultural description of the reading lesson from an insider's perspective. Through these descriptions, the informants revealed what they knew about how participation was organized during reading.

While grand-tour questions ask informants to describe an entire cultural event, mini-tour questions deal with smaller units of experience (Spradley, 1979). In their description of the reading lesson, the students mentioned a process whereby their work was corrected by the teacher; what they referred to as "having their answers checked". At this point they were asked to describe a typical session "of checking their answers". It was through the answers to this question, that I learned what the students knew about the rules governing student participation in such sessions. Through this mini-tour question, I was able to focus on a particular event in the reading lesson and to get a cultural description of that event.

Formal interviews were arranged with the four Indigenous students. I began the interviews with Joe, an Indigenous boy in the grade 7 group who was not part of the study. I asked Joe first because I wanted an opportunity to

practice the interview with an Indigenous student that was a participant in the event under study but not a participant in the actual study. After practicing the interview with Joe, I approached Doug. Doug was my first choice because I had met him outside of class through my son and because he appeared to be the most talkative of the four students. Doug was willing, even keen, to be an informant. After some difficulty finding a quiet spot for the interview, we settled in the library. The third student I approached was Lucy. I asked to speak to her for a moment before classes resumed after the lunch break. Like Joe, Lucy was initially reluctant to be interviewed. However she finally agreed and after several unsuccessful attempts to find a quiet spot to meet, we conducted the interview in the staffroom. When the interview was over, I mentioned to Lucy that I was going to ask Mary next. At that point, she offered to send Mary in to see me. Thus I waited in the staffroom for Mary to arrive. A few minutes later Mary came in and after a short discussion we began the interview. Roy was absent the first day of the interviews. I was able to interview Roy when school resumed after the spring break, at which time he was a willing informant.

Spradley's (1979) suggests that "ethnographic interviewing involves two distinct but complementary processes: developing rapport and eliciting information" (p. 78). If an interviewer develops rapport with the informants, they feel comfortable enough to reveal aspects of their culture. As they reveal information about their culture, rapport develops. I attempted to develop rapport by being friendly with the informants and by discussing more neutral topics before the ethnographic questions began. Throughout the interview, I made my cultural ignorance (Spradley, 1979), that is my lack of knowledge about "the reading period", known. My never having taught grade 6 reading nor ever having used the basal reading series around which the lessons were centered, made this cultural ignorance a reality rather than a pretense. The students truly

believed that I did not know the answers to the questions I was asking and this encouraged them to respond.

Data Analysis and Interpretation

Until very recently the development of guidelines for conducting qualitative data analysis and interpretation had received little attention in the methodological literature (Conrad & Reinharz, 1984; McCutcheon, 1981; Miles & Huberman, 1984b). In order to provide criteria for judging qualitative research and to develop a set of commonly accepted procedures for data analysis and interpretation, it is incumbent upon qualitative researchers to document and share the manner in which they analyze and interpret their data (Conrad & Reiharz, 1984; Miles & Huberman, 1984b).

Data analysis and interpretation are closely related, if not, symbiotic processes. Analysis is the process of organizing and retrieving the information that has been gathered (Bogdan & Biklen, 1982) and it is the process through which the researcher begins to make sense of the data (Dobbert, 1982). McCutcheon (1981) states interpretation is "the meaning of observations and the process of making that meaning" (p. 5). Keeping in mind the close relationship between the various aspects of data analysis and interpretation, the following section outlines the methods of data storage, retrieval, analysis and interpretation that were employed in this study.

Data Storage

A Macintosh microcomputer (512K) with an external disk drive and an Imagewriter dot matrix printer are the microcomputer hardware used in this study. In addition, several pieces of software were used. Tables, graphs and matrices were created with the graphics program, MacPaint. Microsoft WORD was used for word processing, while Microsoft FILE was used for data

management. The Living Videotext program, THINKTANK, enabled easy drafting and organizing of ideas.

Most data were stored on computer disk using Microsoft WORD. Each WORD document indicated the type of data it contained, that is memo, fieldnotes, or tape transcription plus the date, location and topic of the observation. Once data were entered into the computer, a hard copy was printed for safety purposes. The hard copy of all fieldnotes, memos and tape transcriptions as well as any data that were on paper but were not entered into the computer were kept in a three ring binder.

Instead of using a typewriter, tapes were transcribed directly onto computer disk. A Dictaphone Electronic Dictating Machine (Model # 2890) with a foot pedal and headset was rented from the University of Victoria Audio/Visual Services to transcribe the audio tapes. Transcribers make the transcription of tapes easier, more efficient and more accurate (Bogdan & Biklen, 1982). With a transcribing unit, tapes can be moved forward or in reverse without the typist's hands leaving the keyboard. The speed of the tape can be controlled; sections of the recordings that would have been inaudible on a regular cassette deck were decipherable at slow speeds on the transcriber.

The format of the transcriptions was borrowed and adapted from Erickson and Mohatt (1982). The recordings were transcribed verbatim; that is every audible utterance was transcribed. False starts, repetitions, and conversational fillers such as "um" were all recorded. The physical distances between utterances in the transcription indicated length of pause. Rather than traditional punctuation, a single slash mark (/) indicated a brief pause, similar to a comma, while double slashes (//) indicated a full pause, similar to a period. Initially primary stress was included in the transcriptions. However this was abandoned as it was time consuming and did not appear to be relevant to the research

questions. As in Erickson and Mohatt's (1982) format, overlaps between speakers were indicated through indentation.

To the far left of the text was the name of the speaker. Student speakers were identified by the first two letters of their names and the teacher by an upper case letter T. Unidentified speakers were indicated with an upper case letter U; an unidentified chorus of speakers was indicated with an upper case letters UC. Erickson and Mohatt (1982) gave each line of the transcription a separate number. However, that did not appear to be necessary in this study. Instead the odometer number on the transcribing unit's counter was periodically included to aid location of that portion of the text on the original recording.

When sessions were both audio and video recorded the two transcriptions were incorporated into one. Generally the audio transcripts were prepared first with the typed transcription being used as a guide for viewing and analysing the video recording. Video tapes were viewed and transcribed on a Sylvania Video Cassette Recorder Model VC2215BK01. The primary purpose of viewing the recordings was to make detailed notes on the actions of the Indigenous students. A secondary benefit however was that previously inaudible dialogue was sometimes added during this process. Notes of the behaviours penciled on the typed audio transcripts were then entered into the computer.

The transcription of the audio and video tapes required the integration of three types of information into a single transcript: the audio transcript, the information from the fieldnotes, and information from the video recording where applicable. At the time of transcribing, fieldnotes were integrated into the transcription and enclosed in [square brackets], while paralinguistic information such as voice level, tone of voice and intonation was enclosed in (curved brackets). All parenthetical information was inserted to the far right of the actual

text. Once all the information had been entered, a single transcript that included information from the fieldnotes, the audio recording and the video recording was printed for editing and analysis.

Classifying, Coding and Labelling Data

A crucial step in data analysis is to develop a coding system which can be used to categorize and sort the monumental amount of data that have been collected (Bogdan & Biklen, 1982; Patton, 1980). As Patton (1980) states "simplifying the complexity of reality into some manageable classification system is the first step of analysis" (p. 299). Coding of data can be inductive or theory driven; that is the coding categories can arise from the data (Bogdan & Biklen, 1982) or be borrowed from a theoretical framework and research questions which arise out of that framework (Miles & Huberman, 1984b). However Miles and Huberman (1984a) note that "a conceptual structure, whether prespecified or evolving, must underlie the definitions" (p. 60) of the codes. The data in the study were coded both inductively and deductively.

The entire data set, including memos, diary entries, fieldnotes, audio/visual transcripts and interview transcripts was read through and an initial tentative labelling of items was done. As recommended by Miles and Huberman (1984a), analytical memos were taken during this initial coding. The list of families of coding categories presented by Bogdan and Biklen (1982) guided the initial data coding. The coding families which were most helpful in the labelling of this data were: *definition of the situation codes, perspectives held by participants, participants' way of thinking about people and events, activity codes, strategy codes, relationship and social structure codes, and methods codes*. During the labelling process, specific codes were developed within each family of codes. For example, data included in the *methods code*

family was further broken down and labeled as transcription, interviews, anonymity, video recording, audio recording, fieldnotes, access and microcomputer. The coding family *perspectives held by participants* included such codes as the 'teacher's view of students'.

The *activity codes* included most of the classroom observations. After a thorough review of these observations, it became apparent that the theoretical framework of participation structures and the rules governing them accounted for the organization of reading lessons and the teacher-student interaction within those lessons. Thus data included in the *activity codes* family used a set of codes based upon the theoretical framework. Labels such as bid, not bid, individual nomination, invitation to bid, and invitation to reply, were used to code the classroom observations which focused on student participation.

The interview data were coded more inductively than the mechanically recorded data. Because the purpose of the interviews was to learn how the participants saw the reading lesson from their perspective, it was important to categorize the data according to a classification system the participants themselves used. Patton (1980) refers to this classification system as indigenous typologies, in that they are indigenous to the people under study. "These typologies are clues . . . that the phenomena to which the labels refer are important to the people in the setting, and that to fully understand the setting it is necessary to understand those terms and their implications . . ." (Patton, p. 305). For example in their description of the reading lesson, the students used terms such as "putting up our hands" and "getting picked on" to describe how they participated in the lesson. Terms used by the students were later cross referenced with the codes arising out of the theoretical framework.

Although category labels may be directly added to the text file on the computer (Sproull & Sproull, 1982), in this study the initial reading, coding and

labelling of the data were done on the hard copy. Two methods were used: the ten most obvious categories were color coded with flow markers, while the remaining thirty or so were simply written in the right hand margin of the data. Words rather than numbers were chosen as labels for the coding categories (Miles & Huberman, 1984a; Sproull & Sproull, 1982) to ease quick, comprehensible review of the data. A list of the codes was kept close at hand, and it was referred to frequently throughout the coding process.

Items were multi-coded (Becker et al., 1984; Bogdan & Biklen, 1982). That is, each item could be labelled with more than one code. For example in a small group reading lesson the teacher called upon Lucy to answer a question that Lucy did not bid for and to which she did not reply. This observation was given four labels: *SMALL GROUP PARTICIPATION STRUCTURE *INDIVIDUAL NOMINATION RULE *NOMINATED *NO RESPONSE. Later this instance was retrieved as an example of each of these four categories.

Preparing Data for Computer-Assisted Analysis

Once the hard copy had been coded, the next step was to prepare the data which were stored on the computer for analysis. The first step was to make back-up copies of all computer disks containing research data. A master copy was put away for safe keeping while copy disks were used to prepare the data for analysis.

The second step involved organizing the raw data into a series of smaller documents; each document representing a major coding category. Data not relevant to the research questions were not coded (Miles & Huberman, 1984a) thus reducing the actual amount of data to be used in analysis. Using the word processing program Microsoft WORD, all the relevant, coded data were extracted from the original computer document and placed into a series of gross

category documents. This process was similar to the traditional method of manually copying, cutting, and sorting the pieces of coded data and storing them in file folders (Bogdan & Biklen, 1982). Microsoft WORD allows for a "split-screen" where up to four documents can be displayed on the computer screen at one time. Thus an original document, for example a tape transcript, could appear at the top of the screen while the category document could be edited at the bottom of the screen. An example of a category document is a file containing all the available data on a particular student. With the split screen, all references to that particular student were edited from the original document and transferred to the category document. In this way a series of documents were set up, each of which contained all the information in the data set that belonged to that particular category.

Next, all entries in the individual documents were labelled. In most instances this simply meant taking the codes that were already on the hard copy and entering them into the computer document. For example, I would open the category document entitled Roy's File and locate the first entry in that file. I would then locate that entry in the hard copy to see how the observation had been previously coded. Those codes were then entered into the computer in upper case letters. Below is an example of a typical entry in Roy's file on the computer:

TEXT D PAGE 15 *SMALL GROUP PARTICIPATION STRUCTURE
*INDIVIDUAL NOMINATION *RATIFIED

T: where is the poison located [on a scorpion] Roy?//

Roy: on its tail//

T: on its tail/ sting at the end of the tail//

In this example Roy was observed to be individually nominated in a small group participation structure and his response was ratified by the teacher. The

name of the original text file and the page number within that file were entered to ensure easy reference to the original text. Reference to the original text was frequently required because storing and retrieving data in this way removes specific behaviours from the context in which they occurred. This example came from page 15 of transcription "D" in the original text.

Originally one document was set up for each student as well as a few other descriptive categories such as "description of the reading program". As there were close to 40 coding categories used in this study, the logistics of attempting to organize all the data for each category in the manner described above rendered the task not feasible. It became apparent that in order to make maximum use of the microcomputer for data analysis, the categorized data had to be transferred to a data management or filing program.

Data Retrieval for Analysis

Once the data on the computer had been categorized and coded, the next task was to organize the data so that all the information in each category was easily accessible. The computer was used to retrieve the data for both qualitative and quantitative analysis of the data.

Quantitative Data Analysis

The participation of the Indigenous students was categorized and counted in order to interpret and generalize about their participation during reading lessons. To ensure efficient, accurate retrieval and counting of observations, the coded data were transferred to Microsoft FILE, a data management program. Transferring the data was possible because FILE is a companion program to WORD; both are products of a single company. FILE met the criterion of efficiency. It was developed specifically for the Macintosh computer and thus takes full advantage of the Macintosh's user- friendly

capabilities. FILE sorts data chronologically, numerically or alphabetically and is able to find all records containing a requested descriptor. This capability allowed for systematic and efficient counting of every instance of a particular coded behaviour. Once most of the data had been entered into FILE there were 469 items in the data base and yet the program was able to execute the sort and find commands relatively quickly.

The next step in preparing the data for analysis was to retrieve all items of each code. As each record had been previously coded, I would enter the code as a descriptor and ask the computer to find and display all instances of that code. For example, I set up a datafile for Mary. In that datafile were all the items, or pieces of coded data, that contained a reference to Mary. I would open up Mary's datafile and I would ask the computer to search for all the items which contained the descriptor *BID. The computer would then display all these items. At the same time, it would automatically calculate the number of records which it had retrieved. Each item was carefully examined, to ensure it was an instance where Mary had bid. Any records which were not instances of Mary bidding were discarded or subtracted from the calculated number of records. Through this process the total number of instances when Mary had bid for the floor during reading was accurately tallied. Once all examples of Mary bidding were pulled, the computer was then asked to locate all records of Mary bidding in a small group participation structure; all instances of when Mary was nominated when she bid; when she was nominated when she had not bid; when her response was ratified by the teacher, for example. In this way, all incidents where each student participated during reading were carefully examined and tallied.

In order to compare the participation of the four students, a series of tables and graphs was created to provide a visual display of the data (Miles &

Huberman, 1984a,1984b; Patton, 1980). The tables and graphs were prepared on the microcomputer with an Apple Company program entitled MacPaint.

Qualitative Data Analysis

Much of the qualitative data was also prepared for data analysis with a microcomputer. The process of transferring the data from the original documents to the data management program was the same. Once the data were in FILE, the search and display functions were used to retrieve all the data relevant to a particular code. For instance, when preparing the description of the students, several codes such as *student description*, *personal background*, *attendance* and *breaking the rules* were used to retrieve descriptive information about each student. These files were then sorted chronologically and alphabetically. Once they were in a format which best displayed the data relevant to that particular student, a hard copy of the records was printed. The hard copy was used as a guide in preparing the student's description; each item from the data sheet was methodically ticked off to ensure it was included in the description.

There are disadvantages to using a microcomputer and one of them is the loss of data through operator error, program glitches and power surges (Conrad & Reinharz, 1984). The transcriptions of the tape recorded interviews with the students were erased off the computer disk on which they were stored. Fortunately, a hard copy of the interviews had been printed and coded. Rather than re-entering the data into the computer, the interviews were analysed manually. Analyzing the interviews consisted of first of all identifying those parts of the interview relevant to the research questions. Then a one or two page summary of each student's responses to the questions was prepared. These summaries provided an accessible display of the relevant content of the interview as well as means for comparing the responses.

Interpreting the Data

Hammersley and Atkinson (1983) remind us that in ethnography "the aim is not to gather 'pure' data that are free from potential bias. There is no such thing. Rather, the goal must be to discover the correct manner of interpreting whatever data we have." (p. 112). Three types of interpretation were used in this study: (1) patterning (Bogdan & Biklen, 1982; McCutcheon, 1981) (2) interpreting social meaning of events (McCutcheon, 1981) and (3) relating the findings to existing theory (Dobbert, 1982; McCutcheon, 1981).

Patterning is a type of interpretation process where the researcher considers the interdependence of various aspects of the corpus being studied (McCutcheon, 1981). Seeing the interdependence of aspects of participation came as a result of analysing the data. My interpretations of the classroom observations were initially formulated during data collection and recorded in the observer's comments and memos. As data were coded, patterns were further developed and recorded in the form of memos. Qualitative data analysis does not end abruptly but continues on well into the writing phase of the research (Bogdan & Biklen, 1982). As I wrote, patterns which had emerged during analysis became clear.

The physical act of a behaviour means little until the researcher ascribes an interpretation to it. As I wrote the description of what I had observed, I began to interpret the behaviours I had observed in light of their social meanings; that is the social importance that both the participants and the observer ascribe to the act (McCutcheon, 1981).

Interpretations can also be made in terms of existing theory (Dobbert, 1982; McCutcheon, 1981). Such interpretations attempt to show a "reciprocal relationship" (McCutcheon, 1981, p. 7) between the theory and the practical instances of the classroom incidents. As a result of writing the conclusions of

the thesis I attempted to interpret the classroom observations in light of larger social, language and educational issues.

Summary

A major concern of qualitative researchers is to increase the strength of their interpretation of the data (Atkins, 1984; Dobbert, 1982; Goetz & Lecompte, 1984; Hammersley & Atkinson, 1983; McCutcheon, 1981). One means of accomplishing this goal is to triangulate; that is to employ multiple methods of research to ensure that conclusions are drawn from a variety of sources in the data (Atkins, 1984; Dobbert, 1982; Goetz & Lecompte, 1984; Hammersley & Atkinson, 1983; McCutcheon, 1981; Rist, 1982). Dobbert (1982) says "Multiple perspectives permit cross-checking of all types of data for accuracy and completeness. They also add to depth and breadth of interpretation." (p. 265). This study employed a variety of data collection procedures which allowed cross-checking of data, increasing confidence in the interpretation of those data. In addition, an eclectic approach to analysis included interpreting patterns as well as using frequency counts of behaviour as a means of generalizing about those behaviours. The microcomputer was instrumental in ensuring accurate and efficient storage, reduction, and retrieval of data in preparation for analysis. Meaning was brought to the data by a transaction between the researcher's knowledge and the observations that were made (McCutcheon, 1981). It is to the findings and the interpretation of the data that we shall now turn.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

This chapter discusses the actual study itself. The introduction will describe the context in which the study took place: the school, the classroom, and the reading program in place in that classroom. The second section will describe how student participation was organized during reading instruction and the rules which governed verbal interaction in each participation structure. The final section describes the four Indigenous students, how they participated during reading instruction and how they viewed their participation. Interpretations of the data will be presented.

The School

ABC Elementary is located in a high-unemployment district of a major city in British Columbia. Although two or three years ago many of the parents in this community were employed, present economic conditions have resulted in large numbers of families living on welfare, income assistance and unemployment insurance. The school population is comprised of 480 students who come from such culturally diverse backgrounds as Indigenous Canadian, East Indian, Portuguese, Chinese, Black, and Caucasian (which shall alternately be referred to as White or Anglo). Sixty Indigenous students make up the largest single minority in the school while East Indian students are the next largest minority. The school population is predominately White "non-working" class although there is a small pocket of affluent families. Fifty to sixty per cent of the children come from single parent families. The principal estimates that approximately one third of the entire student population is "at risk"; that is they are children who "are likely to encounter difficulty in school"; children who have emotional and learning difficulties or who have been physically and/or sexually abused. One

primary teacher's comment summarize the status of ABC Elementary in the city school district when she said it was a school "on the other side of the tracks".

In the past, many children in the school have had behaviour problems. However, the principal has implemented a "structured program" where everyone knows what the expectations are in regards to their behaviour and he believes that ABC Elementary is now one of the "best disciplined, sportsman-like" schools in the district. The principal was aware of current research in the area of effective schools and has made an effort to implement current knowledge into the program. The school has had sixty inservice workshops in three years on topics such as learning disabilities and sexual abuse. I attended one of the school workshops on the topic of reading while I was observing in the school.

The school has 24 full time teachers and five "peripheral staff"; two itinerant counsellors, one for all school children and one for the Indigenous children; a Band instructor; an English as a Second Language Instructor; and a hearing impaired instructor; as well as custodial and clerical staff. One of the full time teachers is a Native Indian.

The school has one main building which houses classes from kindergarten to grade 7. There are also a number of "annexes", separate buildings where other classrooms are located. The school ground surrounding the buildings is asphalt. A set of wooden play equipment with cedar chip underlay was recently constructed to provide an additional play area for the primary children. In addition, a large grass-covered area referred to as the 'back field' is located behind the school. It is here that the upper elementary children play team sports.

The main school building is comprised of an older and a newer section. Once an open area, the new section is fully carpeted with high ceilings and has

been renovated into traditional classrooms. The new section also includes a library, music room and a gymnasium. The upper elementary classrooms are located in the older section directly across from the office. In this section of the school, the floors are bare and the ceilings are much lower. Bulletin boards as well as paintings and historical photographs cover the walls in the hallways.

The school day begins at 8:35 A.M. with the reading of the Bible and announcements over the "intercom". The school day is divided into six forty minute periods. There is a fifteen minute recess from 10:25 until 10:40 A.M., a lunch break from 12:00 to 1:00 P.M., and school is dismissed at 3:00 P.M. except on Wednesdays when classes are dismissed at 2:00 P.M. to allow time for the weekly staff meetings and inservice workshops.

The Indigenous Student Population

The sixty Indigenous students at ABC Elementary are mostly "Urban Indians"; that is they live in the city and for the most part maintain only limited ties with the reserves from which they come. They come from a variety of cultural groups such as Kwakiutl and West Coast Salish while some are from reserves close to the city. To the best of this author's knowledge, English is the first language of all the Native Indian children in the school. The principal stated that few of the Native pupils have extended family in the city and that generally their families attended cultural activities at the city's Friendship Center rather than on the reserves neighbouring the city.

The principal's policy is to integrate the Indigenous students into the mainstream culture while providing opportunity for Indigenous cultural unity and development through the special funds allotted under the NISLP (Native Indian Special Learning Program). A secondary goal is to raise the level of awareness and pride of the entire school population in cultural traditions and heritage of the Indigenous peoples. Under the auspices of the program, for example, the

Indigenous students were taken swimming and a West Coast Indian artisan was brought into the school to carve where he could be observed by the entire student population.

The background of the Indigenous students is as diverse economically and socially as it is culturally. The principal stated that Native parents range from persons who are "seriously at risk" to "affluent carvers and artists". In his experience the principal has found that the brightest Indigenous students have come from both types of family environments. One of this year's most outstanding grade 7 graduates is an Indigenous girl from a family of artists and carvers.

Miss Mac's Classroom

The classroom used by Miss Mac at the time of the study is located in the main hallway in the old section of the school. The classroom is a large rectangular area without carpeting. There is a small cloakroom at the back of the room which was separated from the main area by a portable blackboard/bulletin board. A small storage closet opens out into the cloakroom. A kitchen sink and a set of cupboards are located on the wall adjacent to the storage room. On the counter, numerous plants were being nurtured under a fluorescent lamp which is hooked up above the sink. A listening centre was located between the teacher's desk and the sink. The north wall of the room is mostly windows which look out onto a quiet city street. Below the windows are shelves where various workbooks, textbooks and supplies were located. The teacher's desk was in front of the windows facing the class. Miss Mac rarely sat at her desk and was only observed to do so once when she was checking students' work. There was at least one drawer in the teacher's desk to which the students had free access. They went to the desk both with and without permission in order to search for felt pens and other such supplies. The walls of

the classroom were brightly decorated with art work, displays of students' work and achievements, as well as displays of cultural artifacts related to the current social studies unit.

The rows of students' desks formed a U-shape, with two rows facing south, two rows facing north and one row facing the front of the class which is east. When observations initially began, the grade 6 and 7 students were mingled together in a seating plan organized by the teacher. However near the end of the study, Miss Mac allowed the students to choose their own seating arrangements in an effort to prepare them for the self-directed responsibility required in junior high school.

The time periods allotted for reading and language arts followed recess on all days except Wednesday. Library, social studies, science, music, art and physical education were all part of the classroom program and were held at different times of the day depending on the day of the week. Some students periodically left the classroom to attend Band instruction and to listen to grade 1 children read.

In summary, the classroom, like the school as a whole, provided a congenial working atmosphere within which a variety of interesting learning activities were being carried out. Expectations of students both in terms of performance and behaviour was high. In most instances, students appeared to understand those expectations and to be working towards meeting them.

The Reading Program

At the beginning of the observation period, Miss Mac was using the basal reading series prescribed by the provincial Ministry of Education as the basis for the reading program. The split grade 6/7 class was divided into three reading groups: the grade sixes were the *Sky* group and the grade sevens were the *Mountain* group. Two students reading at the grade 4 level formed the third

group, the *People*. There were four Indigenous students in the Grade 6 reading group; Lucy, Doug, Roy and Mary. In addition there was an Indigenous boy in each of the remaining two groups. The decision was made to focus the data collection on the *Sky* group because it had the most Indigenous students.

Although the basal reading series formed the core of the reading program, there was flexibility and variation. During the observation period the Grade 6s researched biographies of authors; practised and presented the reading of a play; and listened to younger children read. However this study began when the teacher was finishing the traditional reading program and getting ready to implement a new program. Thus some of the observed flexibility and variation could have been due to the transition in reading lesson format.

The new reading format was to include independent reading, as well as individual oral reading to the teacher of self-selected articles from various issues of two periodicals. The teacher's goal for the new program was to provide the students with "real" reading materials; to create a more individualized program and to shift the locus of control from the teacher to the students. In addition Miss Mac wanted to shift the emphasis away from questions about reading to reading for enjoyment. She appeared to be excited about the new program and said that she was anxious to begin. The observational period of this study covered the remainder of the basal program, the transitional period and the beginning of a novel study.

The portion of the "transition period" that was observed consisted of a series of classes on structural analysis and on finding the plot of a story. The novel study was originally to be conducted in a traditionally structured reading lesson format. However, the teacher changed her original plans and instead read chapters of the novel out loud to the students on a daily basis. These

were followed by students working together in small groups on a wall mural portraying an aspect of the novel. As the new lesson format had little in the way of structured verbal participation of students, observation of reading lessons ceased at this point.

Participation

The next section describes how participation was structured during reading period. A description of the four participation structures and three turntaking allocation procedures is provided. Examples of how each of the participation structures and turntaking rules are manifested during reading instruction are included.

Participation Structures

Philips (1972, 1983) defines four different ways in which student participation is organized during instruction: whole class, small group, one-to-one and desk work participation structures. In this study, all four participation structures were utilized during the reading period. The following section describes the four structures and variations on them that were observed or described in interview data.

During whole class participation structures in reading, Miss Mac typically stood at the front of the room using an overhead projector and the blackboard to review or introduce a concept. She asked questions of the students in order to introduce a topic; to elicit what the students already know about a topic; and to relate new information to their previous experiences and understandings. The students typically had a reader and/or a notebook on their desks. The teacher also employed this participation structure to correct written work that had been assigned to the whole class. In one particular reading lesson, Miss Mac assigned questions on the blackboard to be completed during the reading

period. After about 20 minutes, the teacher resumed the whole class participation structure and began oral correction of the assignment.

The small group participation structure was frequently observed in this study. Philips (1983) defines the small group participation structure as one where the teacher is engaged in an interaction with a group of five to ten students. However, this classroom had 30 students and the class was often split into two large groups based on grade level. There were 16 students in the grade 6 group and 14 students in the grade 7 group. Thus in this classroom, the small group participation structure typically meant that the teacher was engaged with a single grade at a time. For example, the teacher taught a lesson on structural analysis to the grade sixes while the grade sevens had gone to another classroom for a high-school orientation session. In another instance, the teacher read Anne of Green Gables to the Grade sixes while the grade sevens were doing desk work.

Philips (1983) suggests that student directed working groups are a variation of the small group format and such a variation was observed in this classroom. Although the groups were organized by the teacher, they were student-directed in that the pupils were collectively responsible for accomplishing the assigned task without direct teacher supervision. In one lesson, the grade sixes were divided into two working groups: the "back of the room people" and "the bookroom people". (These names are in reference to the locations where the students were to work on their tasks). Each group was given a play to practice reading as part of a "Readers' Theater". The groups were required to select a director who fulfilled a role similar to that of chairperson. Although Miss Mac assigned both the play to be read and the students to the group, the group was required to work independently to accomplish the goal of being able to read the play to another group of students.

In this study the teacher initiated a one-to-one participation structure by evaluating a task, requesting an action or reprimanding inappropriate behaviour. More than once, the teacher circled amongst the students while they were engaged in desk work, making comments such as "good", "watch your spelling", "I think you've got the hang of it". A typical one-to-one participation structure was students lining up at the teacher's desk to have their work corrected (Philips,1983). This procedure was observed once during the course of classroom observations. One of the Indigenous students, Doug, mentioned lining up at the teacher's desk in his interview. He said that sometimes students were coerced into lining up at the teacher's desk. When a group of students wanted to pass notes to one another unobserved they got their classmates to "block" the teacher. Doug defined the process of blocking the teacher: as

"we go right up to the desk and fill around her desk with a big line of questions or we gotta ask her what to do or something and then she's trying to look over us and that will give them enough time to throw [the note] across the room to somebody" (page 27)

The desk work participation structure was most frequently observed in conjunction with a whole class participation structure. The teacher would introduce a concept and then assign the students work in which they were to apply the concept. For example, when working with the grade 7 group, Miss Mac had them silently read through sections of a story. After each section, she would direct questions to the group to determine if they could articulate the main idea of that section of the story.

Often when they had free time, students were observed to be given a choice between desk work and group projects. Thus in some instances the students were able to choose the participation structure in which they were to engage.

Allocating Turns at Talk

Student interaction in classrooms is regulated by normative rules (Mehan, 1979, 1984) and different rules apply to different participation structures (Philips, 1983). Under normal classroom circumstances, teachers regulate student participation by employing three basic turntaking procedures: individual nomination, invitation to bid, and invitation to reply. The following section describes how each of these turntaking procedures was used during reading instruction in this classroom.

In this study, the invitation to bid rule was the predominant turntaking allocation procedure both in the whole class and the small group format. The teacher would ask a question in a way that would indirectly indicate that students could raise their hands to bid for the floor. Indirect indication was accomplished in several ways but most often through a variation of "who knows the answer to this question?". Frequently such questions began with one of the "any" pronouns such as "anybody", "anyone" or "anything". For example:

Ex. #1 T: Does **anyone** know what the word is? (Text C-9)

Ex. #2 T: **Anything** else we looked at? (Text B-6)

The invitation to bid also was accomplished by a combination of the modal "can" and an indefinite pronoun such as in the phrases "can anyone tell me" or "can someone give me". For example:

T: **could someone** give me suffix?/ (several students bid)
Ra?// (Teacher nominates a bidder by name)

Ra: ly//

T: ly/ and I would like one more suffix// (more students bid)
(Text B-8)

This example illustrates the type of sentence frame which indirectly suggested to students that they were invited to bid.

Bids were also invited through "what" "where" or "when" questions. The following is an example of such an invitation to bid:

T: What is the other word we use for root word?// (Text B-4)

Although the grade 3 teacher in Mehan's (1979) study overtly invited students to bid for the floor by saying "raise your hands", Miss Mac did not use direct indexation. However, she did make indirect reference to the requirement for students to bid in this exchange:

T: what does /-less/ mean? (an invitation to bid elicitation)

St: the opposite of more?

T: okay//...any others?// was your hand up over here?//

(Text A-22)

The "invitation to bid" rule was also indexed through an infraction of the rule in this example:

T: any other meanings [for nobility]?//
Ju?//

Ju: (no response)

T: you had your hand up there// (Text A-13).

In this instance, the teacher's reaction to the student not having a response was to both index the rule and the expectation underlying the rule. When the invitation to bid was in effect, bidders were expected to have something to say once they had been given the floor.

In the second turn allocation procedure, the teacher nominated the next speaker by name without that student having necessarily bid for the floor. For example:

T: Ch/ we had one word last week that we could have pronounced two different ways// Can you remember what that was?//

Ch: conduct//

T: good// (Text B-10)

In this example the teacher included Ch's name as part of the elicitation. This act served the purpose of allocating the floor to Ch and indicating that it was her turn to reply. Besides using their name, the teacher nominated individuals by physical orientation of her body, pointing or eye contact. For example in the following exchange, Miss Mac faced and Mary and continued to look directly at her:

T: I want a possession that needs an apostrophe, Mary?//

Mary: cook

T: cook's what?

Mary: (inaudible)

T: the cook's?

Mary pot

T: food

Mary: oh

T: okay// pot would have been another good one//

(Text B-12)

In this exchange, the teacher's body orientation and eye contact indicated both to Mary and the other students that Mary continued to share the floor with the teacher.

Individual nomination was used in conjunction with the "invitation to bid" procedure during whole class and small group participation structures. After a bidder had been chosen to respond, the teacher might use individual nomination to call upon other bidders who were not initially chosen to respond. For example:

T: What does listless mean ? (both St and Mary bid)

St? //

(St is nominated)

St: they didn't want to listen

T: yes/ if you're listless you're not prepared to listen//
Mary/ what were you going to say? (Text A-25)

Automatic turn allocation (Mehan, 1979), a variation of the individual nomination procedure, is common in structured reading lessons. In this procedure, the teacher goes up and down the rows or around a circle (Philips, 1983) automatically assigning the next turn to the next student in the row or circle. This variation of individual nomination, was not actually observed in this study. However, according to the interview data, answering 'around the circle' was a common turntaking procedure in reading groups. When students were directly queried about how their assignments were corrected in a typical reading period, they would invariably say that they sat in a circle and the first student to Miss Mac's right or left would answer the first question and then the next student would answer the next question and so on. This fits the description of individual nomination using the "round" method. Thus the fact that this procedure was not observed was probably more a reflection of the timing of the data collection than representative of typical classroom procedure.

Both observational and interview data suggested that the "individual nomination rule" was frequently utilized when assigned work was being corrected. It also appeared that the "individual nomination" rule was invoked when the teacher wanted to be assured that she would get a "correct" response. In this instance the teacher would ask a question, usually when introducing a new concept, and then individually nominate a student she was confident might know the answer to the question.

When the "invitation to reply" rule was in effect, the teacher spoke in such a way as to call for a response without indicating who was to respond or in what

way they were to do so. Mehan (1979) found this rule realized through a sentence completion form, a chorus elicitation and a "wh" question form. In this study about half of the observed instances of "invitation to reply" were sentence completion procedures as in the following example:

T: nobility includes
 UC: kings (chorus of voices)
 T: kings
 UC: queens
 T: queens
 UC: earls
 T: earls
 UC: lords
 T: lords (Text A-15)

In the other half of the instances of this rule, a choral response was required.

The required response was typically a simple yes or no;

T: does he want to help other people?
 UC: no::: (chorus of voices) (Text C p. 17)

or a physical response;

T: ac/tu/al/ly /sounds like it would have how many claps?
 (students clap out the syllables)
 (Text B p. 11)

or a one word answer;

T: what do you think?
 US: four (chorus of voices)
 (Text B p. 11)

The "invitation to reply" rule was invoked in both the whole class and the small group participation structures. It appeared to be used most often when the teacher was introducing or reviewing a concept.

Findings and Interpretations

Each of the four participation structures Philips (1972, 1983) identified in her study were also found in this classroom. The small group and whole class participation structures were the predominant means for organizing student interaction during reading, although desk work participation was utilized as well. The teacher also employed the student-directed group which Philips has suggested is a variation of the small group participation structure.

Although this was a split grade classroom and reading groups were divided on the basis of grade level, the whole class participation structure was frequently used. It appeared that the teacher used the whole class structure to teach skills which she perceived to be important to both grades. For example in the whole class participation structure Miss Mac taught a lesson using structural analysis to identify unfamiliar words. On a different occasion, she taught a lesson to the whole class but used the small group participation structure for the lesson's follow up activity.

Although all turntaking allocation rules were invoked, it was found that the "invitation to bid" was the predominant means for soliciting student participation in teacher-directed groups. During the observational period the rules were not directly indexed by the teacher. However direct indexing of rules is less likely to occur in a grade 6/7 classroom (Philips, 1983). Of the tacit nature of these rules Philips (1983) stated "as the children get older, they less frequently violate rules for taking turns at talk, and the frequency of teacher directives to correct such violations also decrease so that the rules for regulating interaction become increasingly implicit" (p. 92).

That these participation structures and rules were in place in this classroom supports the findings of Mehan (1979) and Philips (1972, 1983). These findings provide additional evidence that this manner of social

organization is typical of North American classrooms and reading lessons in particular. Besides validating the theoretical constructs of participation structures and turntaking rules, these findings validate that the context of this study is also typical. The fact that these structures and rules were in evidence in this classroom reinforces this author's belief that the Indigenous students in this study found themselves in a somewhat typical classroom with typical reading lessons. The next question to be answered is how do Indigenous students participate within this framework of organized student interaction.

The Indigenous Students

This section of the chapter describes the four Indigenous students, how they participated during reading instruction, what they said about how participation was structured and how they viewed their own participation. This description is drawn from both the observational data and the interviews.

Mary

Mary is a girl with a medium brown complexion, a heart shaped face and almond eyes. Her thick, dark hair is cut short and stylish. She wears small pierced earrings and her clothing is usually color coordinated, stylish and of expensive quality. One day she wore a gray plaid wool skirt, grey shoes, with a white dress blouse, and a black pullover sweater. As she left the class early carrying a musical instrument, Mary's clothing on that particular day may have been related to a Band activity. However, Mary's general style and manner of dress was different from the other Indigenous students; it reflected an ability and/or desire to spend money on clothes that the other students appeared to lack.

Mary seemed comfortable in almost all social situations observed. As will be discussed in greater detail in the next section, she participated frequently

and appropriately in the classroom and was nominated to speak a greater percentage of the time than any of the other Indigenous students. Whether she was speaking in a whole class or in a small group situation, her voice was clearly audible on the audio and video recordings. When the Grade 6 reading group was called to the back of the room, Mary was one of the first students to arrive. When recess was over, she was one of the first students to come back into the classroom. Mary appeared to ignore or not be aware of the video and audio recording equipment placed in the classroom for data collection.

Mary was a highly visible member of student-directed small groups. In one such session that was video recorded, Mary was assigned the role of transcriber by her peers because of her neat handwriting. As well as transcribing, Mary participated in the group decision making. She also functioned as a mediator in minor disputes between group members. During the session, Mary used politeness forms, such as "Thank you" and indirect speech acts such as "I made a mistake" in order to borrow someone's erasing liquid.

When people are being interviewed or tape recorded, speech patterns are likely to change, usually increasing in formality (Dittmar, 1976). I asked Mary to wear a lapel microphone to record the student directed small group session. With the microphone on, Mary continued to speak to the other students in a manner similar to the way she had been interacting before she wore the microphone. Her voice volume remained audible, much more so for instance than Lucy, who was in the same group but inaudible on tape. That the presence of the microphone did not seem to dramatically alter Mary's interactional patterns provides additional evidence that she is student with a great deal of self confidence.

In the interview situation, Mary appeared to be slightly cautious about her answers. She was more likely to interpret pauses in my interview questions as signs that I had completed speaking, than were Roy or Lucy. Thus there were times in the interview when our voices were overlapping and we were interrupting one another. Such interruptions are more indicative of Anglo interactional patterns than Indigenous ones. As mentioned before traditional Indigenous interactional etiquette requires longer pauses between speakers.

The degree of caution Mary exercised in the interview was also apparent during classroom bidding. In her interview, Mary reported that she would not bid if she did not understand the question or did not know the answer. The manner in which she bid was less persistent than other students. While Roy would bid continuously from one question to the next until he was nominated, Mary was often observed to put up her hand and then quickly put it down if she was not nominated.

Mary appeared to have little difficulty with the academic program. The teacher described her as a "solid working" student and that is what she was observed to be. Mary began and completed her work quickly. She and Roy were often the first students to complete an in-class exercise. When she did not understand a task, unlike the other Native students, Mary would sometimes ask the teacher for assistance.

Roy

Roy is a boy of medium build with short dark brown hair. His brown eyes and complexion provide a stark contrast to his bright white teeth. Roy's complexion is dark but his bone structure indicates a Caucasian, as well as a Native Indian, heritage. Although Roy's surname is French and he lives off

reserve, when asked, he was immediately able to identify the Indian band to which he belongs.

Although Roy attended ABC Elementary from kindergarten to grade 3, he transferred to a school outside the city two years ago. In the middle of the present school year, he returned to ABC Elementary. As he continues to live in the country next to the reserve, Roy commutes several miles every day on public transit from his home to the school.

He dressed in dark but fashionable clothes; blue jeans with various dark colored tee shirts on top. Following what appeared to be a trend among the grade 6 and 7 boys, Roy sometimes wore two shirts at once: a long sleeved tee shirt underneath with a color coordinated short sleeved sweat shirt over top.

Although he had only recently returned to the school, Roy was involved in various activities. As a lunch monitor, he supervised younger students eating their lunch. As a reading tutor, he listened to a small group of grade 1 children read once a week. During lunch recess, Roy played baseball in the backfield of the school with other upper elementary students. He also attended activities organized specifically for the Indigenous students.

The teacher and Roy appeared to have a good working relationship. The teacher described Roy as "nice" and her behaviour towards him coincided with her description. She stopped by his desk when circulating amongst students during a desk work participation structure. Also, Miss Mac would ask him to do special favors, such as fetch her marking pen from her desk.

This congenial relationship did not seem to be marred by the fact that Roy broke classroom rules more often than any of the other Indigenous students. When the teacher specifically told the class not to use a dictionary, Roy immediately began using one. He only put it away when another student was caught using a dictionary and verbally chastized for it. Once when Roy had

completed his assigned work, he began reading a comic book, holding it inside his desk, out of the teacher's view. When the whole class participation structure resumed, Roy continued reading the comic while raising his arm in response to the teacher's elicitation. Verbal reprimands were rarely observed in this class, and Roy was the only Indigenous student to have attention called to himself in this way. As well, he would tease the girl sitting next to him or poke Doug in the back trying to get his attention while the teacher was talking. None of the other Native students were observed to break classroom rules as frequently as Roy did.

There was no indication that Roy was having difficulty with the academic aspect of the school program. When the students were given tasks to be completed in class, Roy like all the Indigenous students immediately began doing the work. He and Mary would finish their work about the same time which was often well before the other students in the class.

Roy was new at the school and did not appear to have yet aligned himself with a particular classmate or social group. In activities where the students were away from their desks, Roy would always sit on the fringe of the group as far away from the other group members as possible. When the researcher held a meeting with the grade sixes to discuss the study, Roy sat by himself at the very back of the group away from all the other students. When the reading group would meet at the back of the room, Roy would place himself at the outside edge of the semi-circle of students. In a student directed group, Roy did not speak to his classmates nor was he spoken to.

Although Roy may have been reluctant to verbally participate in some social situations, he freely participated in others. As will be indicated in a following section, Roy attempted to participate more than any other Native student during whole class and small group participation structures. Roy readily

agreed to be interviewed. He provided complete and sometimes quite personal answers to the interview questions. However, unlike Mary and Doug, Roy rarely interrupted the interviewer and there are few instances of overlaps or miscommunication in the interview. Generally, when Roy spoke in class his voice was loud and clear. His voice could be easily identified on the tape recordings as it was much deeper than the other students.

Doug

Doug is a short, stocky boy with dark curly hair. He has an olive complexion with hazel eyes. His aquiline features belie his Indigenous heritage. I was in the classroom for more than one session before I was aware that Doug was one of the six Indigenous students in the class. For most of the observational period, Doug wore a pair of khaki camouflage pants with a bright orange or red T-shirt.

Miss Mac informed me that Doug's mother is Cree and his father is Anglo. Doug reported that his mother was born and raised in the Northwest Territories. Doug did not know where his father was originally from but right now he is working in the Libyan oilfields. Doug was born in a town not far from this city. Six years ago his family moved to the city and two years ago he transferred to ABC Elementary .

At the time of the study, Doug's relationship with the teacher had deteriorated over the issues of homework and attendance. The teacher described Doug's recent attendance as "sporadic" and he missed several days during the observational period. I asked about how the situation at home might be related to attendance but the teacher dismissed this suggestion with the comment that Doug's mother "had her head on straight". The teacher sensed that the attendance stemmed from an earlier problem. A couple of months

previous to the study, Doug was not handing in homework assignments. During basketball season, the teacher began using Doug's interest in the sport to set consequences for unfinished homework. The teacher now feels that Doug reacted to this approach by becoming a "bit of a hypochondriac" and staying away from school due to a series of undefined illnesses.

In spite of the power struggle, the teacher referred to Doug as a "nice child". Unlike Mary, the teacher made no reference to Doug's working ability. When observed, Doug appeared to begin his tasks immediately and comply with teacher requests, while working slower than either Roy or Mary. During the interview Doug demonstrated an interest in and a concern for the quality of his school work. He stated that due to his low grades (mostly C's he said), his mother was requiring him to study for one hour every evening. Doug stated a very clear preference for particular subjects such as social studies and certain topics within that general subject area. More than once in the interview, he referred to his grades in general or related to particular assignments.

Doug was a willing participant in social situations both inside and outside of class. Like Roy, Doug was a lunch monitor and a reading tutor. During reading instruction, Doug bid frequently, both in whole class and small group participation structures. He was never observed to turn down an opportunity to speak. When the researcher held a meeting with the Grade 6's, Doug asked as many questions as the other students combined. His questions raised such important issues as access to the data and the rights of the students to withdraw from the study. He questioned whether or not a video tape would present a realistic portrayal of the group's behaviour "because they might act differently in front of the camera". In comparison, Mary and Lucy said nothing during this session and Roy asked one question.

The sociolinguistic patterns Doug displayed both in formal classroom situations and in the interview suggest that he has had significant exposure to Anglo interactional norms. When I asked Doug if I could interview him, his answer was immediately affirmative. He made suggestions about where in the school we could best hold the interview and we finally found a spot in the library. As the interview proceeded I became concerned that Doug's loud voice would disturb the other people using the library. He particularly enjoyed being considered knowledgeable about the topic under discussion, answering the interview questions in great detail, often in more detail than was required. He offered his opinions about the other students and the teacher freely.

The interview with Doug was replete with false starts and interruptions. Like Mary, Doug often misinterpreted pauses in the interview questions and in those instances he would begin answering the question before I had finished asking it. As mentioned above such overlaps and interruptions were much less common in the interviews with Roy and Lucy, and are usually associated with Anglo rather than Indigenous conversational patterns.

Lucy

Lucy is a girl of medium height and build. Her brown hair hangs in soft curls to just above shoulder length. Lucy's complexion is soft brown in color, as are her rather large eyes. Her clothes appeared plain and inexpensive but always neat and clean.

Although Lucy was also absent for a week during the period of the study, it was due to an extended illness. The teacher described Lucy as a good attender and this absence as unusual.

Unlike the other three Indigenous students, Lucy has extended family in the school and regular social contact with neighbouring Indian reserves and

communities. The school spring break occurred in the middle of the data collection period and Lucy spent part of this vacation with her married sister on an Indian reserve about 20 miles north of the city. Half way through the break, her older brother, his wife and daughter took Lucy with them on a road trip to a small fishing community some distance away. Lucy said she went along to provide company for her niece who also attends ABC Elementary and is one year older than herself. The teacher reported that Lucy's family engaged in traditional Native activities such as fishing and that they often travelled long distances to see other family members and attend social events.

Lucy appeared to be somewhat shy and did not like to draw attention to herself. As will be discussed in the next section, she bid less often than any other Indigenous student and in two of the sessions observed she did not bid at all. When she did speak in class, her voice was much softer than the other students'. There were several times on the tape recordings where her utterances were inaudible. Especially in the small group sessions, Lucy payed more attention to the video camera than the other students did.

Although technically Lucy, like all the other grade 6 students, had agreed to participate in the study, she was reticent to be interviewed when the time came. However after a minute or two, she consented to do the interview. While the interviewer spoke quickly, repeated herself and made several false starts, by comparison Lucy appeared to speak slowly and choose her words carefully. Although overlaps and interruptions were rare, there were several instances of miscommunication between the interviewer and Lucy. One noticable difficulty was that the interviewer would ask a question, Lucy would answer it and then the interviewer would rephrase or expand the question. However, Lucy would often not respond to the new question. It seemed as though once she had

answered the first question Lucy felt under no obligation to respond to the second one.

The teacher referred to Lucy as a "real sweetie" and Lucy did appear to have a pleasant personality. Lucy was always observed to comply with the teacher's requests and to complete assigned tasks. She started her work quickly but usually took longer to finish than the other three Indigenous students. However, the teacher referred to Lucy as a student of "low range ability" and was recommending her for a modified academic program in the coming year.

In the interview, Lucy's answers were complete and her description of a typical day in the classroom was especially detailed. She was the only student interviewed who knew the complete timetable for every day of the week. She stated distinct preferences for subjects, mathematics and language being her favourites. Lucy compared the various activities in reading period on the basis of how much work was involved or how difficult the work was. For example, she claimed that two sets of reading activities "Skill Pack" and "Study Book" were essentially the same, except that one was more difficult. When asked if she liked reading, after a long pause she said "yah". In response to the questions "what is it that you like about it?" she said "I like the Skill Pack [workbook] because of the easy questions [like] the matching".

Lucy looked up to Mary and valued her friendship. In her interview responses, Lucy mentioned that she was working with Mary on a group project. When asked for an example of a question from the basal reader, Lucy twice gave 'Mary' as the fictitious name in her example. The relationship appeared to be somewhat reciprocal in that Mary attempted to involve Lucy into the peer group's activities.

Findings and Interpretations

Although the four Indigenous students in this study come from divergent personal backgrounds there are areas in which these students demonstrate similarities. In each case at least one of their parents is an Indigenous person. All of the students have moved at least once in their school career. Each student appears to do the school work that is required. Each student has had some experience living in the city and attending an inner city school.

However the differences between the students are significant. They differ in appearance, dress, length of stay at ABC Elementary, subject preference, knowledge of content and relationship with the teacher and peers. Their exposure to and familiarity with both Indigenous and Anglo norms of verbal interaction appear to vary.

The Indian children in Philip's (1972) study were socialized on the reservation which is a cohesive linguistic and cultural community. As a result of the similarity in their early socialization and linguistic experiences, Philips was able to describe the Indian students as a cultural group. Wild et al. (1983) studied a group of Indigenous high school students who had recently moved to the city from their reserves. One can assume that the early socialization and language experiences of these students would also have occurred in the singular cultural and linguistic environment of their home reserve.

As can be seen from the above descriptions of the students in this study, they have not been socialized within a common cultural and linguistic group. They were born and raised in a variety of places and with the exception of Roy they have arrived at ABC within the last two years. Their personal backgrounds have resulted in varying degrees of exposure to the interactional norms of both Indigenous and Anglo speech communities.

Mary grew up in a large urban centre in the interior of the province. Her family moved to this city two years ago and she has been attending ABC Elementary since that time. Mary appears to be one of the Indigenous students at ABC Elementary with little apparent contact with an Indian community, such as a reserve. Her manner of dress, style of hair, interactional patterns, place of birth and permanent residence in a city all support the assertion that Mary is an "Urban Indian" with extensive exposure to Anglo interactional patterns.

Doug's immediate family is racially mixed and his physical appearance identifies him as someone with a Caucasian as well as Native Indian heritage. He is an outgoing person, not the least bit shy, with a loud voice and a willingness to speak his mind. He was the most willing to be interviewed and he provided the longest, but not necessarily the most informative, answers to the interview questions. Doug's extensive urban experience and other aspects of his personal background as well as his sociolinguistic patterns suggest extensive exposure to an Anglo rather than an Indigenous speech community. Like Mary, Doug appears to be of Indigenous racial background but quite familiar with Anglo interactional norms.

Roy's background is not as clear as the other three students and it is difficult to categorize him as either an urban Indian or as a more traditional Native person. He has experienced life both in the city and near, although not necessarily on, an Indian reserve. Although he may not live on the reserve, Roy expressed an awareness of his Indian heritage. His sociolinguistic patterns reflect exposure to and familiarity with both Anglo and Indigenous interactional norms.

Lucy's family background and interactional style suggest that she has had significant exposure to Indigenous rather than Anglo culture. Her parents are older Native people and therefore it is more likely she was socialized into

more traditionally Indigenous interactional patterns. It is clear that through extended family Lucy maintains contact with an Indigenous community outside of the city. Her soft voice and quiet manner in the classroom, and her slow and cautious speech during the interview are additional evidence that Lucy is more typical of the Indian students described by Philips (1972; 1983) and Wild et al. (1983) than are any of the other students in this study.

In summary, it is clear that although there are similarities in the Native students in this study, there are important differences which appear to affect the way in which they verbally communicate. It is to the similarities and differences in how these students participate specifically during reading instruction to which we now turn.

How Indigenous Students Participate during Reading

The four participation structures observed during reading instruction were whole class, small group, one-to-one and desk work. The 'invitation to bid' rule was the primary turntaking strategy used during the observational period. Table 1 outlines the number of times each Indigenous student bid in each of the four participation structures. As can be seen the majority of bids were made in the whole class participation structure while the students bid less often in the small group participation structure and not at all in the one-to-one or desk work participation structure.

Table 1 indicates differences in the bidding patterns of the four students. The highest bidding student, Roy, more than doubled the bids of Lucy, the lowest bidding student. Figure 1 illustrates the percentage of total bids that each Indigenous student represents. The highest bidder represented 37% of the total bids by Indigenous students while the lowest bidder only represented 15%.

Table 2 illustrates that under the "individual nomination rule", Roy is nominated most frequently; at least twice as often as the other Indigenous students while Mary is nominated least often. Roy and Lucy were the only students to refuse their turn to speak when individually nominated and the contexts in which the refusals occurred are similar. Both instances were whole class sessions where the teacher had nominated the student to answer a question for which the student had not bid. In both cases, the student responded to the question with silence.

TABLE 1
NUMBER OF TIMES EACH STUDENT BID IN
EACH PARTICIPATION STRUCTURE (PS)

STUDENT	PARTICIPATION STRUCTURE				TOTAL NO. OF BIDS
	WHOLE CLASS	SMALL GROUP	ONE-TO- ONE	DESK WORK	
Roy	37	15	-	-	52
Mary	22	16	-	-	38
Doug	28	1	-	-	29
Lucy	21	-	-	-	21
TOTAL	108	32	0	0	140

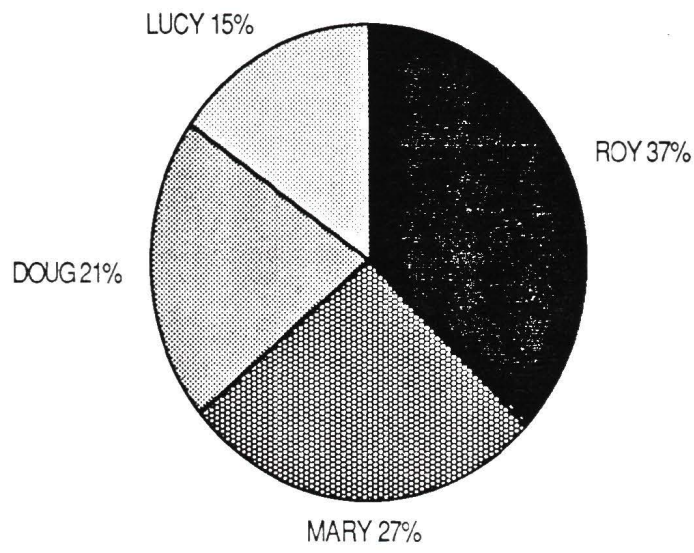


Figure 1. Each Student's Percentage of Total of Number of Bids Observed

TABLE 2

NUMBER OF TIMES STUDENTS
ARE INDIVIDUALLY NOMINATED

STUDENT	ACCEPTED THEIR TURN TO SPEAK		
	TOTAL OF TIMES NOMINATED	YES	NO
Roy	6	5	1
Mary	1	1	-
Lucy	2	1	1
Doug	3	3	-
TOTAL	12	10	2

As can be seen in Table 3, there are individual differences in how the students responded to an "invitation to reply". Mary replied twice as often as Roy and six times more often than Doug. Although participation is voluntary under the "invitation to reply" rule, the two boys, Roy and Doug, responded in all instances. Both girls, Mary and Lucy, chose on one or more occasions not to respond. Mary chose not to laugh at two of the teacher's jokes. Lucy was the only Indigenous student who chose not to clap out the number of syllables in a polysyllabic word at the teacher's indication she wanted them to do so.

Table 4 summarizes the total participation of each Indigenous student under all three turntaking rules. When number of bids for the floor, individual nominations and choral replies are totalled, Roy represents 37% of the total Indigenous student participation. Thus the total of the highest participator is greater than the participation of the two lowest participators combined. Mary accounts for 29% of all Indigenous student participation which is double the amount accounted for by Lucy, the lowest participator.

Although Roy and Mary attended all of the instructional sessions which were analysed, Lucy and Doug, were absent for one and two sessions respectively. Given the incomplete attendance, a straight comparison of total participation may not accurately reflect normal bidding patterns. Table 5 compares the participation of each Indigenous student in a single session when all Indigenous students were in attendance. Although the differences are not as great, the patterns for the highest and the lowest participator remains consistent. However Table 5 shows a difference in the participation patterns of Mary and Doug. When attendance is taken into account, Doug participated slightly more often than Mary.

TABLE 3
NUMBER OF TIMES EACH STUDENT RESPONDED
TO TEACHER'S INVITATION TO REPLY

STUDENT	RESPONDED TO INVITATION		TOTAL
	RESPONSE	NO RESPONSE	
Mary	9	3	12
Roy	6	-	6
Lucy	2	1	3
Doug	2	-	2
TOTAL	19	4	23

TABLE 4

A COMPARISON OF NUMBER OF TIMES EACH STUDENT PARTICIPATED
WHEN EACH RULE WAS IN EFFECT

Rules in effect	*IB RULE	**IN RULE	***IR RULE	TOTAL PARTICIPATIONS	% OF TOTAL PARTICIPATION BY @ NAT.
	NO. OF TIMES BID	NO. OF TIMES RESPONDED WHEN NOMINATED	NO. OF TIMES REPLIED		
SUBJECT STUDENT					
Roy	52	5	6	63	37%
Mary	38	1	9	48	29%
Doug	29	3	2	34	20%
Lucy	21	1	2	24	14%
TOTAL	140	10	19	169	100%

- * INVITATION TO BID
- ** INDIVIDUAL NOMINATION RULE
- *** INVITATION TO REPLY

TABLE 5
TOTAL PARTICIPATION OF EACH NATIVE STUDENT
IN A SINGLE WHOLE CLASS PS

Rules in effect					
	*IB RULE	**IN RULE	***IR RULE		
SUBJECT	NO. OF TIMES BID	NO. OF TIMES RESPONDED WHEN NOM- INATED	NO. OF TIMES REPLIED TO INVITATION TO REPLY	TOTAL NO. OF PART- ICIPATIONS	% OF TOTAL PARTICIPA- TIONS BY NATIVE ST.
Roy	37	-	2	39	33.0%
Doug	28	2	1	31	26.5%
Mary	22	-	2	24	20.5%
Lucy	21	1	1	23	20.0%
TOTAL	108	3	6	117	100%

- * INVITATION TO BID
- ** INDIVIDUAL NOMINATION RULE
- *** INVITATION TO REPLY

Figure 2 indicates the percentage of times a student was actually nominated to speak out of the total number of times each student attempted to get the floor. As can be seen the teacher nominated some students more often than others. Mary was nominated twice as often as Lucy or Doug and significantly more often than Roy. Figure 2 also indicates the percentage of times each student was nominated in the single session when all Indigenous students were present. Although the differences are less dramatic when attendance is taken into account, the pattern remains the same. Mary is nominated most often and Doug and Lucy least often. Although previous tables indicated that Roy attempted to get the floor more often than any other Indigenous student, Figure 2 clearly shows that it is Mary who is nominated a greater percentage of the time. Mary is thus more successful in her attempts to get the floor than any of the other Native students.

Figure 2 compares the nomination rate in all sessions with the nomination rate in a single whole class session. The nomination rate is probably higher in the whole class session because nominations must be distributed amongst a greater number of students. The nomination rate for Lucy is exactly the same in both instances because the single whole class session was the only one in which Lucy was nominated. In the other two sessions, Lucy neither bid nor was she nominated.

Student elicitation, where a student initiates an interaction with the teacher, are an additional way for students to participate. When students wish to speak to the teacher they either bid for the teacher's attention or ask the teacher a question without bidding. Table 6 shows that Mary was the Indigenous student to most often initiate an interaction with the teacher, while Roy did so only once and Lucy and Doug not at all.

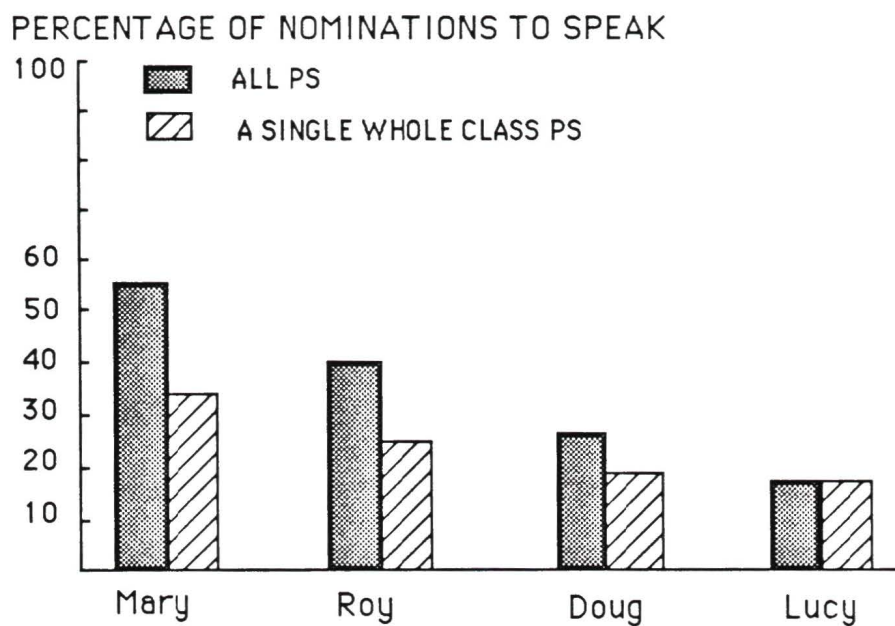


Figure 2. The percentage of times each student was nominated to speak out of the total number of times each student attempted to get the floor.

Table 6

NUMBER OF STUDENT ELICITATIONS

	STUDENT ELICITATIONS	RATIFIED	NOT RATIFIED
Mary	4	1	3
Roy	1	1	-
Doug	-	-	-
Lucy	-	-	-
TOTAL	5	2	3

In order to effectively engage the teacher, a student elicitation must be recognized or ratified by the teacher. Table 6 indicates that although Mary made four elicitations, only one of these was ratified by the teacher. In the other three instances, Mary was ignored or told to wait. The student elicitations that were ratified occurred in one-to-one participation structures. In one such situation, Roy asked and was granted permission to go to the washroom after he had completed a task for the teacher. Mary's single successful elicitation occurred when she asked Miss Mac to clarify an assigned task. The three times when Mary's elicitations were not ratified occurred at the beginning of a whole class or small group session. It appears that for a student elicitation to be effective it must be made when the teacher is not engaged with the whole class and it must be relevant to the topic or task at hand (Eder, 1982).

Philips (1983) describes a student-directed group as a variation of the small group participation structure. The researcher had the opportunity to observe and record a student directed group session during the course of the study. Unfortunately Doug was absent that day. Each of three Indigenous students who were present participated in a slightly different way.

The task facing the group of three Native and three non-Native students was to write out 6 to 10 sentences that described the plot of a play they had read. The teacher instructed the students to work at the back of the room where there was a small table which was not big enough to accommodate all six students. The students immediately elected Mary to be the group recorder. She sat in the center of the trapezoid table flanked by the three non-Native students. Roy and Lucy were the only two students who did not find space at the table. They stood back from the group attempting to write standing up and finally getting chairs on which to write.

On different occasions, both Roy and Lucy unsuccessfully attempted to get closer to the group when other students left the table momentarily. Roy advanced twice but in both instances he relinquished his newly gained position to its original owner when she returned. One of the girls told him "move please" and he immediately complied. In the second instance the girl simply pushed her way in front of him. When Lucy attempted to occupy the position of an Anglo student who had left momentarily, the girl moved herself directly in front of Lucy when she returned.

The task assigned to the group required them to make several decisions. Roy did not attempt to participate in the making of any of these decisions and neither was he invited to do so. During the course of the group interaction, Roy did not have any personal contact with any of the other students and when the session ended, Roy was the first student to leave the group.

On the other hand, Lucy was given opportunities to participate in the group by Mary. At one point, Mary consulted with Lucy on how to proceed with the task. Later, however she disregarded Lucy's advice. On another occasion Mary turned around and called to Lucy using a familiar nickname, offering Lucy a spot at the table. Lucy did not reply. Mary looked directly at Lucy and called her again. However, Lucy refused to answer for a second time. Mary gave up and returned to her writing. When recess was announced Lucy left the group immediately after Roy, while Mary and the two Anglo girls remained at the table discussing whether or not what they had just written was presentable enough to be handed in to the teacher.

Findings and Interpretations

How do Indigenous students participate during reading instruction? The literature suggests that minority students may encounter difficulties functioning within classroom participation structures and rules (Au & Mason, 1982; Philips, 1983), the implication being that because of their similar cultural and sociolinguistic backgrounds, Indigenous students would participate in a somewhat similar manner in any given classroom. However the findings of this study do not support this conclusion.

The use of metaphors is a qualitative data analysis technique for assisting the researcher in drawing conclusions about the data (Miles & Humberman, 1984b). Bogdan and Biklen (1982) note the important role that metaphors play in moving the analysis beyond the particulars of the data to higher levels of abstraction. In this study, as data analysis and writing proceeded, the image that came most clearly to mind was that of a group of horses running a series of races at the track. The racetrack metaphor provided a personal and yet apt analogy for the competition involved in classroom participation, the individual differences between the competitors and the inevitability of having winners and losers in such a system. Wherever appropriate I have used this metaphor in the presentation of the findings in an effort to make the interpretation of the findings clear for the reader.

Race horses must run under varying track conditions; a dry track, a muddy one, a slow track and a fast one to name the most obvious. It is helpful to think of the various participation structures as the types of tracks on which the students must compete. There was one striking similarity in the participation patterns of all the Indigenous students. All of the four students participated most often in whole class participation structures and least often in the one-to-one and desk work participation structures. This is not surprising in that neither the

desk work nor the one-to-one participation structure lends itself to the level of participation that can be achieved during the rapid question and answer format common to whole class and small group instructional sessions. However, these findings run counter to Philips' (1972, 1983) findings that grade 6 Indian students are less willing to participate in larger groups and ask more questions in a one-to-one participation structures.

Roy reminds one of the horse who has been assigned the outside track as his post position at the start of the race. Gamblers do not like to bet on a horse in the eighth position. A horse in the outside lane is handicapped by its position and must run that much harder to win. Roy arrived at the school in the middle of the year. At the time of the study he had not made close friends and he was aloof in situations of closer personal contact such as small groups or peer groups. Roy tried very hard but he did not seem comfortable with his position in the race and he appeared to be at a disadvantage because of it.

In the whole class participation structures it is clear that Roy attempted to get the floor more often than any of the other Indigenous students. Sometimes he was an aggressive bidder, making verbal and physical gestures to indicate how anxious he was to be nominated. He was often a persistent bidder, leaving his hand raised over a series of questions. He bid less frequently in the small group participation structures and appeared to be more reticent to participate in the smaller sessions. It appears that Roy preferred and felt more comfortable bidding in the anonymity of the whole class structure. When the opportunity arose to participate under the invitation to reply rule, Roy often did so. He laughed at the teacher's jokes, clapped and waved his arm in response to her request for a show of hands. He often contributed when there was no invitation to do so, such as audibly groaning at the announcement of assignments.

Roy was individually nominated more often than any of the other Indigenous students. The interviews revealed that the students believe the teacher invokes the individual nomination rule in order to see if they are paying attention or have done their work. Given that Roy was observed to finish his work quickly, be reprimanded more often and be more mischievous than the other Native students, it appeared the teacher used the individual nomination procedure in an effort to monitor Roy's behaviour.

What Tables 6 and 7 make quite clear, however, is that there is a difference between how often a student attempts to participate and how often they are successful at doing so. Although Roy attempts to get the floor more often than any other student, only 1/4 to 1/3 of his attempts are successful. However it is clear that the teacher cannot always nominate a student who bids especially one who bids as often as Roy did. Philips (1983) notes that to a certain extent a "first come first served" principle governs the nomination procedure. As the session proceeds and the first comers have been frequently nominated, the teacher will begin scanning the room for persons who have not yet been nominated. Miss Mac was observed to follow this principle and therefore, Roy's frequent attempts to get the floor were less successful as the session proceeded.

In the student-directed group, Roy's interactional strategies were the exact opposite of those he employed in the whole class sessions. He went from being the highest bidder to someone who attempted to say nothing. As Streeck (1983) suggests, the interactive strategies and social organization of such groups are qualitatively different than those of teacher-directed groups. In the whole class and small groups sessions Roy was vying for the attention of the teacher and the teacher was compelled by democratic principle to recognize Roy a minimum number of times. In a situation where the horses are off the

track and in the pasture, there are clearly horses with more social prestige and dominance than others. In the peer group situation, the motivation for participation is different, as are the rules for doing so. The dominant students in the group simply did not recognize Roy and he did not attempt to be recognized. Roy's isolation from group members and the group activity suggests that he did not have a close relationship with any of the group members that might have allowed him access into the group. His social status within the group was such that he can easily be visualized as a horse running in the outside track.

Mary reminds one of the type of racehorse on whom safe bettors would place their money. Her pattern was one of consistency; not always winning but consistently doing well. Table 1 clearly illustrates that Mary participated in both whole class and small group participation structures, although like all the other students her rate of bidding was somewhat higher in the whole class situation. Mary responded more often to the teacher's invitations to reply than any other Native student; she appeared to be the most tuned in to the teacher and the activities of the class. She attempted to elicit an interaction with the teacher twice as often as Roy, the only other Native student to do so. Although not all her attempts to ask the teacher questions were successful, Mary clearly felt comfortable asking for assistance, something the other Native students simply did not do. (One of Roy's elicitation was for permission to go to the washroom, not for assistance, for example).

Mary's inside track on verbal participation becomes evident when the rate of nomination is examined. When attendance is taken into account in Table 5, it can be seen that Mary participated less than Doug and Roy and only slightly more than Lucy in the whole class session. However Table 7 shows that in spite of her lower rate of bidding in that single session, Mary is nominated a far greater percentage of the time than any other Native student. If

the teacher is the one and only bettor at this race then Mary appeared to be her favorite.

In the peer group session, Mary played a central role. She participated in the negotiations about how the task was to proceed, she resolved conflict and she attempted to integrate Lucy into the group. Mary's comfortable and high profile position in the peer group stood in stark contrast to Roy and Lucy who remained physically and socially on the outside fringe of the group. Mary appeared to have significantly more social status than the other two Indian students in the group. She used her social position differentially in her interactions with the other Native students in the group, making overtures to Lucy but not to Roy.

Mary is a winner - a successful participator as well as being successful socially and academically. Mary's manner of dress, style of speaking and interacting all suggest that she has the inside track on how to succeed in the classroom, overcoming any difficulties her cultural background may present.

To continue the racetrack metaphor, Doug is by all bets the dark horse of this race. A dark horse is one who appears to have potential but has not yet fully displayed his racing abilities. Doug's frequent absenteeism makes it difficult to interpret his participation in a meaningful way. However, the fact that he is absent frequently reinforces his image as a dark horse; a student who reacts to problems at school by simply staying away. When Doug was in a whole class participation structure he was an active bidder; out-bid only by Roy. In the small group session he only participated once. Table 7 clearly illustrates that although he frequently attempted to get the floor more often than Mary, Doug was nominated a much smaller percentage of the time.

Doug suggested in his interview that he is often in trouble with the teacher over minor issues such as talking during class. There is no

observational data to support this assertion, however. Doug described the teacher in more negative terms than the other students, reinforcing the teacher's suggestion that their relationship was strained. The interpersonal difficulties appeared to affect Doug's participation patterns. He was individually nominated more often than Mary or Lucy. More frequent individual nomination could stem from the teacher's effort to ensure she is not overlooking him because of their power struggle. As with Roy, the teacher may have been making a greater effort to monitor Doug's in-class behaviour.

The kind and number of questions Doug asked during the small group session with the researcher clearly showed a perceptive student with a bright mind. Chronic absenteeism and failure to complete assignments, combine with inconsistent participation to reinforce Doug's image as a dark horse, a competitor with potential but one who has not yet had a good showing.

Lucy stands in marked contrast to the other three students. Lucy has neither an outside nor an inside track, rather she is running at the back of the race. Generally, Lucy participated less under all participation structures and rules than did any of the other four students. In two recorded sessions Lucy neither bid nor was nominated and there was only one instructional session in which Lucy bid at all. In this exceptional case, she bid 21 times in a single class. This flurry of bidding seemed out of character for Lucy. However, the content of the lesson required the students to apply their general knowledge to questions which the teacher asked orally. The teacher would say a word and the students were to choose from a small set of suffixes and prefixes in order to make a new word. Once they had thought of an appropriate word they were to raise their hands. The rate of participation in this lesson was very high for all students. It was a low risk situation in which the student could utilize easily accessible general knowledge to respond. Thus the subject content of the

lesson could have accounted for Lucy's uncharacteristically high rate of bidding in this particular session.

How successful was Lucy in her attempts to get the floor? Table 6 and 7 clearly show that not only is Lucy the least likely to bid but she is the least likely to be nominated when she does bid. However, because the rate of bidding was high for all students in the single session when she bid, Lucy's opportunities to be nominated were greatly reduced. It appears that Lucy is not the student upon whom the teacher is "laying her bets".

There are two exceptions to this general pattern of being the horse in last place. Lucy was individually nominated twice while Mary was nominated only once. However, it is not surprising that the teacher would individually nominate Lucy in an effort to solicit her participation because Lucy bid so infrequently. (In the interviews, Lucy indicated that she believed the teacher to individually nominate her frequently). Also Table 3 indicates that Lucy responded more frequently than Doug to the teacher's invitations to reply. However this table does not account for attendance and given that Doug was absent more often than Lucy it does not necessarily reflect accurately the participation patterns in this particular situation.

During the peer group session, Lucy may have been affected by the presence of the video recording equipment. She looked directly at the video camera and smiled a kind of embarrassed smile twice during this session. None of the other students gave any indication that they were bothered by or even noticed the camera. Thus Lucy's positioning of herself physically away from the group (and out of camera range) and her refusal to accept Mary's offer to sit at the table, may have been influenced by the recording equipment. However, given Lucy's generally shy and quiet manner and low rate of

participation in other classroom situations, her behaviour in the peer group was not out of character.

Lucy's social status in the group appeared to be low. Her only access into the group's working core was through her relationship with Mary. The other group members basically ignored her. Even her relationship with Mary appeared to be uneven, with Mary wielding more social status and power. When Mary consulted Lucy about how to proceed with the task, she later disregarded Lucy's advice and followed the heed of an Anglo group member. In another instance, Mary chided Lucy for not doing the work the "proper" way.

Lucy is a quiet and mature student who does not appear to be particularly keen on competing socially or academically. In the race for first, Lucy is clearly trailing the pack. The fact that she was being entered into the modified academic program in the coming school year suggests that Lucy was being groomed for a slower track.

In summary, the pattern of individual differences are clear. The participation of Lucy and Mary provides the most consistent pattern: Mary is a medium to high level participant in most situations while Lucy is a low level participant in most situations. Although observed infrequently, Doug ranges from a middle to high level participant. The change in level and manner of participation across structures is the most dramatic for Roy: he is the highest bidder in teacher-directed groups but the lowest participant in student-directed groups. This pattern is consistent in that the smaller the group the less likely Roy is to participate and conversely the larger the group the more likely he is to participate. With the exception of Lucy, the Indigenous students' interactional patterns are inconsistent with what Philips (1972, 1983) would suggest is typical for Indian students.

These findings also indicate that rate of nomination must be considered when considering level of participation. It is the combination of how often a student attempts to get the floor as well as how often he or she actually is given the floor that gives an accurate reflection of actual level of participation in different participation structures. When we simply looked at bidding, that is attempts to participate, Roy was the front runner. However, when we took into consideration how often those attempts were actually successful, Mary came in first by several lengths.

In this section of the study I have tried to summarize how Native students participated during reading instruction and the individual differences which were paramount. The next section describes how the Indigenous students saw participation being organized during reading period and how they viewed their own participation.

How Indigenous Students Describe Participation during Reading

The students' description of the reading period can be divided into two basic parts: reading and work. The category of "reading" typically referred to silent reading of assigned pages in the basal reader, although it also included the novel study which was being conducted at the time of the interview. The students subdivided the generic category of "work" into three major tasks: boardwork, the questions following a story in the basal reader, and workbook questions. When questioned about how their assigned work was corrected, the students invariably said that the Grade 6s "go to the back of the room and sit in a circle". All four students described the process of the grade 6s getting together during reading period in this way. From the perspective of the students then, a typical reading lesson is carved into a series of desk-work and small

group participation structures: a predetermined amount of work must be accomplished in the former while the same work can be corrected in the latter.

The students were aware of two of the three rules governing participation: individual nomination and invitation to bid. Although they did not label these rules, they described a typical classroom situation in which the rule would be invoked. The 'invitation to reply' rule was not recognized by the students as a legitimate turntaking procedure.

All four Indigenous students described the process governed by the 'invitation to bid' rule. Mary's description of this rule was typical: "[Miss Mac.] reads us the questions and then we put up our hands and then she picks one of us to answer the questions". Mary referred to the voluntary nature of the bidding rule in the following statement: "She'll read us the question and then if you know it you can put up your hand and if you don't you don't have to."

All students recognized "individual nomination" as a common turntaking procedure during reading instruction. "Picking persons whether they have their hand up or not" was typical of the way the students described this rule.

"Answering in the round" is a variation of the "individual nomination" rule (Mehan, 1979; Philips, 1983). The interview data suggests that the procedure whereby students are automatically nominated to speak by "going around the circle" is frequently used during reading lessons. A sample from Doug's interview illustrates this point:

CC: When you answer questions can you tell me a little bit about how that goes?

Doug: well we go out in the back again, take some cushions to sit on and [. . .] then we sit in a semi-circle and she'll start from one end and go all around for different answers. That's what we do for Skill Pack and Study Book, too. (p. 37)

Three of the students impute different motives to the "individual nomination" rule when it is used outside of the "going around the circle" format.

For example, when asked why the teacher picks people who do not have their hand up, Doug replied that teacher would do so "if she thinks they're lazy and don't have the right answers". Mary thought the teacher nominates non-bidders to see if they understood the question. Mary and Roy both offered "to see if they've done their homework" as a reason. Lucy didn't know why people are individually nominated and she referred again to the "answering in the round" procedure as a possible explanation.

All the students interviewed indicated that they were aware that either of these rules may be in effect in a single participation structure. Mary said "sometimes she goes in a circle or sometimes she just picks anybody who has their hand up". Doug indicated that although the "individual nomination" may be the predominate turntaking procedure being employed in a single session, the teacher may break from this and call for bids. Roy noted that "when we go around [in a circle] we just tell the answers or else we put up our hands".

None of the Indigenous students referred to the "invitation to reply rule". When directly asked if they were ever allowed to simply call out an answer, Mary responded in the negative. When asked if there were any rules governing the teacher questioning sessions, Doug and Roy stated that the students were not allowed to "yell out the answer" or "talk out of line".

When asked to describe their own participation during reading instruction, both Roy and Mary replied that they put up their hands often. Roy stated that he put his hand up "about three quarters of the time". Without the question being put to her, Lucy volunteered that she in fact did not like putting up her hand in reading because she was scared that she might "get the wrong answer". When asked when she would bid, Lucy responded that "sometimes I put up my hand in language or math or spelling or something, mostly in math". Later she revealed that mathematics is her favourite subject.

The students were also asked if there would ever be a time when they would not bid. Roy replied that he did not put up his hand "when I'm not sure of the answer". Mary stated that she would not put up her hand if "I didn't understand the question" and then added with a laugh "or if I didn't do my homework". As mentioned above, Lucy reported that she did not like to bid because of fear of having the incorrect answer.

Findings and Interpretations

What were Native students willing or able to articulate about participation during reading instruction?

Generally the students' description of a typical reading lesson incorporated events which are analogous with the theoretical constructs of participation structures and turntaking rules. The students' categories of "work" and "getting together at the back" appear to be synonymous with the theoretical categories of desk work and small group participation structures respectively. While "picking anyone" is synonymous with the individual nomination rule, "picking people who have their hand up" is consistent with the invitation to bid. The students' description of the teacher asking questions around the circle beginning with "the person next to her" is analogous to the variation of the "individual nomination" procedure of answering in the round.

The invitation to reply rule is the exception in that the students were not aware of this procedure as an operative turntaking strategy in their classroom. However, classroom observations clearly indicate that there are specific instances in which students are invited to respond chorally or to call out one word answers in both whole class and in small group participation structures. When asked why they were not to yell out answers, Roy replied "cause some people don't know the answer and then they'll know it but they have to learn by

themselves". Doug remarked that if they did not put up their hand the teacher would get very angry with them.

These comments suggest that violations of the "invitation to bid" rule have been indexed often enough that students are consciously aware that they must bid to gain the floor. However, the teacher did not directly index the "invitation to reply" rule. For instance, she was not heard to say "answer all together now" or "fill in the correct answer when I finish speaking". Thus the cueing for participation under the "invitation to reply" rule appears to occur at a more subconscious level than the other two rules. This subconscious knowledge may be overshadowed by the direct indexation of the 'invitation to bid' rule with statements such as "don't yell out the answer" and "put up your hand". Thus the students' statements reflect both a conscious awareness of the "invitation to bid" rule and a lack of awareness, at least at the conscious level, of the "invitation to reply" rule.

Observational data support the students' description of any or all of the three rules being employed in a single participation structure. The teacher nominated individuals to answer specific questions but once that response had been given, she might call for alternative answers from the class at large thus opening up the floor for bidding. Students would anticipate this process and proceed to bid while the nominated student was still responding. Also, when the 'invitation to bid' was the dominant rule in effect, the teacher would periodically individually nominate someone who had not bid.

The content of the students' description of the reading program and the participation within reading are very similar. The students are aware of the general organization of a typical reading period as well as specific procedures for accomplishing that organization. With the exception of the "invitation to reply" rule, the students are able to articulate the turntaking procedures which

govern interaction during reading. There is no question that the students are at some level aware of the rules that underly classroom participation.

What is the relationship between what students said and what they did?

It appears that the students' perception of their own rate of participation is consistent with the observational data. Roy claimed to bid often and he did. Mary stated that she bid often as well, which she did. Lucy said that she did not like to bid, and with the exception of one particular session, she did not bid.

Lucy perceived herself to be frequently nominated by the teacher when she did not bid for the floor. However, the observations during the study period simply did not bear out Lucy's perception of her participation. During the observational period, however she was individually nominated only twice. Once she was asked to read out her written answer to a question off the blackboard. In the other instance, Lucy was individually nominated in the midst of a whole class session in which the predominate turntaking procedure was bidding. Lucy simply did not answer. Perhaps a longer observational period would have born out Lucy's perceptions. However, Lucy's fear of being wrong combined with her shy manner and somewhat confused answers in the interview suggest that she is more unsure of herself than the other Indigenous students. Her insecurity, combined with the students' belief that individual nomination is a teacher strategy for monitoring student comprehension and behaviour, may lead Lucy to believe she is frequently nominated when in fact she is not.

It is clear from the classroom observations that Indigenous students in an inner city school do not necessarily behave as a cohesive cultural group within the classroom. Unlike the children of Warms Springs (Philips, 1972; 1983), these students are not socialized into a cohesive cultural community outside of the classroom and they appear to have varying degrees of exposure to Anglo

interactional norms. Therefore, although lack of familiarity with the underlying rules governing verbal interaction in classroom settings may be a problem for Indigenous children facing their initial school experiences, the findings of this study suggest that by the time students have reached sixth grade they have internalized these rules and procedures. There appears to be a relationship however, between how accurately a student describes his/her own participation and rate of participation. The students with the highest levels of participation also provided the most articulate and accurate description of classroom procedures and rules, as well their own participation. The lowest participating student was the least able to offer plausible explanations for rules; offered the least faithful rendering of her own participation; and provided the least articulate description of a reading lesson and the rules governing them.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

This chapter offers conclusions based both on the methodology and on research and discusses the implications of these conclusions. Also, suggestions for further research are made.

Conclusions about Methodology

Generally, qualitative research asks the question "What is going on here?" (Rist, 1982) while microethnography focuses on "particular cultural scenes within key institutional settings" (Erickson & Mohatt, 1982, p. 137) by asking 'what is the underlying organization of the event under study?' (Au & Mason, 1982). The cultural scene under study was a reading lesson and the participants were four Indigenous grade six students. The purpose of the study was to reveal the underlying social organization of the reading lesson and to answer the question 'How do Indigenous students participate within that underlying social organization?'

Microethnography shares with general ethnography the view that any analysis of a cultural event must take into account the perspectives of the participants of that event (Erickson & Mohatt, 1982; Spradley, 1979). To incorporate the participants' perspective into the analysis, the question was asked "What is it that Indigenous students know and are able to articulate about how participation is organized during reading instruction and about rules that govern that participation?".

In a microethnography, interaction between participants is studied through detailed analyses of audio/visual records. However, interpretive analysis of microethnographic data requires that audio/visual records be placed in a broader socio-cultural context (Erickson & Mohatt, 1982). The data required to develop a broader perspective are collected through participant

observation (Au & Mason, 1982; Erickson & Mohatt, 1982) and interviewing (Erickson & Mohatt, 1982). In this study, data were gathered using four methods: observation, audio recordings, video recordings and interviews.

Classroom observations yielded an abundance of descriptive information about the classroom, the organization of the reading program and the Indigenous students. Informal observations outside the classroom furnished a description of the district surrounding the school, the school itself, and the student population. This descriptive information provided the contextual framework within which both researcher and reader are able to interpret each student's manner of classroom participation. Classroom observations performed a second function by supplying a detailed written record of the interactions of the teacher and the Indigenous students in the classroom. It was from these data that generalizations about how each Indigenous student participated were drawn.

Audio recordings supplied a permanent record of what the teacher and students said during each reading lesson. Also, how each person said what they said, that is volume, tone of voice and intonational patterns, were present on the audio tape. Classroom observations were incorporated into the verbatim transcript of the audio tapes thus producing single transcripts containing all available information about the lesson. These complete transcripts were the single most important source of knowledge about the underlying organization of the reading lessons and the verbal participation of each Indigenous student.

Video recordings rendered a permanent audio and visual record of the observed reading lesson. The audio portion of the video recordings were lacking the technical quality obtainable with a lavalier microphone and a cassette recorder. Also with a transcribing unit, audio tapes are simpler to transcribe than video tapes. For these two reasons, a combination of audio and

video recordings produced a more accurate and technically superb record of a single lesson than did the separate use of either tool. Transcripts which integrated information from both audio and video recordings provided the most comprehensive and accurate information about the verbal and non-verbal communication of the Indigenous students during reading instruction.

Detailed analysis of the audio/visual records were crucial in disclosing the organization of student participation during reading lessons and the participation of Indigenous students within those lessons. This analysis enabled the researcher to explore the suitability of the theoretical framework of participation structures and turntaking rules for reading instruction in this classroom. Once it became clear the framework was applicable, the underlying organization of the reading lessons was analysed within this framework. The transcripts were searched for every exemplar involving one of the participants. These instances were then examined using the theoretical framework as well as common sense categories supplied in the interviews.

Interviews allow researchers to obtain information that is not directly observable; to substantiate inferences that have been made from observations; and to find out something about the person giving the account (Hammersley & Atkinson, 1983). In this particular study, interviews provided all three types of data. During the observational period, the reading program was changing and the interviews elicited student descriptions of reading lessons before the transition period. In this way the subjects furnished a more comprehensive description of the reading program than could be directly observed. Secondly, the concept of participation structures and rules governing participation within those structures are theoretical constructs. The students' description of reading lessons in the interviews substantiated the observer's inferences that the theoretical framework adequately accounted for the organization of student

participation in this classroom. Finally, the interviews furnished personal information about each student as well as their perspectives on the formation of reading lessons, the structuring of participation within reading lessons, and views on their own participation. This background material provided the framework in which the nature of Indigenous student participation could be interpreted and accounted for.

Recommendations for Methodology

The ethnographic methodology employed allowed the researcher to study social phenomena within the natural context in which it occurs. In order to understand how Indigenous students participate in reading instruction, they were observed in the context in which they are typically required to participate. In order to understand why they participate as they do, they were talked to and observed. Although it had been suggested that Indigenous students may not participate because they do not know or understand the rules governing interaction, no one had actually talked to Indigenous students about their participation in the classroom. Although in the research Indigenous students have been addressed as a single cultural group, fine-grained analysis of their verbal and non-verbal interactions in classrooms revealed significant individual differences. Thus both talking to and observing students were essential data collection procedures for this study.

The observations should maintain a consistent balance between observer's notes and comments and mechanical recording of observations. It is typical for microethnographic studies to rely heavily upon audio and video recorded data (Hammersley & Atkinson, 1983). However, Bogdan and Biklen (1982) deter such researchers from abandoning fieldnotes as a major part of their data collection. The experience of this study supports Bogdan and Biklen's (1982) recommendation. Analysis of the tapes revealed that neither

audio nor video recordings provide a complete picture of what transpires. Nor do they allow the researcher to record his/her reflections on the observations. As the data collection drew to a close, it became clear that fieldnotes contributed greatly to an accurate record of classroom observations. Those sessions where a written record was abandoned for an audio/visual one were not the better for it. Thus consistent and accurate notetaking requires that the researcher's direct observations and insights are included in the written record of the recording session.

With the use of mechanical recording devices it is not necessary to collect numerous audio/visual records; as few as one (Au & Mason, 1982) or two (Mason & Au, 1981) video recordings and as many as 18 hours of video (Erickson & Mohatt, 1982) have furnished comprehensive analyses of student-teacher interactions. The detailed analysis of two audio recordings and two video recordings provided sufficient data for determining the underlying organization of reading lessons in this classroom. However, an answer to the more specific question of "How do Indigenous students interact during reading instruction?" would have been better addressed with additional classroom observation.

First of all, the wide variation in Indigenous participation patterns has not been observed elsewhere in the literature and thus additional data would have strengthened the interpretation of individual differences. Secondly, the reading program was in a state of flux and the observational period ran the risk of being atypical. An extended observational period would have addressed this concern. Thirdly, although the students appeared to be somewhat comfortable with the researcher, they were not fully at ease with the mechanical recording or the interviews. Some informants appeared to be reticent about being interviewed and were reserved during the actual interview. During video

recording sessions, one Indigenous student in particular frequently looked at the camera. How comfortable students feel with a researcher, her/his equipment and procedures would undoubtedly increase in direct proportion to the amount of time the researcher spends in the classroom. Thus increased observation time would improve relations with the participants and strengthen the researcher's confidence in her interpretation of the observations.

The interviews provided valuable information about how Indigenous students viewed the organization of grade six reading lessons as well as information about their participation within that organization. It was only through the interviews that the researcher could begin to understand what motivated the students to behave as they did in the classroom. Such data cannot be obtained through observation alone. Although the original intention was to interview the students more than once, due to lack of time it was not feasible to do so. Given the ethnographic nature of the interviews, a more comprehensive account of the students' understanding of and ability to articulate about student participation would have been achieved with additional interviews.

Hammersley and Atkinson (1983) suggest that location is an important element of an ethnographic interview. In this study, finding a private but non-threatening interview location on the school premises was difficult. Interviews might be more productive and less threatening if they are conducted in a neutral location such as a restaurant. If interviews must be held on the school premises, a library is more conducive to open interviewing of students than a staffroom. Also interviews should be spaced farther apart. Having four interviews in one day did not allow an opportunity to do any analysis of one interview before beginning the next.

Withdrawing the student from class, negotiating an interview time and location, walking together to the interview location and setting up the recording

equipment were important aspects of the interviews. They were neutral activities through which the informant and interviewer could carry on "small talk" and establish rapport. Interviews approached in this way eased the tension between interviewer and interviewee resulting in a more open interview.

There were advantages and disadvantages to doing complete transcriptions. The most obvious advantage is the ability to document how each student interacted both in the classroom and in an interview situation. Certainly this information was useful in accounting for the sociolinguistic experiences of the individual Native student. In addition, this detailed sociolinguistic data maybe amenable to further analysis which was not within the framework of the original study.

However there are disadvantages to full transcriptions, the most obvious of which is the time required. Transcribing tapes has been made easier with advent of microcomputers and transcribing machines. However, until direct voice input to a word processing system is readily available and affordable, transcription will remain tiring and time consuming work. Like the fieldnotes which had to be prepared after each session, so the audio tapes were usually transcribed shortly after the actual recording session. To prevent a backlog, audio tapes were transcribed before re-entering the classroom. Each one hour audio tape would take 8 to 10 hours to transcribe. Verbatim transcriptions take time that could be used for on-going data analysis. Intervals between recording sessions should be sufficiently long to allow for transcribing as well as initial analysis.

Finally, the use of a microcomputer greatly aided data storage, retrieval and analysis. However, there are two disadvantages to FILE, the data management software used in the study. First of all, it is not a relational data base program and therefore it cannot do AND/OR searches. This means that

the computer cannot be asked to search through the data to find an example of this or that. Such an ability greatly speeds data processing. Secondly, the computer cannot do AND searches if it must search through a body of text. In other words, if the data records are text orientated, as the ones in this study were, the computer can only search for one descriptor at a time. Therefore the program's ability to manage text data as opposed to numeric data is an important criterion in choosing a data management program for a qualitative study. The efficiency of data retrieval and analysis in a qualitative study can be improved by the use of a text orientated, relational data management program.

Conclusions About Indigenous Student Participation During Reading Lessons

This study began by asking three questions:

1. What participation structures are utilized during reading instruction and what rules are governing participation within each structure?
2. How do Indigenous children participate verbally during reading lessons?
3. What are Indigenous children able to articulate about the nature of their participation and about the implicit rules which are inherent in the way participation is structured during reading lessons?

An additional goal of the study was to determine if there was a relationship between what Indigenous students said about their participation and how they were observed to participate. The data collected were able to address each of these issues.

How is participation structured in this classroom?

Four participation structures were utilized to structure participation during reading instruction: whole class, small group, one-to-one and desk work. These findings support the conclusions of Philips (1972, 1983) who found these four participation structures in both grade one and six classrooms in a small town in Oregon. Participation within each structure was governed according to a tacit set of turntaking rules. This finding supports the research of Mehan (1979;

1984) and Philips (1972;1983). Students were invited to bid, individually nominated or invited to reply as a group, depending on the turntaking rule in effect. The invitation to bid, which required students to raise their hands and be officially recognized by the teacher in order to speak, was the predominant rule during the observation period.

That these participation structures and turntaking rules were in effect in this western Canadian inner city school as they were in San Diego (Mehan, 1979) and Warms Springs, Oregon (Philips,1983) strengthens two interpretations. First of all, the underlying social organization of classroom lessons is similar across North American classrooms and reading lessons in particular. Neither Philips nor Mehan looked specifically at reading lessons, however it is clear from this study and others (Au and Mason, 1982; Mason & Au,1981) that student participation in reading lessons is socially organized in the same manner as other aspects of the instructional day. Secondly, the fact that participation was structured in a typical manner means that the students in the present study were enculturated into a typical classroom with a typical underlying social organization and typical reading lessons.

For the most part, the theoretical framework of participation structures and turntaking procedures was appropriate. However, students differentiated between two turntaking procedures which according to the theoretical framework should be considered variations of a single turntaking rule. Both Philips (1983) and Mehan (1979) consider answering "around the circle" as a variation of the "individual nomination" turntaking procedure. Presumably they are considered variations of one rule because in both instances students, without bidding or calling out to obtain the floor, are directly nominated by the teacher. However the Indigenous students differentiated between the process of "picking someone who doesn't have their hand up" and "going around the

circle" on the basis of their interpretation of the teacher's motives. In the first instance, they believe the teacher's motives are to monitor student understanding, to ensure students are paying attention and/or have completed their homework. In the second instance, they did not attribute a motive but simply described "going around the circle" as the normal procedure for certain reading lesson events such as correcting written work.

The peer group or student-directed group, a variation of the small group participation structure, is frequently employed during reading lessons. This is typical of many classes cited in the research literature where students are expected to spend at least part of the school day in groups which are not under the direct supervision of the teacher (Webb, 1985). Webb (1985) reviews research which shows that the effectiveness of peer-directed groups depends on the verbal interaction that takes place within them. Specifically students will benefit from such groups if they are involved in giving and receiving explanations. Given that two of the Indigenous students in this study had little or no verbal interaction in an observed peer directed group, it is questionable how much these students are gaining from this type of participation structure.

How do Native students participate during reading instruction?

The most obvious answer to this question is that individual Indigenous students participate differently in different contexts within the reading lesson.

The individual differences in the participation of the Indigenous students are clear. While Mary participated frequently in most situations, Lucy participated infrequently in most situations. Roy bid more often than any other student in whole class and small group situations but rarely participated in student directed groups or on a one-to-one with the teacher. Doug, frequently absent, was a medium level participant in the whole class but infrequently bid in the small group structure. However in the discussion group with the

researcher, Doug asked more questions than the other students combined. Thus it is clear that the commonly held stereotype of the "silent Indian" student does not hold in all classroom contexts with all Indian students.

What are Native students able to articulate about the tacit rules?

Generally the Indigenous students were aware of the rules governing participation during reading lessons and abided by those rules. They were able to describe the organization of participation during the lessons as well as the operation of each rule, with the exception of the "invitation to reply" rule. As well as being able to articulate the rules and procedures, they did not violate any of them during the observations. For example, they did not speak out of turn which would be a flagrant violation of the rules. These conclusions are congruent with those of Philips (1983). She suggests that by grade six and age 11, both Indian and Anglo students, know and accept the rules governing participation.

There was a relationship between how accurately a student described her or his own participation and level of participation. Lucy's report of her participation was less congruent with her observed behaviour than was that of the other students and Lucy was the student who participated the least of all four Indigenous students. As well, Lucy's description of the organization of the reading lesson and the turntaking procedures was the least clear of the students. Thus the more accurately a student's description of the organization of student participation, generally, and his/her manner of participation, specifically, the more likely it is that student will be a frequent participant.

What can account for the individual differences in participation in varying classroom contexts?

Dobbert (1982) states that "...ethnographic description itself is based on analysis and generalization of a low-level type, but no proper ethnographic report ends with the description; a good report goes beyond it to the level of

explanation" (p. 279). Explanation seeks to answer the question "why does what happens here actually happen here?" (Dobbert, 1982, p. 279) Thus we must go beyond the three original research questions and ask "What accounts for the individual differences in participation of Indigenous students?"

Urban-Reserve Distinction

It is clear from the classroom observations that Indigenous students do not behave as a cohesive cultural group within the classroom. The personal-cultural history of each Indigenous students is different. They have been socialized into dissimilar cultural and family situations with varying degrees of proximity to a cohesive Indigenous community. The students appear to fall along a continuum of exposure to communicative norms which differ from those expected in the classroom. At one end of the continuum is Anglo interactional expectations while traditional Indigenous interactional etiquette is at the other end. The student who exhibited typically Indigenous speech patterns and whose personal history suggested extensive exposure to Indigenous interactional norms, participated the least. Conversely the student with the least apparent exposure to a cohesive Indigenous community was a more active participant in most participation structures.

As Philips (1983) suggested, by grade six, Indigenous students can abide by the rules underlying classroom participation regardless of their socialization experiences outside of school. Therefore, association with a cohesive Native speech community is only one aspect of an Indigenous child's personal history which can account for participation during reading instruction. Other patterns in the data suggest that participation is affected by student-teacher relationship, the student's social status, the subject content of the lesson and the student's willingness to risk.

Student-Teacher Relationship

The findings of this study suggest that in-class communication between a teacher and student are affected by their impressions and expectations of one another. Rate of student participation is affected by how often the teacher gives a student the floor to speak. The more academically able the teacher believed a student to be, the more likely she was to nominate that student when he/she bid. The reverse was also true. Also, nomination under the "individual nomination" rule increased when the teacher-student relationship was strained. If the student was misbehaving, the teacher called upon that student more often, perhaps in an effort to draw attention to the student or to ensure she/he was paying attention. Woolfolk and Galloway (1985) cite Brophy and Goody's study who found that:

"teachers waited less time for low expectation students to answer, gave up more quickly on their wrong answers, *called upon them less often*, paid less attention to them except when they misbehaved, and placed their seats farthest from the teacher" (p. 82; italics added).

Subject Content

General subject area, as well as the specific topic of a lesson, affects rate of participation. Within the subject of reading, clearly some topics allowed for greater participation than did others. Students generally, but Indigenous students in particular, are more comfortable bidding when the task or question requires them to apply a concept that has already been taught or allows them to draw upon their general knowledge. Student participation was far lower when the teacher presented new and conceptually more abstract material. This finding supports the work of Blumenfeld and Meece (1985) who noted that generally children resist tasks "that are procedurally unfamiliar, unstructured or cognitively demanding" (p. 55).

Subject content is important in another way. The findings suggest there is a relationship between how well the teacher perceives the student to understand the subject content and the student's rate of participation. Mary, whom the teacher described most favorably, was a frequent participator with the highest rate of nomination. Lucy, who was considered the least able student academically, participated least. Doug, who is having difficulty with low grades, high absenteeism, and incomplete homework, is also a less frequent participant.

Eder's (1982) research in a grade one classroom found that depending on the reading ability group (high, medium or low) to which they were assigned, students were socialized to a different set of communicative norms. Those children in the low ability group were allowed to interrupt more often than were those in the high ability group and consequently developed a different notion of what a "reading turn" is all about. Although the Indigenous students were not grouped according to ability, they have had six previous years of schooling in which they may have been exposed to different communicative norms based upon the teacher's perception of their reading ability. Eder (1982) suggests that like the Warm Springs, Oregon children in Philips' (1972) study, students labelled as 'low ability readers' are not less communicatively competent but have simply acquired and conform to a different set of rules.

A student's personal interest in the content of the lesson also affects his/her level of participation. The students described reading period as a series of work events which varied in the number of questions to be completed and the ease or difficulty of the task. When queried about their favourite school subject, not a single student preferred reading. Social studies, science and mathematics were the suggested favourites. There was a wide variety in subject preference; Mary and Doug both liked social studies while Lucy

preferred mathematics. Lucy not only likes mathematics better but she stated that she bids more often in that subject than in reading.

Changes in student interest which influence participation can occur within a single lesson. In one particular small group session, the teacher was asking a series of questions as a pre-reading exercise. The setting of the play they were about to read was a desert and the teacher was querying the students about the climate, geography and peoples of the desert. Roy showed little interest in this session until the topic shifted to the type of animals that live in the desert. When the questions focused on information pertaining to snakes and scorpions, Roy began to actively participate.

Student-elicited talk is predominately questions to the teacher and these questions, few in number, tend to be task orientated. A remark from one of the interviews partially bears out this observation. When asked if students ask the teacher questions, Roy stated "nope/ well only in science only because we don't know that much about [it] like we didn't study it before". This could be interpreted to mean that the students will ask more questions of the teacher when they are unsure of either the procedure, task or content.

Willingness to Risk

In an extended study of preschool and elementary school children, Harste, Woodward and Burke (1984) discovered key patterns in language and literacy learning. One of those patterns is risk-taking; a strategy which allows language users to set aside both perceived and real constraints upon their success at a language task and give it their best shot (Harste, et al.1984). Harste et al.(1984) found older children to be more cognizant of their vulnerability, that is their ability to make mistakes in a literacy situation, than younger children. They suggest that a child's willingness to take the risks necessary to become a successful language user is a learned phenomena, one

"constrained by the language user's personal-social history of literacy" (p. 136). Upon searching through the patterns available in the data in this study, it is clear that each student's willingness to risk played an important role in determining when and how often she/he would bid.

The public nature of literacy tasks in classrooms makes the risk-taking strategy especially problematic for Indian students, at least those who have been socialized in a culturally more traditional Indian family or community. Van Ness (1981) cites research which suggests that the pedagogical device of 'spotlighting' a particular child is culturally incongruent with Indian patterns of verbal interaction. This suggests that the more culturally conservative the personal-social history of an Indigenous child, the less comfortable he or she is with the possibility of making a "public mistake" (Van Ness, 1981, p. 123).

In this way a student's willingness to risk appears to be closely related to his/her knowledge of the lesson content. As was mentioned previously, Indigenous students participated more in reading events that allowed them to use their general knowledge or to refer to written answers to previously assigned questions, while they participated less in situations requiring them to answer questions as part of the introduction of a new or abstract concept. In other words, they participated less in situations where the risk of being wrong was greater and more often in situations where the risk of making a mistake was lower. Although the Indigenous students generally participated less in the higher risk situations, Mary and Roy who participated the most frequently overall, also were more willing to participate in situations of higher risk than were the other two.

Interviews with the students substantiated the notion that risk-taking is a significant participation strategy. When asked what students do while they are waiting for their turn during an "answering in the round" session, Lucy began

her reply with "like if we put up our hand" but then immediately qualified her statement with "I don't like putting up my hand [cause I'm] scared that I might get the wrong answer". Lucy volunteered that the reading group is a high risk situation for her and she is not willing to take the risk of being wrong. This fear of being wrong has serious implications for the literacy learning process. As Harste et al. (1984) suggest "access to the process can only be gained through involvement in the process" (p. 130).

Social Status

The Indigenous students varied in the social status they wielded with their peers and this affected how they participated in a peer-directed group situation. Webb (1985) cites research which suggests that "White students tend to be more active and influential than minority students" in peer groups. She attributes these differences, in part, to the differing social status of the students. Also, Webb's research suggests that female and low ability students are typically characterized as 'low status' in peer groups and tend to be ignored by the other members of the group. The present study supports Webb's (1985) findings. Two of the three Indigenous students were basically ignored in the peer group. Mary, the Indigenous student who was most involved in the peer group appeared to be the most "White" of the Native students. In addition, Mary appeared to have a higher level of social status amongst the White group members than Lucy or Roy.

A Matrix of Elements Accounting for Indigenous Student Participation

Throughout analysis a researcher is searching for emerging patterns in the data. One means of displaying the data in order to generate new insights is through matrix analysis (Miles & Huberman, 1984a, 1984b; Patton, 1980). By cross-classifying the categories or dimensions, the analyst works back and forth between the emerging matrix and the data to generate a full descriptive

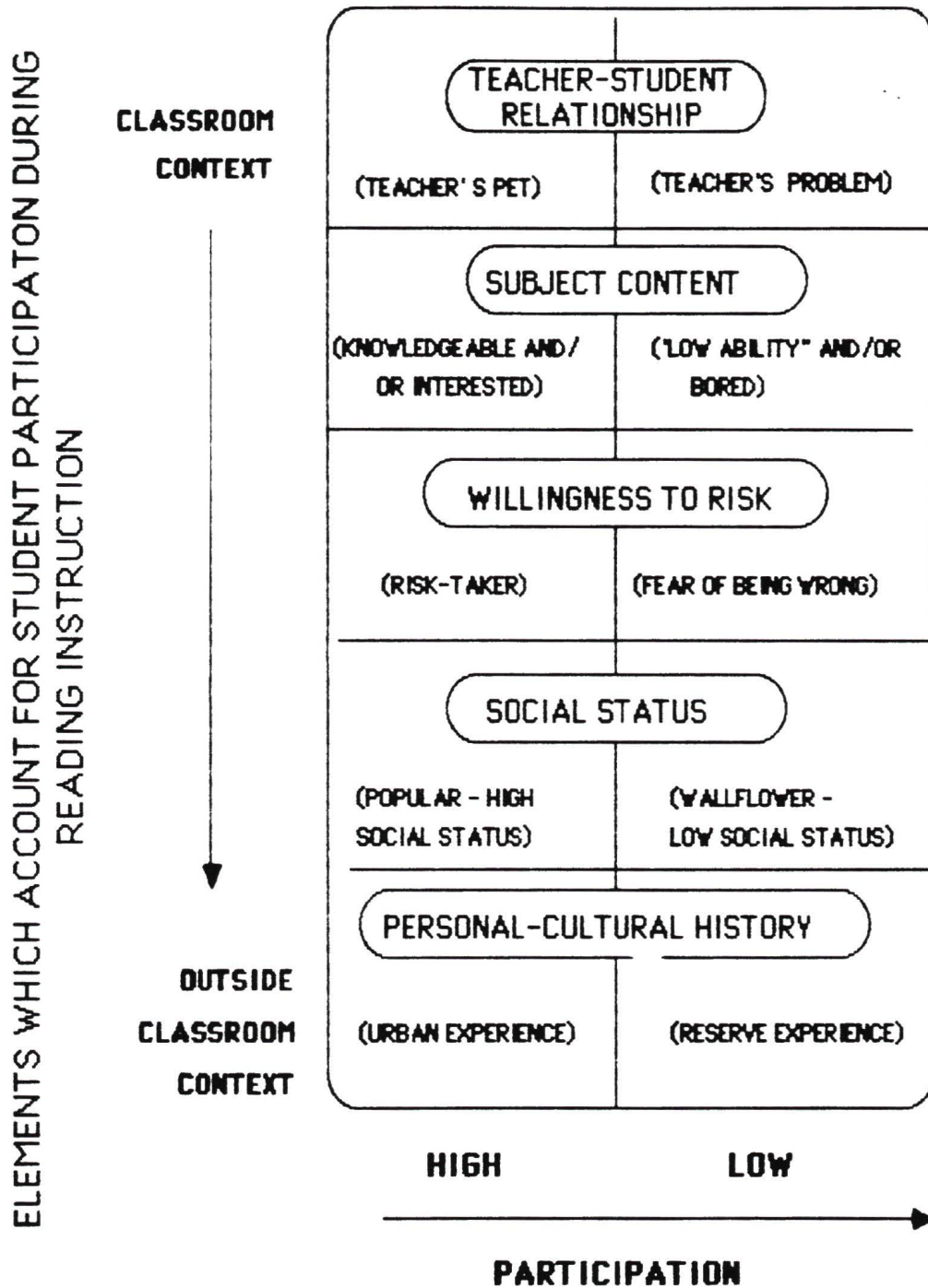


Figure 3: Elements which account for individual differences in Indigenous student participation during reading instruction.

analysis (Patton, 1980). Figure 3 is a matrix which displays the elements which appear to account for individual differences in the level of participation during reading instruction in this study.

One dimension of the matrix is participation; a student's rate of participation in a particular event during a reading lesson can be categorized along a continuum of high to low. The second dimension of the matrix is the elements of the Indigenous child's experiences which seem to govern how much, how often and in what contexts he or she will participate. A teacher is more likely to nominate students she/he considers to be knowledgeable than students perceived to be low ability. Conversely, as a means of social control, teachers are more likely to individually nominate students who are not paying attention, are most likely to have not completed their work and are generally misbehaving. Students who are knowledgeable and interested in the topic under discussion will attempt to participate more than those who are not interested or who do not like the subject. Again, the more knowledgeable they are, the more likely it is they will be nominated. Some students are willing to risk being wrong while others are not; some students are more willing to risk in some situations than others. Risk-takers inevitably participate more often than do those who are fearful of making a mistake. Students who have acquired a position of high social status with their classmates will have greater opportunities to participate in peer-directed groups than students with low social status. Finally, there appears to be a difference in the level of participation between Indigenous children socialized in urban centers and those socialized within an extended Native family with close ties to a cohesive Native community.

The elements accounting for differences in rate of participation can be further differentiated on the basis of where that element originates. Elements

which originate primarily outside the classroom are less amenable to educational change than are elements which originate for the most part in the classroom. Student-teacher relationship is for the most part an inside-the-classroom phenomenon and thus is more amenable to improvement. A student's personal history and enculturating experiences in his/her home and community are primarily outside-the-classroom phenomena and are less likely to be affected by changes within the classroom context.

This matrix summarizes the conclusions of the study. There are individual differences in the participation of Indigenous students in reading lessons. Because of the wide variation in the personal-cultural history of Indigenous students being educated in urban, as opposed to rural classrooms, the actions of the students cannot be accounted for simply by reference to the socialization of the students outside the classroom. There are elements of a student's previous and on-going experiences which can account, at least in part, for their overall participation in classrooms.

Recommendations for Educators and Educational Researchers

Individual differences in level of participation indicate that not all Indigenous students are fully enculturated into classroom life by grade six. There appears to be a polarization process whereby the Indigenous students who have found success through enculturation continue to achieve, while those who have failed to adapt fall farther behind. If students are not able or willing to present what they know in the manner expected in the classroom, teachers will continue to perceive those students as not knowing at all. However students cannot present what they do not know or are afraid to say. This suggests that in order to increase participation of Indigenous students changes are required in teacher practice; what material is presented, how it is presented, how it is practiced and how students' knowledge of that material is evaluated.

Increasing Participation

Because a formal comparison of Native and non-Native students was not made, it is not possible to state that Indigenous student participation was affected by the type of participation structure differently than was the participation of non-Native students. Depending on the topic of the lesson, Indigenous students did participate in the whole class sessions. What did not seem to be effective in eliciting bidding was the technique of asking questions to introduce an abstract concept such as "What is the plot of a story?". Questioning, when the goal of the questions is unclear to the students, turns out to be a game of conjecture: the teacher inviting students to guess what the topic of discussion is. This is not an effective means of eliciting Indigenous student participation. An alternative method of introducing new material would be to first explain and define the concept, using questioning to apply the already introduced concept to the students' knowledge base. A second alternative would be to have a classroom discussion first and then relate that discussion to an explanation and definition of the concept.

Given the frequent use of peer-directed groups in reading instruction, it is important to note that this format does not necessarily ensure maximum student interaction. Contradicting the findings of Philips (1972; 1983), the peer-directed small group format did not increase student participation for all Indigenous students. In fact, participation significantly decreased for two students, apparently as a result of their low social status in the group and their perceived lack of knowledge and/or competence. The students chose Mary to be the peer-group secretary because "she has neat handwriting". Mary's peers perceived her as being competent in an area which was important for successful completion of the assigned task. This supports Webb's (1985) suggestion that low status children need to be given special expertise in some

material that will raise their status in a peer group situation. Teachers could assign students like Roy and Lucy special roles in the peer group or perhaps teach them a specific skill which they could then pass on to the rest of the group members. The student's expertise will increase his/her status in the group and subsequently his/her level of participation.

Although no group discussions were observed in the present study, giving students opportunities to practice discussing topics that are meaningful to them increases verbal interaction (Pinnell, 1984). However being an effective participant in a group discussion takes practice and skill, thus discussion skills should be taught in schools. Pinnell (1984) suggests that using narrative is a successful group discussion technique for enabling students to share personal meaning. Such a technique should be effective with Native students given the important role that storytelling, including narratives, plays in the oral tradition of both modern and traditional Indigenous societies (Katz, 1983; Marashio, 1982; Tafoya, 1981,1982). Given the reticence of some Indigenous children to speak in student-directed groups, training for conversation and discussion skills should begin in dyads, later progressing to triads and small groups. Such incremental changes in size of discussion groups may increase the chances of Indigenous students sharing and learning in peer-directed groups.

Shifting the emphasis from teacher-directed instruction to learner-directed activities is a successful methodological approach with Indigenous students (Foerster & Little Soldier, 1980; LeBrasseur & Freark, 1982). Schools operated by the Miccosukee tribe in the United States, place a strong emphasis on student-initiated learning, and learning centers are used in their classrooms at all grade levels (LeBrasseur & Freark, 1982). Beginning at a very early age, Indigenous children are generally encouraged to assume responsibility for their

own decisions. Foerster and Little Soldier (1980) suggest that student-directed learning reinforces the independence that Indigenous children learn at home.

Depending on other factors such as the topic under discussion, the Indigenous students abided by both the "invitation to reply" and the "invitation to bid" rules. However, the "individual nomination" procedure was more problematic. Assigning turns to speak with the "individual nomination" procedure while the "invitation to bid" was the predominant rule in effect, was not successful in increasing Indigenous student participation. Miss Mac said that she played a game with one of her Native students in a previous class where she would ask the Native student a question every day in class, and every day the Native student would refuse to answer. When using this strategy, Miss Mac had the best of intentions; trying to involve the student in the class. However, it was not a successful strategy. Indigenous students like Lucy, who do not like to participate for fear of being wrong, like it even less when they are called upon to answer a question which they in no way indicated they wished to answer. Indigenous students appear to believe that the teacher uses "individual nomination" to find fault with them; to catch them with incomplete assignments or incorrect answers. Thus Indigenous students fear of making a public mistake suggests that trying to increase their participation through surprise "nominations" may be self-defeating.

Previous research has shown that in classrooms where there is an Indigenous teacher and Indigenous students, the interactional patterns are smooth and consistent with the interactional norms of the Indigenous cultural community of which the teacher and students are a part (Erickson & Mohatt, 1982; Van Ness, 1981). Because non-verbal patterns of behaviour are learned earlier than verbal ones, they are more culturally conservative and thus more difficult to change (Philips, 1983). Thus it is not always feasible or appropriate

to suggest that Anglo teachers and Indigenous students adopt new interactional patterns. Rather there is a distinct need for more Indigenous teachers. The recognition of the need for additional Native teachers is particularly relevant in the present economic and political climate of drastic cutbacks to post-secondary education generally and funding for education of Indigenous people in particular.

In urban centers where Indigenous students often find themselves in a minority situation, it is not always feasible nor desirable to have solely Indigenous teachers for Indigenous students. However, where there are Native students who are unable to successfully participate or succeed generally in integrated classrooms, there must be special facilities available to those students. The Native Survival School in Saskatoon, Saskatchewan, to name one such urban institution, offers Indigenous students an educational oasis where they can develop the skills which will allow them to return to a public school classroom and survive. Rather than a "modified program" in a large understaffed urban high school, students such as Lucy urgently require facilities such as the Native Survival School.

Unanswered Questions

This study has opened many new doors and closed none. A need for further research does not arise out the traditional notion of "limitations of the study" (that is the findings are not less valid because of the way in which the study was conducted), but rather out of the process of conducting and writing ethnographic research. As the writing concludes, I wish to return to the beginning in order that the knowledge gained in the process of analyzing and writing could be re-applied to the task anew. With this in mind, below are some of the questions which need further examination.

1. Does participation change across different aspects of the curriculum? We need to observe student participation in a number of subject areas: comparing participation in subjects which the students prefer, with subjects they do not like. As well, we need to compare participation in subjects in which the students are perceived to be successful with those in which they are not.
2. That participation plays a significant role in student evaluation is an assumption which remained unquestioned in the present study. This research, as well as that cited in Woolfolk and Galloway (1985), suggests that a relationship between aspects of participation and informal student evaluation does exist. However, a more definitive understanding of that relationship can only increase our understanding of the processes involved in becoming a successful student.
3. Do the elements which accounted for participation of Indigenous students in this study apply to all students? This is an important question that needs attention.
4. What additional experiences within the school context makes certain Indigenous children more successful at school in general, and literacy in particular, than others?
5. What experiences outside the classroom context makes certain Indigenous children more successful than others? Specifically what aspects of an Indigenous student's personal, social and cultural history affect him/her as a language learner?
6. How is success at being literate defined in the school context compared with how it is defined by Indigenous students and their families?

Recommendations for changes in teaching practice mentioned above, also need to be implemented and altered if found wanting. Important questions of curriculum and changing praxis can be carried out within the framework of action research (Bogdan & Biklen, 1982; Carr & Kemmis, 1983). Such research may yield the direly needed information about how to make school experiences successful for Indigenous, as well as other minority students.

Summary

This study attempted to answer questions regarding Indigenous student participation during reading instruction. Wide ranging differences in the participation of individual Indigenous students were found. As Native students

were able to articulate and abide by the rules governing the underlying social organization of the lessons, it has been suggested that lack of knowledge of those rules does not fully account for observed differences in participation. Rather a matrix of "situational and cultural" (Harste, Woodward & Burke, 1984, p. 146) elements which form the context for the language event was offered as an explanation for fluctuating levels of participation in differing classroom contexts. Because Indigenous students attending urban schools come from diverse social and cultural backgrounds, it can no longer be assumed that ethnographies of homogeneous Indian communities will provide an adequate framework for interpreting the interactions of Indigenous students in classrooms. These findings do not violate the assumption that the ways in which students and teachers conduct themselves in classrooms are culturally organized (Van Ness, 1981). Rather they challenge our assumptions about what that culture might be. Each classroom is a dynamic cultural entity with its own set of interactional norms; a cultural group comprised of individuals with unique language experiences and personal histories. Understanding the personal histories that learners and teachers bring to language tasks in classrooms will reveal much about each person's use of language in the situational and cultural context of the classroom. As well it will teach us about the process of becoming an effective language user and literacy learner.

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APPENDIX

TO: The University Committee on Research Involving Human
Subjects

FROM: Mr. Bruce
Principal, ABC Elementary School

DATE: 1985-03-05

RE: Cynthia Chambers' research proposal

Please let this memo be confirmation of my approval for Cynthia Chambers to
conduct the research project, as outlined in her proposal, in our school.

Thank you.

TO: The Sky Reading Group
FROM: Cynthia Chambers
DATE: 1985-03-04

I am a student at a University. As part of my studies I must complete a major research project - similar to the kind of research project you had to do for the science fair. Since I am interested in reading and language, I would like to do my project on students' use of language during reading lessons. I have asked your teacher and principal if I can do this research with your classroom. If I successfully complete this project, the University will grant me a Master's Degree in Education.

For the next month or so, I would like to observe the Sky group during reading period. I plan to tape the lessons both with a cassette recorder and a VCR. I will need to take notes to help me remember what I observe.

Towards the end of the month, I would like to meet with some of you once or twice to ask you some questions about reading and what you do during reading period. Everything you tell me will be completely confidential!

I would like to be able to observe and interview everyone in the Sky group. However, it is important for you to know that your participation in this research project is voluntary. If you decide that you do not want to be involved please tell your teacher or myself.

1985-03-05

Dear Parent:

Your child has been chosen to participate in a research project to be conducted at your school. The study is exploring the different ways children participate during reading instruction. The study is expected to begin on March 15th, and will end approximately April 30th, 1985.

The reading group your child is in will be observed three times a week. These reading lessons will be taped with a cassette recorder and a VCR. Towards the end of this month, your child will be interviewed about how he participates in reading lessons. The interview will be tape recorded. No questions will be asked about his personal life.

The involvement of your child in this study is entirely voluntary. If you give your permission, then your child will be asked for his permission as well, and the procedures explained to him.

In the final report to be written based on this research, fictitious names will be used for both your child and the school. I would be more than pleased to share the findings of the final report with you, if you should so wish.

If you have any questions, please feel free to contact me at home (ph. no. 123-4567). To give permission, please fill out the form attached and have your child return it to his homeroom teacher.

Thank you very much for your anticipated cooperation!

Sincerely yours,

Cynthia M. Chambers
Master's Candidate

Norma I. Mickelson, Ph.D.
Thesis Supervisor

Permission Form for Participation in a Study
March 06, 1985

I give permission for _____ to participate in

(name of child)

the study that is to be carried out in the Grade 6/7 classroom at ABC

Elementary School.

(signature of parent/guardian)

VITA

Surname: CHAMBERS Given Names: CYNTHIA MAUDE

Place of Birth: VANCOUVER, B.C. Date of Birth: March 21, 1951

Educational Institutions Attended, with Dates of Entering and Leaving:

UNIVERSITY OF NORTH DAKOTA 1973 TO 1973

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University of Saskatchewan, College of Education Scholarship, 1976

Saskatchewan Teachers' Federation Scholarship, 1975

Fr. Duchesnois Medal, Highest Academic Standing in Graduating Class, 1969

Publications:

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Title of Thesis/Dissertation

A MICROETHNOGRAPHY OF INDIGENOUS STUDENT PARTICIPATION
DURING READING INSTRUCTION

Author:


CYNTHIA MAUDE CHAMBERS

August 31, 1985