THE TRANSFORMATION OF CLASSROOM DISCOURSE:

AN INUIT EXAMPLE

by

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Chapter 1

INTRODUCTION

The basic purpose of the school as an educational institution is the transmission of knowledge. Unlike most other institutions, this purpose is achieved in the classroom primarily through talk. Until recently, however, it has typically been ignored that implicit in the transmission of knowledge is the transmission of cultural beliefs and values. The organization of classroom discourse, like the acquisition of language in the home, follows certain linguistic patterns which are culturally determined. Successful participation in classroom interactions and routines requires the knowledge of a set of classroom rules of discourse that are based on cultural beliefs regarding appropriate interactions with children. While knowledge of these rules of discourse is essential to the development of communicative competence in the classroom, the rules are not usually explicitly taught.

Examinations of communicative interactions and discourse patterns in cross-cultural and minority classrooms have led researchers to suggest that cultural differences or "mismatches" in discourse and interaction patterns at home and at school may simply be matters of temporary adjustment, or else they may pose a significant barrier to learning. Some of the difficulties

experienced by minority children attempting to learn in classrooms that are structured around majority culture values and patterns of interaction have been attributed to the existence of such home-school discontinuities. Examinations of the effects of schooling on non-mainstream children have tended to focus on transformations of traditional culture occurring as a result of exposure to Western models of schooling. Only a few studies have documented the ways in which Western educational models have themselves been transformed by traditional social contexts in non-mainstream classrooms.

Formal education often takes place in a manner which is quite different from the way education traditionally occurred in the local culture. As Levin (1992, p. 59) succinctly states, "Cultural understandings can shape the process of skill learning by the meanings attached to expertise- the goals, conceptions, and social interactions in which skillful performance is believed to be appropriate". This re-shaping of the organization of classroom interactions toward more culturally contextualized ways of teaching and learning is what is meant in this thesis by the transformation of classroom interactions. Such a perspective implies that those transformations occurring in classroom contexts may be bi-directional, since both the western and the local culture impact upon each other within the classroom. Transformations of classroom interactions may also stem from either conscious or unconscious motives to transmit learning in more culturally congruous ways.

The present study is an ethnographic examination of communicative interaction and discourse patterns found in six Inuit-taught classrooms in three remote communities in Northern Quebec. Discourse patterns and elicitation interactions of Inuit teachers and students are documented and contrasted with those of mainstream classroom interactions described in the literature in order to demonstrate how mainstream patterns of classroom discourse have been transformed by Inuit teachers to achieve more culturally congruous classroom interactions. A model of classroom competence for Inuit children is presented and contrasted with that of mainstream children. Findings pertaining to Inuit cultural values as they are promoted in the classroom are discussed in relation to those emphasized both in Inuit homes and in mainstream classrooms.

My interest in this research stems from my own six years of northern teaching experience as well as my involvement in Native teacher training. During my second and third year of teaching, I had a full-time Native "trainee" in my classroom. A large part of the training I was expected to accomplish over these two years was to familiarize her with the planning, organization, implementation, and evaluation of lessons. In addition, each week I was expected to complete a formal evaluation of her teaching of one lesson. These evaluations were sent to the school board office, and the cumulated reports constituted a major source of evaluation upon which her future as a teacher in the local school was based. My evaluations of her teaching were

based on the mainstream teaching model in which I had been trained and which I utilized in my classroom. At the time, it struck me that there were certain "differences" in the ways in which she handled and controlled the class. However, I was not aware of their cultural significance. In fact, I did not always judge these differences in a positive light, and spent a great deal of time coaching her in classroom control and the distribution of turns. At the time I was unaware that her ways of talking with the students in the classroom were actually reflections of the ways in which children were socialized within her culture. Out of respect for me and an apparent concern for my "loss of face", she never directly pointed this out. However, she only rarely implemented the strategies I suggested into her lessons. The present thesis, then, grew out of these unconscious but persistent feelings of "difference" in teaching style which I began to feel had serious ramifications for the teaching and learning of Native children.

Chapter 2

MAINSTREAM CLASSROOM INTERACTIONS

Introduction

Culturally congruous models of classroom competence are based on the understanding that the ways of talking with children are culturally-based and reflect deep underlying beliefs regarding the place of the child in society. Such models must therefore be situated and described within the contexts of both primary and secondary language socialization. The central concepts inherent to theories of both primary and secondary language socialization will be briefly defined and discussed in this introduction to the chapter on mainstream classroom interactions.

Examinations of the characteristics of social interchanges with children within their cultural context aim to explain and describe the means by which a child is brought up to become a member of his culture. This process by which children become appropriate members of their culture and achieve social competence in the use of language within their society has been termed 'language socialization' (Schieffelin and Ochs, 1984; Schieffelin and Ochs, 1986). This term implies the dual concept of "socialization through language and socialization to use language" (Schieffelin and Ochs, 1986, p. 2).

Central to the concept of language socialization is the notion of "communicative competence" developed by Hymes (1972). According to Hymes, the social rules of language used within a society determine the discourse structure of social interchanges just as effectively as the grammatical rules underlying language structure determine the form of these exchanges. Thus the patterns of language used within a particular culture are seen as being socially organized and are viewed as being powerful conveyers of socio-cultural knowledge (Hymes, 1972; Schieffelin and Ochs, 1984).

The exchanges involved in the transmission of knowledge in the classroom are also socially organized events which follow certain culturally-determined linguistic patterns (Cazden, 1988; Heath, 1986a; Mehan, 1979; Philips, 1983; Trueba, 1987a). Successful participation in the society of the classroom requires that the child develop a second form of competence which could be called 'classroom competence'. Development of this form of competence depends on the acquisition of certain implicit forms and rules of discourse, similar to that required for successful participation in social interchanges in wider society (Cazden, 1988; Erickson, 1987; Erickson and Mohatt, 1982; Mehan, 1979; Philips, 1983). Competent membership in classroom culture is described by Mehan (1979) as a process of "weaving academic knowledge and interactional skills together like strands of a rope, providing factually correct academic content in the interactionally appropriate form" (p. 170). It entails knowing

when, where, how and with whom to speak in the classroom.

The process by which children become appropriate members of their classroom community has been seen as a form of secondary language socialization (Au & Jordan, 1981; Crago, 1991; Duranti and Ochs, 1988; Heath, 1983; Philips, 1983) which can be described using research approaches similar to those used in other language socialization studies. This process often involves the acquisition of new communicative patterns, values, and styles of learning in the classroom (Crago, in press; Duranti & Ochs, 1988). The formulation of a theory of language socialization begins by the careful examination of caregiver-child interactions within a particular culture, often using an ethnographic research method (Erickson, 1987; Heath, 1983; Ochs, 1988; Ochs and Schieffelin, 1986; Schieffelin, 1990). Similarly, the formulation of a theory of classroom competence has been derived from descriptions of the structure of classroom lessons and is based on the examination of communicative interactions between children and their teachers within the school setting (Cazden, 1988; Mehan, 1979; Philips, 1983).

In the following section, those classroom discourse patterns and participant structures that are typically found in mainstream classrooms will be described. This description is based on Mehan's (1979) classic work, Learning Lessons, that examined the structure and organization of lessons in the first grade classroom of a highly recognized and experienced educator, Courtney Cazden. His description was based exclusively on the

teacher-led lesson or recitation. Mehan developed a comprehensive model of mainstream classroom competence derived from the interactions documented in the target classroom. Cazden, in her introduction to his work, recognized the importance of his findings for future examinations of differences across teachers, classrooms and cultures. For this reason, Mehan's work is summarized in some detail below, as it provides a well-developed model of classroom interactions against which the transformations of discourse which have occurred in non-mainstream and Aboriginal classrooms can be illustrated and highlighted. Following this, the development of mainstream classroom competence is discussed in relation to its continuity with home practices.

Mainstream Classroom Competence

Teacher-led lessons are described by Mehan as having both sequential and hierarchical organization. Sequential organization refers to the temporal aspect of lesson structures as they flow from beginning to end, while hierarchical organization refers to the various components which are assembled to make up a lesson. Certain aspects of sequential lesson structure and organization of relevance to the present study are described below.

Sequential Organization of Discourse Structure

The sequential organization of mainstream classroom lessons are said to consist of three phases: an opening, an instructional, and a closing phase. Each phase serves a specific function within the overall organization of the lesson, and is composed of distinctive "participant structures" (Philips, 1983) or "interactional sequences" (Mehan, 1979). This three phase sequence constitutes the socially constructed classroom event known as the lesson.

The Three Phases of Lesson Organization

The opening phase. In the opening phase, teachers and students provide each other with information about what will occur during the instructional phase of the lesson. Physical rearrangement of furniture and participants occurs at this time, and this phase of the lesson is composed primarily of directive and informative interactional sequences. Directives call for participants to prepare for the lesson by taking such action as sharpening pencils or opening books. Informatives consist of information, opinions or ideas passed on to the participants. The opening phase may involve only a brief description of the instructional activity, or it may take the form of an extended monologue by the teacher. Back-channel signals such as eye-contact with the teacher, head nodding, and providing comments ("yeah") are frequently observed during the opening phase of the lesson (Mehan, 1979).

The instructional phase. Mehan describes the instructional

phase as the heart of the lesson, involving the exchange of academic information, opinion, interpretation and meta-process analysis. During this phase of the lesson the teacher's main focus is to elicit particular information from the students. This is accomplished through the use of four different types of elicitations: choice elicitations, product elicitations, process elicitations, and metaprocess elicitations.

In what Mehan calls a "**choice**" elicitation, the respondent is called upon to agree or disagree with a statement provided by the questioner or to select one from a series of options provided by the teacher in the elicitation. "**Product**" elicitations require the respondent to provide a factual response such as a date, a label, or a place name. Opinions or interpretations are elicited through "**process**" elicitations. Responses to the first three elicitation forms thus consist of factual information, opinion or interpretation. "**Metaprocess**" elicitations require the student to reflect on the connections between elicitations and responses and to provide a rule or procedure to explain how to arrive at or to remember a particular answer (Mehan, 1979).

The closing phase. According to Mehan, the closing phase of the lesson summarizes what has been accomplished in the lesson and often contains directives to prepare the students for the next activity. This phase is again comprised primarily of informatives and directives, and is described as a mirror image of the opening phase. Mehan sees the opening and closing phases as "frames" (1979, p. 49) for the elicitation phase which forms

the basis of the lesson. These directive and informative frames are used by the students to distinguish 'lessons' from other ongoing streams of talk and behaviour which occur in the classroom.

Co-occurrence relationships in elicitation sequences

Each of the teacher-initiated elicitation sequences outlined above requires an obligatory reply form, resulting in a "co-occurrence relationship" (Gumperz, 1964) which establishes a symmetry between initiation and reply acts. According to Mehan, the following rule appears to govern interactional sequences in the classroom:

Initiation	**requires**	**Reply**
choice elicitation		choice response
product elicitation		product response
process elicitation		process response
metaprocess elicitation		metaprocess response
informative		acknowledgement
directive		reaction

(Mehan, 1979, p. 50)

The interaction in an instructional sequence initiated through one of the elicitation forms is typically maintained by the teacher until the above symmetry between initiation and response is obtained.

Initiation-Response-Evaluation (IRE) Routines

The result of this symmetry between elicitation and response acts is the "three part instructional sequence" (Mehan, 1979) or the "Initiation-Response-Evaluation (IRE) Routine" (Cazden, 1988), a familiar form of classroom talk for mainstream children. An example comparing conversational and classroom talk taken from

Cazden (1988) illustrates this pervasive classroom discourse structure:

Conversation	**Classroom Talk**
What time is it, Sarah?	What time is it, Sarah?
Half-past two.	Half-past two.
Thanks.	Right.

(Cazden, 1988, p. 30)

IRE sequences in the classroom are typically maintained in one of two ways. In the most common form, the teacher initiates an interaction through use of one of the above elicitation structures. If the response provided follows the proper co-occurrence rule and contains accurate content, the teacher positively evaluates this response, resulting in a tripartite instructional sequence consisting of an initiation, a response and an evaluation. Interactions which do not conform to the co-occurrence relationship tend to result in "extended sequences" (Mehan, 1979) which continue until the expected reply appears. These extended sequences are characterized by the use of prompts, repetitions, or simplifications of the initial elicitation until the correct form of the desired response is provided. Once the desired response is provided, the teacher marks the re-establishment of symmetry in the co-occurrence relationship and the termination of the sequence through a positive evaluation in a similar manner to the straight three part sequence.

The IRE form of discourse is clearly distinguishable as 'classroom talk', and is the most common pattern of mainstream

classroom discourse at all grade levels (Cazden, 1988; Erickson and Mohatt, 1982; Silliman & Wilkinson, 1992). Mehan's (1979) study documented that 53 percent of all teacher-initiated sequences conformed to this pattern. Indeed Cazden (1988, p. 53) called this form of interaction the "default pattern" of classroom instruction, the form used unless deliberate action is taken by the teacher toward an alternative model.

IRE routines typically follow each other rhythmically and with great regularity in teacher-led lessons. Co-occurrence rules bind together initiation and reply acts and serve to tie the initiation-response exchange to the evaluation act. This reflexive relationship suggests an active, cooperative participation on the part of both students and teachers. The evaluation act plays an important role in the negotiation of meaning within an instructional sequence, and is seen to be an essential component of instructional discourse (Cazden, 1988; Mehan, 1979).

Topically-Related Sets

The description of a lesson as a sequence of directives, elicitation-response-evaluation sequences and informatives is not sufficient to capture the overall structure of lessons. Since teachers do not elicit information randomly, elicitation sequences must be organized around topics. Mehan (1979, p. 65) calls these larger organizational units "topically related sets". Topically related sets are composed of a basic sequence in which the discussion is established, followed by a number of IRE

sequences which may contain extended and optional conditional sequences. Any rearrangements or adjustments of the lesson, including changes in instructional material or procedure, re-direction of student attention, or change of focus occur at junctures between topically related sets, but never within them. The instructional phase of the lesson is thus composed of a series of topically related sets which are actively co-constructed by the participants. The various aspects of sequential organization of lesson outlined above mark boundaries within lesson structures which segment the continuous flow of interaction into more discrete units and aid in communication and the interpretation of information in the classroom.

Turn Allocation in the Classroom

While the explanation of the structural organization of classroom lessons demonstrates how the various units of classroom discourse are arranged, it says little about the process by which the orderly progression of these levels of interaction is achieved. According to Mehan's analysis, the structuring of lessons is accomplished in the classroom through the operation of a "turn-allocation machinery" (Mehan, 1979, p. 83). The turn allocation machinery is incorporated into the interactional sequence such that in most cases the teacher-initiated elicitation specifies not only the form of the desired response but also identifies the desired respondent(s), resulting in the establishment of a co-occurrence relationship between nomination

and response format.

According to Mehan, student respondents are generally selected in one of three ways: by individual nomination, by invitation to bid, or by invitation to reply. **Individual nomination** involves the teacher's explicit selection of the next speaker either verbally (by calling the student's name), or non-verbally (by pointing, head nods, or through eye contact). In **invitations to bid**, the teacher invites the children to raise their hands as part of the elicitation act. The **invitation to reply** format allows students to state their knowledge directly without being required to raise their hands or to be nominated for a response. This procedure is generally signalled by the teacher as a sentence completion, a chorus elicitation ("Let's all say XX") or a wh-question form to which the students respond in unison.

The rules involved in turn-taking in the classroom are seldom explicitly formulated or explained. It is only through violations of the co-occurrence relationship between speaker and respondent and the resulting negative evaluation on the part of the teacher that the desired form of the turn-taking mechanism is indicated (Mehan, 1979). Appropriate student action in turn-allocation sequences results in the acceptance of the response and a positive evaluation by the teacher (Mehan, 1979; Silliman & Wilkinson, 1992). Inappropriate action, consisting either of interruptions or replies rather than bids, most often leads to sanctioned or negative evaluations of the action by the teacher,

accompanied by non-acceptance of the response. Changes in context can result in changes in the basic turn allocation procedure within the lesson itself. This calls for a great deal of interpretation on the part of the students, who must analyze the flow of interaction based on subtle, often non-verbal cues and gear their behaviour toward the appropriate procedure for gaining access to the floor in order to actively participate in the interaction.

The interactional procedures described above place the teacher in control of the regulation of all talk which occurs in the teacher-led lesson and help to insure the orderly progression and the maintenance of social order in academic instruction. This regulatory role helps to establish the teacher as the authority and primary conversational partner within the society of the classroom (Cazden, 1988; Mehan, 1979; Philips, 1983).

Student Initiations

It has been estimated that teacher talk comprises two thirds of the total talk which occurs in the classroom (Cazden, 1988). Based on the discussion of the predominance of IRE sequences in the classroom, this finding makes sense. Nevertheless, the student's role in the classroom is not limited solely to responding to responding to teacher elicitations. Students can have an influence on the teacher and the course of the lesson through the contribution of new information to the instructional sequence. The successful introduction of new

information into the lesson is a skill which is highly valued and appreciated by mainstream teachers (Cazden, 1988; Heath, 1983; Mehan, 1979).

According to Mehan (1979), the incorporation of student contributions into the lesson structure involves three specific and relatively complex component skills: getting the floor, holding the floor, and introducing the new information. Gaining access to the floor is an essential requirement for contributing new information to a lesson, however the construction of dialogue in the classroom is organized in such a way that individual contributions cannot be introduced at any point in the lesson. Attempts to insert new information into ongoing sequences of discourse are often felt to disrupt the symmetry of the interaction and are considered intrusions which are generally ignored or rebuffed by the teacher. Students must locate an appropriate boundary in the lesson structure in order for their contributions to be recognized. The appropriate juncture for students to gain access to the floor to contribute new information is after the completion of an IRE sequence or a topically related set. Gaining access to the floor thus involves the recognition and completion of interactional or topical sequences (Mehan, 1979).

According to Mehan's analysis, access to the floor is not sufficient for the incorporation of student's contributions into the lesson. Students must keep the floor by having their contributions picked up by other participants, usually by the

teacher. In order for this to occur, student initiations must be relevant to the previous discussion, they must introduce new information to the lesson, and they must be interesting or original. Integration of these three components is essential to the successful introduction of student-initiated topics into the lesson according to Mehan's (1979) analysis.

Aspects of Mainstream Classroom Competence

In order to be judged as competent members of mainstream classroom culture, students must master academic subject matter, employ the response form consistent with the teacher's elicitation act in order to display this knowledge, and interpret implicit classroom rules in order to provide interactionally-appropriate speech and behaviour within varying classroom situations (Mehan, 1979). The integration of student-initiated topics into ongoing lessons depends on the student's recognition of appropriate junctures in discourse, the selection of a relevant topic, and the originality of the contribution.

The development of mainstream classroom competence thus requires an understanding of the complex integration of form and content in classroom interactions (Cazden, 1983; Mehan, 1979). Interactions between teachers and students proceed smoothly when the accurate form of a response is integrated successfully with appropriate content. Misinterpretations on any of these interactional planes can result in inappropriate social displays, lack of access to the floor, and probable negative sanctions or

evaluations on the part of the teacher. These negative evaluations often result from inappropriate classroom behaviour which is based on a lack of classroom competence (Cazden, 1988; Mehan, 1979; Silliman & Wilkinson, 1992).

Classroom rules of discourse and procedure are tacit (Cazden, 1988; Mehan, 1979). Normative rules regarding turn-taking, access to the floor, and co-occurrence relationships are rarely communicated directly by the teacher. Students must be able to infer and abstract appropriate ways of engaging in classroom discourse within the context of constantly changing classroom situations. The complex skills inherent to the development of classroom competence therefore require considerable time and experience to develop and perfect. Mehan's (1979) study showed that it was only toward the end of first grade that the children involved in his research became adept at integrating both interactional and academic skills. This is a significant finding, since many of these children already had some experience through their home socialization practices with the organization of discourse and interaction found in the classroom.

The Continuity between Home and School Discourse for Mainstream Children

Successful participation in mainstream classroom interactions and the promotion of learning in classroom communicative exchanges depends to some degree on the prior

acquisition of similar functions and uses of language in the home environment (Heath, 1983; 1986b). Early language socialization studies of mainstream caregiver-child interactions have documented that from a very young age mainstream children are engaged in many labelling routines and are asked many test questions by their caregivers (Bloom, Rocissano & Hood, 1876; Brinton and Fujiki, 1982; Bruner, 1981; Ninio & Bruner, 1978; Snow, 1977). These routines typically utilize three of the four elicitation strategies (choice, product, and process) which are also found in classroom elicitation sequences (Heath, 1982b; 1986a; Mehan, 1979). Through caregiver's usage of 'scaffolding' dialogue, children as young as two years of age become familiarized with IRE-type sequences (Heath, 1986a). Experience with these forms of discourse familiarize children with the rules of co-occurrence relationships and prepare them for the interactive sequences of discourse which will later be extended into classroom discourse structures (Heath, 1982b, 1983, 1986a; Iglesias, 1985; Mehan, 1979).

From birth, mainstream children are brought up to act as communicative partners with adults (Kaye & Charney, 1980; Snow, 1977). Talkativeness and the verbal display of knowledge are highly valued and encouraged in mainstream homes (Bruner, 1981; Cole, 1992; Kaye & Charney, 1980; Snow, 1977, 1984; Snow, Perlmann & Nathan, 1987). Later, under appropriate circumstances, these roles are also encouraged at school (Heath, 1982a, 1983; Philips, 1983; Scollon & Scollon, 1981). In her

(1982b) study, Heath reported that when mainstream children reached school age, they often found themselves in familiar communicative positions in relation to teachers as well as using familiar types of discourse patterns in the classroom:

> By the time they enter school, they have a continuous experience as information givers; they have learned how to perform in those interactions that surround literate sources throughout school...They have learned to listen, waiting for the appropriate cue that signals it is their turn to show off knowledge (Heath, 1982b, p. 104).

In addition, mainstream parents often encourage children to recount experiences and stories in a manner which is congruent to that which will later be expected in the classroom (Cazden, 1988; Heath, 1983, 1986; Michaels, 1981, 1986; Scollon & Scollon, 1981). Studies examining book reading sessions between mainstream parents and children demonstrate the specific skills which are acquired in these interactions which can later be capitalized upon in school activities involving the development of literacy skills (Heath, 1982a, 1982b, 1986). These literacy events are seen as forming the basis of patterns of behaviour toward written materials which reoccur throughout the life of mainstream children and adults and which are central to school success:

> Close analyses of how mainstream school-oriented children come to learn to take from books at home suggest that such children learn not only how to take meaning from books, but also how to talk about it. In doing the latter, they repeatedly practice routines that parallel those of classroom interaction (Heath, 1982b, p. 104).

From their home interactions, children thus learn the rules

of discourse in operation within their speech community. Continuities between home and school ways of talking are seen as helpful in easing the transition from the home to the school forms of discourse and interaction (Alvarez, in press; Cazden, 1983, 1988; Heath, 1983, 1986, Iglesias, 1985; Philips, 1983). Parents often make assumptions regarding the communicative and academic skills which their children will need to be successful in school (Blount, 1982; Erickson & Iglesias, 1984; Iglesias, 1985). Teachers often assume that from their home interactions children have acquired some competence in the use of language to label and describe objects and events, to recount stories and experiences, to follow directions, to maintain social interactions, to obtain information, and to link and integrate ideas in innovative ways (Heath, 1983, 1986a; Mehan, 1979). Prior familiarity with these forms of language used in classroom exchanges allows more attention to be paid to the content of such exchanges, the transmission of which is the basic purpose of schooling (Cazden, 1988; Erickson, 1986; Heath, 1986a, 1986b; Mehan, 1973; Silliman & Wilkinson, 1992).

Issues of Mainstream Classroom Competence

While it is clear that home and school discourse patterns are not the same, mainstream classroom interactions can be seen as extensions of certain practices used in mainstream homes which aid to prepare children for success in classroom interactions

(Heath, 1986a; Iglesias, 1985; Silliman & Wilkinson, 1992; Wells, 1986). In a similar manner, the model of mainstream classroom competence based on the integration of appropriate interactional and academic skills within the culture of the classroom can be interpreted as an extension and reflection of the wider view of the socially appropriate speech and interaction patterns which constitute communicative competence for children in mainstream society. Cultural values emphasizing independent work habits, scholastic achievement, and competition that are promoted in the mainstream classroom reflect those in operation in wider mainstream society (Heath, 1983; Mehan, 1979). Similarities between home and school thus exist both in the status and role of the child within mainstream society as well as in the promotion of mainstream cultural values.

While the forms and functions of language used in classroom discourse are generally of a familiar pattern for mainstream children, they do not necessarily exist in non-mainstream culture socialization practices. The results of language socialization studies which have been conducted in numerous cultural communities have brought into question the universality of some of the psycholinguistic notions regarding mother-child interactions described above for mainstream children (Boggs, 1985; Blount, 1972; Crago, 1988; Demuth, 1986; Heath, 1983; Ochs, 1988; Ochs and Schieffelin, 1984; Philips, 1983; Schieffelin, 1979; Scollon & Scollon, 1981; Watson-Gegeo & Gegeo, 1986). These cross-linguistic studies have demonstrated that many

cultures differ substantially from the mainstream model in the ways in which they view the place of children within their society and, correspondingly, in the ways in which children are socialized to use language to take their place as competent members of their culture. The following chapter will examine the literature on the effects of mainstream classroom interaction patterns on the classroom competence of non-mainstream children who have been socialized through their home communicative interactions to behave in ways which differ substantially from the mainstream model.

Chapter 3

ABORIGINAL CHILDREN IN MAINSTREAM CLASSROOMS: THE EFFECTS OF HOME DISCOURSE PATTERNS ON CLASSROOM INTERACTIONS

This chapter begins with a discussion of two theories proposed in the literature to account for the educational difficulties non-mainstream children frequently face in classrooms organized around mainstream communicative interactions and cultural values. It goes on to describe the language socialization experience of Aboriginal children in the home and examines recent literature on the education of Aboriginal children in classrooms taught by non-Aboriginal teachers. Finally, the implications of these perspectives with regard to their adaptations in educational paradigms designed around the notion of culturally-responsive pedagogy for non-mainstream children are considered.

Two Theoretical Explanations for Educational Difficulties among Non-mainstream Children

The central concepts of variation in socialization and communicative practices across cultures have been recognized for some time. Their implications for explanations of educational difficulties experienced by non-mainstream children and for alternative models of classroom competence based on culturally congruous communication practices have only recently been

appreciated (Erickson, 1979, 1986, 1987; Erickson and Mohatt, 1982; Heath, 1982a, 1982b, 1983; Philips, 1983; Spindler and Spindler, 1987; Trueba, 1987a; Wolcott, 1976). The application of ethnographic methodology to the investigation of communicative interaction and discourse patterns in cross-cultural education has led researchers to propose two theoretical explanations for the difficulties experienced by minority children enrolled in mainstream classrooms. The first of these theories, originally outlined by Erickson (1986), is referred to as cultural discontinuity theory. This theory proposes that differences in communication and socialization patterns between home and school may account for some of the difficulties non-mainstream students encounter in classrooms that are structured around majority culture values and communicative practices (Au & Jordan, 1981; Alvarez, Shannon, & Velasquez, 1989; Boggs, 1985; Diaz, Moll & Mehan, 1986; Erickson, 1986, 1987; Heath, 1983, 1991; Trueba, 1988; Weisner, Gallimore, & Jordan, 1988). The second theory, known as caste theory and represented by the work of Ogbu (1978, 1982, 1987) proposes that minority children's educational difficulties stem from a collective socio-cultural identity that is expressed by certain minority groups in terms of an oppositional culture which rejects the values and practices of the dominant group and consequently frequently results in a 'folk model of failure'. Both of these theories which have been developed to address issues of minority school failure will be discussed in turn.

Cultural Discontinuity Theory

Literature examining home-school discontinuities across various cultural communities is extensive, and includes many minority groups such as Mexicanos (Eisenberg, 1986; Alvarez, in press; Alvarez, Shannon, & Velasquez, 1989; Delgado-Gaitan, 1988) Hispanics (Suarez-Orosco, 1988; Walker, 1988), Chinese (Cheng, 1988; Wong Fillmore, 1991), Black and White Appalachians (Heath, 1983, 1990), Native Hawaiians (Au, 1980; Au & Jordan, 1981; Boggs, 1985; Tharp & Gallimore, 1988; Tharp, Jordan, Speidel, Hu Pei Au, Klein, Calkins, Sloat, & Gallimore, 1984; Weisner, Gallimore & Jordan, 1988) Australian Aborigines (Malcom, 1982), and Native Americans (Basso, 1972; Crago, 1992; Philips, 1983; Erickson & Mohatt, 1982; Scollon & Scollon, 1981). Many of these studies have focused on differences in cultural values regarding communicative behaviour including such aspects as eye gaze patterns, politeness forms, avoidance of competition, loss of face, individualism, and the maintenance of appropriate interactional hierarchies within differing cultural communities. These studies have documented how culturally-distinctive speech or narrative styles and differences in experience with specific aspects of classroom communicative competence such as turn-taking, back-channel signalling, initiations, gaining the floor for speaking, and regulation of talk have created conflict in the classroom and have led to differential treatment of non-mainstream students by their teachers (Boggs, 1985; Crago, 1990; Deyhle, 1988; Diaz, Moll & Mehan, 1986; Erickson & Mohatt, 1982;

Iglesias, 1985; Philips, 1983; Scollon and Scollon, 1981; Tharp et al, 1984; Trueba, 1988). Such communicative differences have been proposed as having the potential to disrupt the smooth functioning of classroom interactions, leading to potentially serious reciprocal misunderstandings in communication between teachers and students. Because of the teacher's position of authority in the classroom, however, the result of such breakdowns in classroom communicative interactions has typically led to an interpretation of deficiency or a penalization of non-mainstream students (Boggs, 1985; Heath, 1983; Philips, 1983; Tharp et al, 1984; Trueba, 1987b).

Caste Theory as an Explanation of Minority School Failure

A number of educational ethnographers have taken issue with the 'cultural difference' or the 'context-specific' approach to theories of minority school failure (Foley, 1991; McDermott, 1974, 1977; Ogbu, 1978, 1982, 1987; Suarez-Orozco, 1988). They have argued that studies contrasting home and school patterns of discourse and interaction alone do not provide sufficient explanations of why some ethnic groups fail academically and others do not. While such studies are seen to have been valuable in demonstrating how schools perpetuate racial inequalities, these "micro-ethnographies" (Ogbu, 1987) of classroom interaction have been criticized for their decontextualized accounts of classroom interactions and their lack of historical and ecological content. In an attempt to deal with the perceived

limitations of the cultural difference theory, Ogbu (1978, 1982, 1987) has taken a more 'macro-ethnographic' approach in his development of a 'cultural-ecological' explanation for minority school failure which he has called the caste theory.

Ogbu has proposed that it is only under certain historical conditions that cultural differences between the home and the school culture become salient enough to cause negative effects on school performance. A central notion in caste theory is the differentiation of racial and ethnic groups into voluntary and involuntary minorities on the basis of their assimilation experience within the majority culture. Voluntary minorities are those who have chosen to immigrate to a new country in search of better educational and employment opportunities or greater political freedom. These voluntary minorities, which include Chinese, Japanese, Punjabi, West Indian and Central American immigrants, have positive and optimistic perceptions of their future opportunities and see their new country as a place of hope and possibility which stands in great contrast to their country of origin. They have no pre-conceived notions regarding school failure, and are optimistic about the future academic and occupational success of their children. While these cultural groups often experience racism and adjustment difficulties due to linguistic and cultural differences in their new country, they do not demonstrate the prolonged and disproportionate school failure of the so called involuntary minorities.

According to Ogbu, involuntary or caste-like minorities,

including African Americans, Mexican Americans, and Native Americans, became incorporated into society involuntarily through conquest, slavery, or colonization and have since been relegated to menial status within the dominant culture. These minorities have had a history of greater hostility in race relations than voluntary minorities. Their negative assimilation experiences have resulted in folk models of negative psychological adaptation and pessimism regarding future educational and occupational opportunities. As an extension of this folk model of failure, and in order to survive in what they perceive to be a hostile society, caste-like minorities have developed a collective socio-cultural identity which is often expressed in terms of an oppositional culture to the dominant group. Through what Ogbu (1982) has called a 'cultural inversion mechanism', dominant culture behaviours, ways of talking, and symbols of success are turned into cultural boundaries, symbols of 'selling out' to mainstream values and practices which are rejected as inappropriate for the caste-like group. This cultural inversion mechanism is seen to stem from a loss of primary or 'traditional' cultural forms and practices which have remained intact in voluntary minority groups. Cultural differences in speech style, which are maintained as symbols of cultural distinctiveness, become salient aspects of the oppositional culture. According to Ogbu, it is precisely this struggle to preserve ethnic culture and identity which simultaneously dooms caste-like minorities to academic failure.

Ogbu's caste theory explanation of minority school failure emphasizes important historical, cultural, economical, and sociological factors which have a significant effect on the school achievement of minority populations. An important offshoot of the continuing debate over "macro" versus "micro" ethnography in the educational literature is seen in the inclusion of more historical, contextualized information in recent micro-ethnographic examinations of discontinuity issues (Foley, 1991; Heath, 1990; Lipka, 1992). Ogbu's theory describes a group of people motivated by strong emotions regarding their adaptations to assimilation experience and a deep collective identity. While Ogbu's caste theory is described by some as being a more powerful, universal explanation for minority school failure (Foley, 1991; Suarez-Orozco, 1988), it has been criticized on the grounds that the distinction between voluntary and involuntary minorities may be an idealization and an overgeneralization of the assimilation experience of minority groups (Foley, 1991).

Trueba (1987b) has outlined a number of important criticisms of the caste theory explanation of minority school failure. He stressed that it was unclear whether caste-like status was a personal or a psychological attribute, and, if it were rooted in historical and economic forces which went beyond individual experience, whether it was permanent and irreversible. He also pointed out that questions arose regarding comparability both within and across the so-called caste-like groups. However,

Trueba's strongest criticism of this theory of minority school failure was that it denied the academic success and mobility of many so called caste-like minorities in response to well planned and culturally-appropriate educational adaptations. According to Trueba (1987b, 1988), Ogbu's perspective, based on the notion that current behaviour can be determined by historical experiences far removed from present life leaves little room for educators to make any impact on the pattern of underachievement exhibited by many minority children. While the academic difficulties among minorities may appear enormous and pervasive, the successes of individuals, families and communities cannot be denied.

The Language Socialization of Aboriginal Children

A number of authors including Erickson and Mohatt (1982), Philips (1983), and Scollon and Scollon (1981) have argued that problems of communication between Aboriginal and mainstream English speakers may stem from basic differences in the organization of discourse structure between these two groups, which lead to mutual misinterpretations of meaning and interaction in discourse. These authors describe communicative interactions in a number of Aboriginal societies including the Odawa of Northern Ontario (Erickson & Mohatt, 1982), the Athabascans of Alberta (Scollon and Scollon, 1981) and the Warm Springs Indians of Oregon (Philips, 1983). The description of

communicative interactions in Aboriginal communities which follows is a composite of these authors' observations.

Within the communicative interactions of these Aboriginal groups, economy of speech embedded within a slow, well-formulated speech style appears to be highly valued. The reluctance to display individual accomplishments and qualities to others in conversation or to speak badly of another's luck or situation, as well as indirectness, a high degree of respect for individuality and face, and an unwillingness to speak of the future are all seen as characteristic of Aboriginal conversational patterns.

Social relations between participants determine to a great extent which member of the conversation takes the dominant and which takes the subordinate role, while a set of specific hierarchical rules appear to regulate appropriate interactions between elders and children. Verbal interactions are typically focused on the general audience and do not tend to spotlight individual participants. Aboriginal communicative interactions often utilize non-verbal signals for obtaining the floor, and averted eye gaze in discussion. Silence, or the absence of talk on the part of the listener, is interpreted as a sign of attention, and listeners do not typically engage in non-verbal back channel signalling such as head nods or eye and body movements to indicate that they are following the conversation.

Conversational topics are not typically controlled by any one speaker, and adjacent turns in a conversation often involve less syntactic inter-dependence than those of mainstream

interactions. Pauses between turns are often long, and do not necessarily indicate that the speaker has given up the floor. Questions do not require immediate responses, and may be returned to later in the conversation without comment. Children are not typically encouraged to fulfil speaking roles in interactions with adults, and tend instead to focus their verbal interactions on the peer group. The principles of discipline in operation in many Aboriginal societies are based on group and not individual responsibility for transgressions, and individual discipline is provided outside of the public arena.

Sources of Educational Discontinuities for Aboriginal Children

The speech style outlined above for many Aboriginal groups appears to provide a direct contrast to many of the interactional skills required for success in mainstream classrooms, as discussed in the previous chapter. The studies outlined in this section will document the classroom interactions that occur when Aboriginal children who have been socialized in accordance with the speech style described in the section above for Aboriginal communities are placed into educational situations where the mainstream model of classroom competence is in effect. The authors of these studies argue that the difficulties experienced by Aboriginal children in classroom interactions with mainstream teachers stem primarily from incompatibilities between differing systems of regulating communication between teachers and students.

The findings outlined in this section are based on the only studies of classroom interactions that have examined the classroom interactions of North American Aboriginal children in the classrooms of mainstream teachers. The first of these is a book entitled The Invisible Culture by Susan Philips (1983). Philips examined what she called "participant structures" in local community interactions in order to explain the classroom behaviour of a two groups of Indian children on the Warm Springs Indian Reserve in Oregon. This ethnographic study documented how communicative misunderstandings affected the classroom performance of Native children, and argued that differences in the organization of verbal interactions was what caused the Aboriginal students to have difficulty in comprehending and learning the information conveyed in the classroom through typical mainstream discourse patterns.

In an examination of interaction and discourse patterns used by Athabascan Indians of Alberta, Scollon and Scollon (1981) illustrated how differences in discourse style formed the basis of miscommunication and misunderstanding between Athabascan children and English-speaking teachers in the classroom. Erickson and Mohatt (1982) examined the social organization of two classrooms of Aboriginal students through a comparison of the classroom interactions of one Aboriginal and one non-Aboriginal teacher. Social relationships, participant structures and leadership roles were carefully documented across the two classrooms. Global differences in the relative amount of time

spent on various classroom activities, as well as more subtle differences in pace and sequencing pointed to a significant difference in teaching style between the two teachers. Observations regarding the non-Aboriginal teacher from Erickson and Mohatt's (1982) study will be included in this section, while those regarding the Aboriginal teacher will be described in the next chapter. The discussion of the classroom interactions documented by these authors will be organized around three basic sources of discontinuity: the organization of classroom conversations, the role of the teacher, and peer interactions.

The Organization of Classroom Conversations

The three phases of lesson organization. The lessons of non-Aboriginal teachers generally began by the focusing of student attention on the activity through an extensive monologue by the teacher once students were assembled in the proper location by means of frequently repeated directives. In the opening phase, the non-Native teacher in Erickson and Mohatt's (1982) study tended to issue directives to single individuals from across the room, demonstrating the exercising of overt control over the public arena through the 'spotlighting' of individual students. The instructional phase of the lesson in the classroom of the non-Native teachers revolved around typical IRE sequences, with turns typically allocated through the individual nomination or invitation to bid procedures. These sequences were delivered from a position relatively removed from

the students, at a quick pace, and involved direct evaluation of student's responses. This established the typical rhythmic organization of the lesson described in the chapter on mainstream classroom interactions in which the teacher maintains control of the talk throughout the lesson. Frequent student initiations were seen as interfering with the teacher's agenda and were ignored unless they were well timed within the organization of the activity, in which case they were incorporated into the classroom dialogue. Emphasis was placed on teacher-control of activities, using teacher directives to focus the attention of the group. The teacher often called out management directives intended for individual students into the public arena. The overall impression was one of business and activity.

Student responses to teacher-initiated dialogue. Philips (1983) observed that the Warm Springs students made less of an effort than their non-Native peers to gain the floor in classroom interactions, and rarely selected themselves for teacher attention by raising their hands to bid for turns. They did not compete with others to gain the floor in interactions and did not frequently utilize the classroom interactional framework in order to display their knowledge or academic achievement. As pointed out in the chapter on mainstream classroom interactions, those students who respond quickly and more frequently to teacher-initiated questions are often judged as more capable and competent by the teacher. This failure to respond to the teacher's questions cannot be automatically interpreted as a lack

of comprehension of subject material, although this was the usual inference made by the non-Native teachers in the Philips (1983) study. The drawing of attention to oneself in the display of academic knowledge through attempts to gain the floor was interpreted by Philips as constituting an inappropriate and unfamiliar situation for Aboriginal students, a situation which required them to behave in ways which conflicted with their home rules of appropriate social behaviour.

Those responses which the students did make were more frequently judged as inappropriate or ignored by the teacher than the responses provided by their non-Native peers. Many of the students' responses and questions occurred at incorrect boundaries in the lesson structure, times when the floor was not open to student responses. The younger Indian students often violated the turn-allocation machinery in operation in the classroom by calling out answers to questions addressed to others or by interjecting comments into the stream of the teacher-student dialogue, but often failed to respond when called upon individually. While the older students demonstrated an increased skill in the management of classroom communication, they did not attempt to exert any control over teacher-student interactions by initiating topics or volunteering information, an indication of their lack of involvement in classroom interactions. The younger Aboriginal children did not appear to be aware of the rules regarding co-occurrence relationships and nomination format in effect in the classroom.

Student listening behaviour. Philips (1983) commented on the distinctive listening behaviour of the Indian students as another source of discontinuity. She noted that the Indian students did not look directly at the teacher as much as the non-Indian students and also provided less back-channel signalling and interjections during the lessons. All of these forms of signalling aid in contributing to the impression of attentiveness in mainstream classrooms, and the lack of such signals on the part of the Aboriginal children was often judged as constituting inattentiveness by the teacher.

The Role of the Teacher

Authoritarianism and control. Both Philips and Scollon and Scollon commented on the role of the teacher within the classroom as a source of discontinuity for Aboriginal children. Within these classrooms, the orientation was toward the teacher as the single authority and recipient of communication. The teacher controlled the regulation of turns in conversation, calling upon students to display their academic knowledge within the public arena. Scollon and Scollon (1981) noted that in their home interactions Athabascan children tended to take a subordinate role in conversational exchanges with adults and were not expected to display their knowledge or abilities but instead were seen as spectators in such exchanges. The role of exhibiting and displaying information and abilities usually fell to the adults who took the superordinate role in conversations. Within the classroom, these roles were reversed. Teachers expected the

children to display their abilities, while at the same time they expected to maintain the dominant role in the interaction. The children expected the teacher to be the performer while they remained silent spectators. Placing children in the performer role caused them to become the dominant members of the exchange, a role to which they were unaccustomed in their daily lives.

Turn allocation format and evaluation. The non-Aboriginal teachers frequently singled out individual students to answer teacher elicitations and to be disciplined in front of the peer group. However, the teachers often failed to understand or evaluate the Aboriginal children's responses as a result of what appeared to be confusions on the part of both the students and the teacher as to what the other was trying to say. The result of this uncertainty was that the students were frequently unable to respond to teacher elicitations correctly by combining appropriate form and content. While the Native students often attempted to resolve their confusion through one-to-one encounters with the teacher rather than giving expression to their uncertainty in front of the group, the teachers tended to limit time spent with individuals, ignoring student questions in order to expose the whole group to additional curriculum material. This orientation toward the teacher as the single authority and recipient of communication as well as the loss of face associated with correction and evaluation within the public arena was felt to have the potential to result in conflict between the community socialization experience and the classroom

socialization patterns (Philips, 1983).

Peer Interactions

Class behaviour. Aboriginal students in the Philips study tended to engage more frequently in peer interactions than the Anglo children in the classroom, often utilizing both the visual and the tactile channels in peer communications. There was a great deal of physical contact, joking, imitating, teasing and rough housing involved in these interactions, especially among the younger students. While the older students appeared to be more settled in the classroom, they continued to signal each other non-verbally across the classroom space and engaged in verbal teasing and joking. These sorts of activities were frequently censored by the teacher and were judged as disruptive and inattentive behaviours. Differences in community and classroom standards of appropriate physical and verbal behaviours as well as a lack of familiarity with classroom patterns were felt to have allowed the students to become overly excited by a lack of opportunity for physical activity combined with an excess of out-of-control verbal activity in the classroom.

The rejection of authority. Philips noted that some of the classroom behaviour of the Indian students may have constituted a deliberate rejection of the teacher's authority in the classroom. A similar conclusion was reached by Kleinfeld in her (1972) examination of characteristics distinguishing effective versus ineffective teachers of Alaskan Aboriginal students. Kleinfeld's study defined teacher effectiveness in terms of the intellectual

level of student's verbal participation in the work of classroom interactions. This criterion was selected due to an observed tendency of Aboriginal children to respond to stressful situations by withdrawing into silence. Indeed, she commented that classroom silence could be interpreted as a passive strategy of resistance and aggression against the dominant and authoritarian role of the teacher in the classroom which was interpreted by the students as an expression of bossiness and hostility. Kleinfeld concluded that an appropriate interpersonal style which showed a concern and appreciation for cultural values such as harmony and respect for individuality and the face of the students, values which she claimed took precedence over achievement in Native societies, might be a necessary condition for learning among Native children.

Reducing Sources of Discontinuity in Classroom Conversations

Differences in fundamental principles regarding the social organization of discourse thus have significant implications for the structure of the face-to-face interactions which occur in the classroom. Over the course of the year these differences led the non-Native teacher observed in the Erickson and Mohatt (1982) study to re-organize and adapt the structure of his classroom interactions to reflect more closely those found in Odawan social interactions. This teacher noted that reducing the amount of individual evaluation and nomination of students through modifications in the overall structure of elicitation sequences

as well as through incorporating individual time within the framework of the lesson to allow students to clarify information outside of the public arena was a culturally responsive approach to pedagogy which allowed him to adapt his teaching methods to reflect more closely the familiar structure of interactions found in the wider community.

Philips' (1982) study documented that when the participant structures in the classrooms of mainstream teachers were altered to resemble more closely those in operation within the Warm Springs community, the Indian students participated more easily and often excelled at certain activities. When the classroom focus was shifted from whole class to small group activities and especially to group projects, the Indian students participated actively and enthusiastically, completing the assigned tasks without intervention from the teacher and often turning the activity into a friendly competition between groups. Philips concluded that students participated more actively in those types of participant structures which were more compatible with Warm Spring's ways of organizing communicative interactions, as they allowed the students to capitalize on more familiar communicative patterns and experiences. As Erickson and Mohatt (1982) pointed out:

> It may well be that by discovering the small differences in social relations which make a big difference in the interactional ways children engage the content of the school curriculum, anthropologists of education can make practical contributions to the improvement of minority children's school achievement and to the improvement of the quality of everyday school life for such children and their teachers. Making small changes in everyday classroom participation

> structures may be one of the means by which a more culturally responsive pedagogy can be developed (p. 170).

The effects of adapting school participation structures to reflect a more culturally responsive pedagogy in the education of non-mainstream children are specifically addressed in the section that follows.

Culturally Responsive Pedagogy

Cazden (1988) has argued that simply documenting cultural influences on communicative interactions in the classroom results in a form of "ethnographic monitoring" (p.69) which, unless it is utilized to influence classroom change, does little more than report on the status quo. While the authors of many examinations of cross-cultural classroom interactions agree that the creative use of cultural developmental differences in teaching, such as incorporating preferred participant structures and capitalizing on home interaction patterns in the transmission of content material are likely to have a beneficial effect on the learning process as a whole, they have not typically been in a position to effect wide spread changes in educational policy which directly influence and affect the education of non-mainstream children. Issues related to the empowerment of non-mainstream students through the reorganization of educational policy to reduce home-school discontinuities have been discussed at length in the literature on intercultural education (Au & Jordan, 1981; Cummins, 1989; Heath, 1983; Gal, 1989, Trueba & Delgado-Gaitan, 1988; Tharp et al., 1984), yet few examples of the adaptation of

Chapter 4

THE IMPACT OF ABORIGINAL TEACHERS: TRANSFORMING CLASSROOM INTERACTIONS

Briggs (1988) has pointed out that even when a population adopts the behaviour of a dominant society, traditional behaviours and assumptions may survive below the surface. This perspective is implicit in the transformational approach to the examination of Aboriginal classroom interactions which is the subject of this chapter. Traditional Aboriginal communicative patterns have survived and have been incorporated into the classroom interactions of two Aboriginal teachers (Erickson & Mohatt, 1982; Lipka, 1991). These interactions form the focus of this chapter.

Erickson and Mohatt (1982) documented and compared the interactions of an Aboriginal and a mainstream teacher in an Odawan community, outlining areas in which these teachers differed in their organization of classroom communicative exchanges, while Lipka (1991) conducted a case study of a Yu'pik teacher in which he examined the organization of cultural and social relationships during an art lesson in a classroom in southwest Alaska. While neither of these studies have specifically addressed issues of transformation in Aboriginal classroom conversations, their findings are nevertheless extremely suggestive and serve as a useful guide in pointing

towards aspects of Aboriginal classroom interactions where such transformations may have taken place. The descriptions of their classroom findings will be discussed and organized around the topics used in the previous chapter to illustrate sources of discontinuity in the interactions of Aboriginal children in classrooms with non-Aboriginal teachers. However, in this chapter these topics will serve to focus on those areas where the maintenance and incorporation of cultural values in communication between Aboriginal teachers and students have influenced the organization of classroom interactions.

Conversations in Aboriginal Classrooms

Sources of Continuity

The Organization of Classroom Conversations

The three phases of lesson organization. Erickson and Mohatt (1982) described the classroom interactions of the Aboriginal teacher in their study in terms of a rhythmic combination of speech and movement which was used to coordinate lesson activity and involved the combination of a slow tempo, pauses, and numerous silent moments. Within the Aboriginal classrooms documented by Erickson and Mohatt and Lipka, teachers began the opening phase of their lessons by stopping at individual work spaces and giving directions quietly, in close proximity to individual student and without the spotlighting effect typically found in the mainstream classrooms. The teacher

in Erickson and Mohatt's (1982) study waited silently for students to assemble, and then began by focusing attention on the activity either non-verbally or by using a short phrase. The teacher in Lipka's case study seated himself on the floor and invited the students to do the same, using suggestions rather than issuing directives. Some of the students moved to the floor and others remained at their desks. The teacher then began demonstrating and explaining the desired procedure while the students gathered around him to observe. The opening phase of this lesson consisted of six directives issued by the teacher relating to materials needed for the lesson. No introduction to the lesson or its content were provided, and a number of the directives were issued before all the members of the class were present in the room.

To begin the instructional phase, the teacher in Lipka's case study reminded the students of a story told in class the previous day. The dialogue continued with the teacher directing questions to the group as a whole, with no attempt to single out individual members. The girls in the class did not participate in this part of the lesson and were not prompted to do so. The organization of the instructional phase of the lesson in the classroom of the Aboriginal teacher in the Erickson and Mohatt (1982) study was characterized by a distinction between "on the record" and "off the record" phases. Comments and directives were addressed to individual children only during "off the record" times, and were privatized by the close proximity of the

teacher to the child as well as the use of a low tone of voice, thus avoiding spotlighting any individual within the group. The teacher did not call out to individual students, nor did the students call out to the teacher in the public domain. Instead, teachers tended to circulate frequently around the room and often responded to student's non-verbal requests for help, incorporating the giving of individual attention into other aspects of formal teaching and classroom management such as handing out papers and working in small groups. Pause times between elicitations in Erickson and Mohatt's study were long (approximately 3 seconds as compared to .5 seconds in typical mainstream interactions), and major transitions between activities were often signalled and initiated silently.

The Role of the Teacher

Authoritarianism and control. The overt social control of behaviour common to mainstream classroom interactions did not occur in the classrooms taught by either of the Native teachers. Instead, control in these classrooms was distributed and shared by both teacher and students. The management of interactions was conducted not through authoritarian means but by paying close attention to the rhythms of student activity, using subtle cues to determine when a change in activity was indicated. In Lipka's case study the students had the option to comply or not comply with various procedural directives such as sitting on the floor. The task itself, however, remained non-negotiable although the teacher made no attempt to control or interfere in the talk of

the students. In both these classrooms, social control was maintained by private, intimate contact with the students rather than through direct, repetitive commands directed at individuals.

Turn allocation format and evaluation. All elicitations of content material in both Aboriginal classrooms were formulated in the invitation to reply format. The discourse within the lesson described by Lipka was not organized around IRE sequences. However, the tripartite pattern commonly found in IRE instructional sequences was frequently maintained. In particular, the evaluative aspect of the IRE sequence took a different form which on occasion entailed the teacher responding affirmatively to incorrect responses offered by the students. In these situations the teacher then made a correct statement which he terminated with a request for acknowledgment by the students. Neither of the teachers overtly corrected or praised students' replies, and avoided spotlighting individual performances through explicit evaluations in the public arena. The correctness of the group response was often implicitly demonstrated through the continuation of the interaction. The teacher in Lipka's case study also often acknowledged student responses through repetition, with any additions or changes to student responses typically accompanied by the teacher seeking acknowledgement from the class.

Peer Interactions

Throughout the lesson described in Lipka's case study there was much peer interaction and a great deal of movement from place

to place as students circulated to observe the teacher and their peers working at desks and on the floor. Throughout the verbal part of the lesson the students interrupted each other frequently, answering the teacher in an excited tone and demonstrating with their hands various procedures requested by the teacher's elicitations. Students chose who they attended to and when they attended. They did not raise their hands to obtain permission to leave their seats, and they worked at their own pace on the task at hand. Students benefitted from both peer and teacher models in the completion of activities. The teachers made no attempt to dominate or control the peer interactions which formed an important part of the lesson.

A Cultural Interpretation of Aboriginal Classroom Interactions

The lessons conducted by both the Aboriginal teachers observed in these two studies revolved around the parsimonious use of words, extended silences on the part of the teacher, and a respect for the individual rights of students in the methods utilized to obtain resources and assistance in the classroom. The teachers tended to model behaviour or procedures without verbal introductions, encouraging the students to rely on observation rather than verbal instruction. The teacher in Lipka's case study joined in the activity with his students and made no attempt to control the behaviour of the other participants through requiring the raising of hands or requesting

permission to move to another seat, while the teacher in the Erickson and Mohatt study distinguished between on and off the record times in order to privatize comments and corrections for individual students. These ways of approaching social relations and social control in the classroom can be interpreted as reinforcing the cultural values of non-interference, the maintenance of face, the role of silence, solidarity and respect for individual rights which have been discussed in relation to many Native cultural groups (Basso, 1970; Briggs, 1970; Crago, 1988; Erickson and Mohatt, 1982; Philips, 1983; Scollon & Scollon, 1981).

The instructional strategies utilized by both the Aboriginal teachers served to de-focus the role of the teacher as the central of attention in the classroom, and instead emphasized peer attentiveness and the responsibility of the group in sharing the instructional load. In his discussion of the adaptations made to tripartite IRE sequences, Lipka maintained that this discourse pattern constituted a compromise between mainstream instructional discourse patterns and Yup'ik cultural norms, whereby the direct correction of others is considered inappropriate. He felt that the repetitions involved in this form of discourse were an affirmation of culture rather than a series of rhetorical questions.

Conclusion:
The Transformation of Classroom Interactions

Differences in teaching style and lesson organization between the Native and non-Native teachers outlined in this and the previous chapter demonstrate that, while explicit transmission of knowledge is the main focus of classroom interactions, the types of communicative and interactional exchanges which occur in individual classrooms are influenced by cultural values about communication and language which are implicitly transmitted through the social organization of classroom interactions. The organization of discourse structure in the two Aboriginal classrooms described in this chapter may be interpreted in light of a cultural framework which serves to indicate areas where traditional Aboriginal values have been incorporated into the classroom and which may have led to the transformation of communicative exchanges between teachers and students.

The studies conducted by both Lipka (1991) and Erickson and Mohatt (1982) have been suggestive in alluding to areas in which the incorporation of cultural values into classroom interactions may have led to transformations of the organization of classroom discourse structure. However, neither of these studies have specifically examined the transformations that occur in the structure of classroom discourse as a result of the incorporation of traditional Aboriginal communicative values in classroom conversations. Nor have these studies examined a wide range of

Aboriginal teacher-student interactions. Lipka's case study, while focusing on a cultural interpretation of classroom interactions, involved observations of a single teacher within the context of a single lesson. Erickson and Mohatt (1982) took a comparative rather than a cultural/transformational approach to their examination of classroom interactions based on observations of a number of lessons conducted by one Aboriginal and one non-Aboriginal teacher.

The present study is an ethnographic examination of Inuit classroom interactions and discourse patterns in three kindergarten and three first grade Inuit-taught classrooms in three Ungava Bay communities. It addresses certain recent criticisms of educational ethnographic research by examining the social structure and organization of the interactions of Aboriginal teachers and Aboriginal children in Aboriginal classrooms. The focus is on the continuities between home and school interactions, as well as on the transformational effects of the incorporation of traditional values promoted by the six Inuit teachers on their classroom interactions. The model of mainstream classroom interactions provided in Chapter Two based on the work of Mehan (1979) is used as point of reference and comparison in order to document the specific areas in which the transformation of teaching interactions have occurred in these six Inuit classrooms.

Chapter 5

THE SOCIO-CULTURAL CONTEXT OF INUIT EDUCATION

This chapter addresses recent criticisms regarding the lack of historical and socio-cultural context in many educational research studies (Foley, 1991; Ogbu, 1982; Suarez-Orozco, 1988) by providing background information on the geographic location of the communities involved in this research, a brief overview of the history of the educational process and language policies in this area, and information on the language socialization practices of the Inuit of Nunavik.

Nunavik, the Inuit territory of Northern Quebec, lies north of the 55th parallel and covers approximately one-third of the province of Quebec. Kangirsuk (bay in Inuktitut) is located on a bay of the Payne River, about ten miles from its mouth on Ungava Bay. Quaqtaq (meaning which seems frozen in Inuktitut) lies on a peninsula which juts out into the Straits of Hudson, forming the eastern coast of Diana Bay. Kangiqsujuaq (meaning big bay in Inuktitut) lies on the Cap du Prince de Galles. Kangirsuk is approximately 1000 miles north of Montreal; Quaqtaq is approximately 100 miles north of Kangirsuk; and Kangiqsujuaq is approximately 150 miles north of Quaqtaq.

The climate of Nunavik is harsh. Snow begins to fall in September and continues until June. Winter temperatures average

about -20 degrees C , with strong winds. Summer is short and cool, with temperatures averaging 11 degrees C. The ice breakup in Kangirsuq usually occurs in the latter part of June, while in Quaqtaq and Kangiqsujuaq the breakup may not occur until August. The communities of Kangirsuk, Quaqtaq and Kangiqsujuaq are all above the tree line.

Demographic Issues

The permanent population of Kangirsuk is approximately 375 Inuit and 8 non-Inuit. The population of Quaqtaq is about 255 Inuit and 6 non-Inuit. In Kangiqsujuaq the population is about 411 Inuit and 1 non-Inuit. Approximately 50% of the Inuit population of these villages is under the age of 15.

The communities of Kangirsuk, Quaqtaq and Kangiqsujuak are accessible from the south only by air. There are no roads connecting these communities either to the south or to each other. Residents travel between communities by ski-doo in winter and by boat after ice breakup. The residents of these communities live in southern-style houses built in the late 1980s which are generally furnished in southern Canadian style. Each community has a cooperative store, a school, a nursing station, a community office, and at least one church, Anglican or Pentecostal, which offers services in Inuktitut. The larger villages also have a Northern Store and a community centre.

Most residents of these communities have telephones and each

community has a local radio station that broadcasts announcements, messages, music and religious programming throughout the day. The communities have had television programming since 1982 which consists of the CBC Northern Service and, in the last two years, the addition of a number of U.S. television channels which vary across different communities. Since January, 1992 the communities have been receiving a channel which broadcasts exclusively in the Aboriginal languages of the Canadian North.

The Inuit of Nunavik are employed in both cash wage jobs and in traditional subsistence activities. Hunting, fishing and trapping are still common activities which are supported by the Hunter Support Program established through funds from the James Bay and Northern Quebec Agreement. Cash jobs in the communities include drivers, mechanics, janitors, interpreters, teachers, social workers, secretaries, Air Inuit agents, as well as positions in the local municipal council including the mayor and local counsellors.

Educational Issues

A Brief History of Schooling

While regular contact with the Inuit of Ungava Bay was established through trading and whaling as early as the mid-nineteenth century, the first school in Western Ungava Bay began only in 1947. This school was run by Father Steinman and

operated out of a small mission which was established in Quaqtaq. The first federal schools in this region did not open until 1960, when the Department of Indian Affairs built a school in Kangirsuk. Before this time, Inuit families travelled periodically to the trading post located there in order to purchase supplies, trade furs and collect social welfare while hunting, trapping and living nomadically on the land.

A second school, run by the provincial Direction General du Nord du Quebec (DGNQ) was opened in Kangirsuk in 1967. This school offered French language instruction as well as a kindergarten taught by Inuit teachers in Inuktitut. The federal and provincial schools operated in parallel until the signing of the James Bay Agreement in 1975. The James Bay land claims settlement provided financial compensation for land utilized in the construction of a large hydro-electric project. It also passed the regional and municipal control of education and health care into the hands of the Inuit, leading to the establishment of the Kativik School Board.

The establishment of schools in this area had a profound effect on the lifestyle of the Inuit. Children as young as five years old were separated from their families and were lodged in a residence from fall until spring in order to attend this English-language school. The families of these children began to abandon their nomadic way of life and settled near the school in order to be near their children. At first, these families lived in tents and igloos in the settlement, and later built shacks and small

houses. The building of permanent houses for the Inuit of Ungava Bay was begun by the federal government in the mid-1960s.

The Kativik School Board

Since 1976, the education of Inuit in northern Quebec has come under the jurisdiction of the Inuit-controlled Kativik School Board, which oversees the functioning of 12 of the 14 schools located in the Inuit settlements. The staff of the Kativik School Board is composed of Inuit and non-Inuit educators and counsellors, and has an Inuk Director General. Local commissioners from each community sit on the Board.

Teacher Training

Teacher training is accomplished in the North through a program which is jointly administered by Kativik and McGill University. Courses offered through teacher training are developed through a collaborative process between Inuit and non-Inuit. These courses are taught by Inuit teachers in collaboration with Qallunaat consultants, and are conducted almost exclusively in Inuktitut. Teachers take a total of 45 credits to receive their teaching certificate in Native and Northern Education. The program also offers a BEd program which consists of an additional 60 credits. To date, 49 Inuit teachers have graduated from the certificate program and 5 from the BEd program. Teachers are hired through the local education committees whose members are elected as community representatives to the school. They are trained on the job and are employed in

the local school upon completion of 2 introductory courses.

At the time of this research the Sautjuit School in Kangirsuk had a school population of 116 students with 10 Inuit teachers including part-time staff and counsellors, an Inuk centre director and 9 non-Inuit staff members including the principal. The Uviluq School in Quaqtaq had a school population of 79, with 7 Inuit full and part-time teachers and counsellors, an Inuk centre director, an Inuk principal and 7 non-Inuit staff members. The Arsaniq School in Kangiqsujuaq had a school population of 154 with 13 Inuit full and part-time teachers and counsellors, an Inuk centre director and 11 non-Inuit staff members including the principal.

Language Policy

Children from Kindergarten to grade 2 in the three communities involved in this research are educated in Inuktitut by Inuit teachers. Above grade 3 students are taught in either French or English, usually by southern teachers of euro-canadian extraction, with 5 out of a total of 25 hour per week devoted to Inuktitut language instruction, Inuit culture, religion, and physical education which are taught in the native language. Inuit parents are entitled to select either English or French as the second language of instruction for their children.

The Current Status of Inuktitut in Nunavik

The Ungava Bay dialect of Inuktitut is spoken by all Inuit residents of Kangirsuk, Quaqtaq and Kangiqsujuaq and is used in most interactions between Inuit. Inuktitut has been described as

one of the few Native North American languages with a chance of long-term survival (Taylor, 1990; Taylor and Wright, in press). The role of the school in the maintenance of Inuktitut is clearly stated in the mandate of the Kativik School Board, which aims to "develop a curriculum which embraces native traditions, culture, and language, and prepare students for active participation in the modern world" (Annual Report, Kativik School Board, 1985, p.11). This goal is promoted for Inuit children through educational policies which stress the development of balanced bilingualism beginning at the junior elementary level (Crago, 1992; Taylor, 1990).

Additive versus subtractive bilingualism. It has been demonstrated that for minority children learning a 'powerful' second language representative of a more dominant social group the result has often been subtractive bilingualism, or the subtracting out of the child's heritage language in the acquisition of the second language. This subtractive effect extends to the heritage culture as a whole (Lambert, 1974; Taylor, 1990; Wong Fillmore, 1991). While the threat of language and cultural loss appears relatively remote for the Inuit of Ungava Bay, there are nevertheless some reasons for concern. Recent studies on the use of second languages in two Inuit communities of Nunavik show that use of the second language, especially English, is beginning to intrude in some community contexts, primarily in the workplace (Dorais, 1981; Taylor, 1990; Taylor & Wright, in press). This finding is significant as

employment opportunities in northern communities are limited and thus the language of the workplace may hold increased prestige over the native language (Taylor, 1990; Taylor and Wright, in press). There is also considerable influence of the second language through the electronic media, as well as a growing phenomenon among younger Inuit to use 'mixed' language or a combination of Inuktitut and the second language, in everyday speech.

The role of the school in the maintenance of strong language. The school has a pivotal role to play in the process of emphasizing Inuktitut as a strong and vibrant language which commands status within the community and which produces students who are "two-way strong" (Cazden, 1991; Taylor, 1990). As has been discussed previously, the process of secondary language socialization for many minority children involves not only the acquisition of new forms of communicative interaction which are not necessarily continuous with their home experience, but also the exposure to mainstream cultural values which occurs implicitly in the classroom. Such circumstances often portend the development of subtractive rather than additive bilingualism in minority children (Taylor, 1990, Wong Fillmore, 1991).

Language Socialization Issues

An understanding of the participant structures and communicative interactions found in Inuit classrooms requires

some background knowledge of the cultural practices of language socialization used by Inuit families with their children. These practices have been documented by Crago (1988) in her examination of parent-child interactions found in the homes of four target children in two Inuit communities on Ungava Bay. Results of her examination of parent-child interactions show that Inuit parents spend very little time in direct conversation with their children. In fact, children are discouraged from participating in conversation with adults and are often reprimanded for "knowing too much" or "talking like Qallunaat (non-Inuit)" (p. 219), if they attempt to engage in conversation with adults or ask too many questions. Many Inuit children live in large extended family situations comprised of multi-age groupings, and young children frequently have older siblings as caregivers. Instead of direct interaction with adults, children are encouraged to interact with peers and siblings. Crago (1988) has described a "hierarchy of silence" (p. 228) that exists in Inuit social interactions such that an older person, for instance a mother, will relate less directly to her young child when a sibling caregiver is present.

Crago noted that questions were rarely asked of children, and children were particularly unaccustomed to answering questions to which the adult already knows the answer, since responding to such questions implied a certain disrespect on the part of the child. Parents did not typically engage in labelling routines with their children or ask them to recount experiences

or events to others. Talkativeness with adults was viewed as a negative characteristic which was to be discouraged. Rather than interacting with adults, children were directed toward their siblings and peers as communicative partners. An exception to this finding were repetition routines that occurred between adults and young children and involved kinship terms used in order to greet adults with proper respect. At other times, children were expected to observe and obey adults and learn by looking and listening.

Crago's study found that Inuit children were given many directives in the home, and proper performance of these directives was considered by Inuit to be an indication that the young child was learning language. Verbal display of knowledge was discouraged, even frowned upon, especially in the homes of children with older parents. This reluctance to 'show off' verbally appeared to be related to strong cultural values stressing non-competitiveness and membership in the larger community. Some of the younger parents in Crago's study were observed to be beginning to engage their children in labelling routines, asking them to name colours or objects, sometimes in English. When asked why they did this, these younger parents replied that they felt this way of talking would prepare the children for school.

Inuit Values

These language socialization practices are based on Inuit

cultural values regarding appropriate communication with children. Crago (1988), in her discussion of values underlying home practices of child socialization listed among others the love for children, hard work, knowledge of family relationships, avoidance of conflict, humour, flexibility in thought, non-interference in the thinking and behaviour of others, and responsibility to the community. A recent discussion of Inuit values during the 1991 Kativik Summer Teacher Training Session held in Salluit resulted in the following list of traditional Inuit values:

sharing
welcoming others
treating everyone equally
cooperating and helping others
avoiding taking sides
avoiding making others feel shy
encouraging happiness
encouraging strong language
giving hope and sympathy
avoiding standing out from the group
treating others with respect
obeying
caring for others
being thankful and forgiving
being wise

Aspects of Culture Change in Nunavik

The geographical region known as Nunavik continues to experience rapid growth and change. Small, nuclear families are beginning to replace the extended families in which Inuit children were traditionally raised. The building of single-family houses and apartments in Inuit communities is a sign of

this growing social phenomenon (Crago, 1988). Communicative patterns in the home are being adapted and changed as a result of an increased awareness of the need for children to adapt to varying forms of communicative interaction (Crago, Annahatak, & Ningiuruvik, in press).

The schools, too, are in a process of development and change. Community and education committees are taking a more active role in determining the directions of their local schools (Rains, 1992). The Kativik School Board continues to adapt and develop programs suited to the needs of their students, and is currently re-evaluating existing language and educational policies in order to determine how best to achieve the goal of balanced bilingualism set out in their mandate (Crago, Annahatak, Aitchison, & Taylor, 1991; Taylor, 1990).

Implementation of such policies requires the development of an Inuit model of education which encompasses an understanding of how Inuit teachers interact with their students in the classroom. These patterns of communicative interaction form the framework upon which dimensions of educational policy can be built. According to Crago et al, (1991, p.19), "One of the features that bilingual education should entail is the structuring of second language teaching programs that are adapted to the children's cultural styles of communication". To date, however, the communicative styles and classroom interactions of Inuit teachers of Nunavik and their students have not been documented. It is the intent of the present research to examine and begin to

delineate the cultural practices surrounding communicative interactions within Inuit classrooms upon which the future re-structuring of such educational programs might be based.

Chapter 6

METHOD

An appreciation for the methodology outlined in this chapter requires some understanding of the notions inherent to ethnographic research. Ethnographic research methods differ from the methods used in quantitative research, principally because of their reliance on context in order to describe and interpret observations of social interactions within a particular society (Agar, 1986; Crago, 1988, 1991; Erickson, 1986; Green, 1983). This chapter will briefly discuss the philosophical orientation inherent in ethnographic research, its use in educational research, the research strategies utilized in this form of research, and issues of validity and reliability in ethnography. It will then describe the method used in the present study of Inuit classroom interactions.

The Ethnographic Research Approach

Ethnographic Research Orientations

Ethnography is a qualitative, non-experimental, descriptive method of research in which the investigator observes and describes certain behavioural, social, or linguistic scenes and circumstances in order to recreate the shared beliefs, practices,

knowledge and behaviour of a cultural group. These observations are utilized to generate hypotheses which are examined using discrepant case analysis in order to define, develop, and clarify a set of constructs from the data. The result is an ethnographic description that can be evaluated in terms of the accuracy of its reflection of the cultural phenomena under investigation (Agar, 1986; Erickson, 1986; Green, 1983; Goetz and LeCompte, 1984; Strauss and Corbin, 1990).

Ethnographic Descriptions and Research Strategies

Ethnographic description is rich in meaning and interpretation, and is concerned with the process by which human life is examined. It relies on the development of "thick descriptions " (Geertz, 1983) that are achieved through the utilization of multiple data sources and data collection strategies which include but are not limited to participant observation, interviews, field notes, and diaries. These sources are used in an attempt to capture and represent the world view of the participants being observed. Ethnographic research strategies are empirical and naturalistic, allowing the researcher to acquire first-hand knowledge of events as they occur in natural settings and without intentional manipulation of variables. Ethnographic research is thus a holistic, eclectic and multimodal process whereby contextualized descriptions of phenomena are used to generate hypotheses regarding the complex inter-relationships between the observed phenomena and the

various behaviours and beliefs regarding that phenomena within the society (Agar, 1986; Erickson, 1986; Geertz, 1973; Goetz and LeCompte, 1981).

Ethnographic Data Analysis

Ethnographic data analysis involves the ongoing examination and classification of data throughout the research process. Themes and categories of analysis are abstracted from the various levels of data collected, with subsequent data collection influencing earlier analyses. Hypotheses generated through the collection of multi-layered data are verified or rejected through the use of a successive data collection schedule.

Throughout the data collection process, various hypotheses are formulated and tested by means of discrepant case analysis and negative case selection (Goetz and LeCompte, 1984). These processes are utilized in order to verify and validate the proposed schemas or hypotheses. When the schema or hypothesis is accurate, additional examples of similar phenomena in the data can be found to confirm and strengthen the original hypothesis. When the schema or hypothesis is inaccurate, however, additional examples of the same phenomenon demonstrate a lack of verification and cause a breakdown and re-formulation of the theory to occur. It is through this process of multi-layered data collection and interpretation that ethnographic research achieves its accuracy and validity. For a more detailed discussion of ethnographic research assumptions and procedures

see Agar, 1986; Crago and Cole, 1991; Goetz and LeCompte, 1981; Kovarsky and Crago, 1991; or Strauss & Corbin, 1990.

Ethnography in Educational Research

Ethnographic methodology has been used to document the social organization and structure of teaching events within the classroom (Cazden, Carrasco, Guzman, & Erickson, 1980; Cook-Gumperz, 1981; Cherry Wilkinson, 1981; Erickson, 1977; Green, 1983; Green & Wallat, 1981; Spindler, 1981; Spindler & Spindler, 1987). By means of such interpretive social research methods, the researcher "seeks to understand the ways in which teachers and students, in their actions together, constitute environments for one another" (Erickson, 1986, p.128). A picture of the nature of the teaching-learning process and the participant structures that form the basis of the on-going linguistic demands of the classroom emerges from such microanalytic examinations of the discourse characteristics of classroom settings, as well as the relationship of these interactions to academic achievement, learning strategies, and participation in classroom activities (Green, 1983). For a detailed discussion of specific aspects of the process by which ethnographic methodology can be applied to classroom research, see Cook-Gumperz, 1986; Erickson, 1986; Gilmore and Smith, 1982; Green, 1983; or Heath, 1982c, 1983. The goal of such research is to develop a theory of the social and cognitive organization of particular forms of interaction and

discourse patterns within the learning environment of the classroom which can then be applied to the understanding of the variations found both within and across classrooms (Erickson, 1983).

Approaches taken to the analysis of social interaction in the classroom continue to take many forms, from structural to selectional aspects of classroom discourse (Bredo, Henry & McDermott, 1988). Despite the general consensus among educational researchers that lessons themselves are rule-governed activities which follow certain intrinsic patterns, the means by which these patterns may be usefully analyzed is not self-evident. One means by which classroom interactions are often analyzed is through a focus on the forms and types of sequences which students and teachers co-construct when conversing in culturally-congruous ways in the classroom. This approach forms the basis for the analysis of sequential patterns in the organization of discourse in Mehan's (1979) examination of mainstream classroom discourse, and will be utilized in the analysis of classroom interactions presented in this ethnographic examination of Inuit classroom interactions and discourse patterns.

The Examination of Inuit Classroom Discourse and Interactions

The present research was conducted in three kindergarten and three first grade Inuit-taught classrooms in three Ungava Bay

communities of Nunavik. The data for the study were collected over the two academic years of 1989-1990 and 1990-1991 during which three separate trips were made to the Ungava region in order to make videotapes, conduct interviews, and engage in participant observation of these Inuit classrooms. The selection of participants for the study, the manner and schedule of data collection, and the analysis of the two layers of data are described below.

People Involved in the Study

Teachers

Teacher Selection. Over the two academic years that this research was conducted, a total of six Inuit teachers were videotaped, three at the kindergarten level and three at the first grade level. These teachers varied in age, teaching experience, and amount of teacher training (see below).

A child was selected from Crago's (1988) study as a "tracer unit" (Green, 1983) for the study. Once he reached school age, this child was followed into the classrooms of Teachers 1 and 2 over the two-year period of the research. Their selection as well as the selection of this child as a tracer unit in the study can be considered as random since the children in the Crago (1988) study were originally chosen by means of random subject selection. The two teachers happened to be this child's teachers. Teachers 3 and 4 were selected for videotaping based on an ethnographic process known as "informed subject selection" (Erickson, 1986). In informed subject selection, subjects

especially pertinent to the field of inquiry are identified to the researcher through comments made by people either directly or indirectly involved in the research. Teachers 3 and 4 were repeatedly mentioned by both Inuit and non-Inuit Kativik consultants, pedagogical counsellors and teachers as being particularly experienced and respected Inuit teachers. As there was a danger in the research of relying too heavily on inexperienced teachers through the use of the tracer unit child, these two experienced teachers were included in the study during its second year. As both teachers were teachers of grade one, two additional kindergarten teachers, Teachers 5 and 6 were also included in order to balance the representation of teachers at the different grade levels. Both of these teachers were working in schools where taping was already taking place.

Teacher Characteristics

A brief description of each teacher, providing details regarding age, community, and teaching experience is summarized below. These details and other information regarding personal educational history and level of teacher training are summarized in Table 1. All of these teachers conducted their classes exclusively in Inuktitut and received their training through joint McGill University-Kativik School Board teacher training courses that were conducted in Inuktitut.

Teacher 1 was a 23-year-old teacher of kindergarten in Kangirsuk, the classroom teacher of the target child during the first year of taping. At the time the research began she was in

her third year of teaching at the kindergarten level. During the second year of taping she had moved to another community and was no longer involved in the research.

Teacher 2 was a 24 year-old teacher of grade one in Kangirsuk, the classroom teacher of the target child during the second year of taping. This teacher was in her first year of teaching at the time of taping.

Teacher 3 was a 25 year-old teacher of grade 1 in Kangiqsujuaq during the second year of taping. She had 6 years of teaching experience, but had left the classroom to go on maternity leave a few weeks prior to the taping date. Teacher 3 returned briefly to the classroom in order to be involved in the videotaping. This teacher had worked as both an instructor and consultant for the Kativik teacher training program and was very involved in the research.

Teacher 4 was a 56-year old teacher of grade 1 and 2 in Quaqtaq during the second year of taping. She had twelve years of teaching experience at the time of taping, and had lived all her life in the community where she was a teacher.

Teacher 5 was a 24-year old teacher of kindergarten in Kangirsuk during the second year of taping. At this time she was in her first year of teaching.

Teacher 6 was a 32-year old teacher of kindergarten in Quaqtaq during the second year of taping. This was her first year of teaching in Quaqtaq after a nine year absence from teaching. However, she had four years of prior teaching

Table 1

Teacher Characteristics

Teacher	Age	Grade Level	Community	Years of Teaching Experience	Years of Formal Education	Level of Teacher Training
1	23	Kindergarten	Kangirsuk	3	Secondary 1 French	3 courses
2	24	Grade 1	Kangirsuk	1	Secondary 3 French	2 courses
3	25	Grade 1	Kangiqsujuaq	6	Secondary 3 French	certificate
4	56	Grade 1	Quaqtaq	12	None	certificate
5	24	Kindergarten	Kangirsuk	1	Secondary 2 French	2 courses
6	32	Kindergarten	Quaqtaq	5	Secondary 3 English	7 courses

experience at the elementary in the Northwest Territories and had worked as a special education teacher there.

Cultural Experts

Cultural experts were highly experienced Inuit teachers with a deep knowledge of Inuktitut language and culture who were used as informants in the study. The two cultural experts were selected by the process of informed subject selection described above in order to view and comment on the videotapes and to aid in the selection of specific videotaped sequences for transcription and analysis. **Cultural Expert 1** was a 62 year-old teacher of Inuktitut language with 25 years of teaching experience. She was a recognized and respected elder in the community of Kangiqsujuaq, and had participated as an expert on Inuit culture and language at a number of international conferences on aboriginal peoples. **Cultural Expert 2** was a 38 year old pedagogical counsellor in one of the community schools who had 20 years of teaching experience. She had obtained her Bachelor of Education degree and was beginning work toward a Master's Degree in education. This teacher had worked on curriculum development for Inuktitut language programs and had served many times as an instructor and consultant for the Kativik teacher training program.

Researcher

The primary researcher was a 37 year old teacher with 10 years of teaching experience, working primarily with Aboriginal children in both Northern and Southern communities who had also

been involved in teacher training for both the Cree and Kativik School Boards.

Physical Location

The three schools involved in the research were relatively modern buildings which were centrally located in their communities. The Sautjuit School in Kangirsuk was built in 1982 and renovated in 1989, the Uviluq School in Quaqtaq was built in 1962 and renovated and extended in both 1980 and 1987, and the Arsaniq School in Kangiqsujuaq was built in 1982. Classrooms were large, colourfully painted and bright, contained modern furniture and were well stocked with many modern games and toys. Inuktitut teaching and reading materials were prominently displayed. Aside from the writing on certain game boxes, there was no English or French evident in any of the classrooms. While most of the toys had been ordered through southern Canadian suppliers, many of the puppets and doll house items reflected the Inuit culture. Some of the teachers used small seal bones and stones as counters in games as well as for math activities.

Data Collection

Data for this research were gathered from a variety of sources including videotapes, formal and informal interviews, and extensive participant observation and field notes, allowing for the collection of a multi-layered data base. A total of two

layers of data were collected and are outlined below. Layer one consisted of three types of data: videotapes, participant observations, and interviews. Layer two consisted of a commentary on layer one phenomena. This section will describe the data collection schedule as well as these two layers of data.

Data Collection Schedule

The principal body of data was collected in three trips which are summarized in Table 2. During the first trip, videotapes were made and participant observations were carried out. During the second trip, additional videotapes and participant observations were made, and a transcript of one videotaped sequence was presented and discussed as part of a Kativik teacher training course which was taking place in Kangirsuk at the time. On the third trip, videotapes and participant observations were again made. During this time portions of videotape for each teacher were viewed and commented on by the cultural experts and sequences were selected for transcription and translation. Teachers were interviewed as part of the second and third trips.

An additional body of data was collected when Teacher 3 made a trip to Montreal between March 12-18, 1991 for the purpose of viewing and commenting on additional videotaped sequences. A final trip which took place between July 26 and August 2, 1991 allowed the results of the study to be presented and commented on by a number of Inuit teachers during a Kativik teacher training

course held in Salluit, another community of Nunavik.

Table 2

Data Collection Schedule

Date	Location	Data
January 12-18, 1990	Kangirsuk	videotape
March 1-10, 1990	Kangirsuk	videotape interviews tape selection
November 26-December 8, 1990	Kangirsuk Quaqtaq Kangiqsujuaq	videotape interviews

First Layer Data

Videotapes

A total of 40 hours of videotape were made in the six Inuit classrooms involved in the research. Table 3 shows the breakdown of videotape for each teacher over the two year period. Parental consent for the videotaping of all the students in the target classrooms was obtained prior to entry. Taping dates were arranged in advance with each teacher, and consisted of taping all activities which occurred during a full morning or afternoon, with the exception of any activities which involved leaving the classroom (e.g. soup time, toothbrushing time, physical education). The time, date, and a running clock of filming time were recorded on each videotape. The majority of the videotapes were made by the primary investigator. During the December, 1990

trip another person was recruited to do the filming, leaving the primary researcher free to make more detailed observation and field notes.

Tape logs. Tape logs of each videotaped session were kept in order to record and outline the date and time of filming, the overall mood of the class, the people present, the teaching activities which occurred in the classroom during the session, any particular equipment or filming difficulties, and comments on the taping session. An example of a tape log can be found in Appendix A.

At the outset of the initial taping sessions both teachers and students demonstrated some shyness and nervousness about being videotaped. These feelings were generally short-lived, however, and both students and teachers soon went about their daily classroom activities with little attention to the camera. From time to time teachers on the tapes made such comments as "You are being taped" and "The camera is watching you", however such comments were often made to tease the students or to encourage them to behave. Neither the teachers nor the students exhibited any real long-term uneasiness or discomfort about being videotaped, and teachers did not feel that the camera had disrupted the class or caused the students to behave differently.

Selection of videotaped segments. Two sections of videotape for each teacher, an oral language and a mathematics lesson, were selected for transcription and translation through consultation with the two cultural experts who viewed tapes of all teachers

Table 3

Summary of Videotapes According to Teacher

Tape Number	Teacher	Community	Date
1	1	Kangirsuk	01/15/90
2	1	Kangirsuk	01/16/90
3	1	Kangirsuk	01/17/90
4	1	Kangirsuk	01/17/90
5	1	Kangirsuk	03/07/90
6	*3	Kangirsuk	03/08/90
7	1	Kangirsuk	03/08/90
8	5	Kangirsuk	11/27/90
9	5	Kangirsuk	11/27/90
10	2	Kangirsuk	11/27/90
11	2	Kangirsuk	11/27/90
12	2	Kangirsuk	11/28/90
13	2	Kangirsuk	11/28/90
14	5	Kangirsuk	11/28/90
15	5	Kangirsuk	11/28/90
16	4	Quaqtaq	12/03/90
17	6	Quaqtaq	12/03/90
18	6	Quaqtaq	12/03/90
19	4	Quaqtaq	12/04/90
20	6	Quaqtaq	12/04/90
21	6	Quaqtaq	12/04/90
22	4	Quaqtaq	12/05/90
23	3	Kangiqsujuaq	12/07/90
24	Cultural Expert 1	Kangiqsujuaq	12/07/90

* Teacher 3 was in Kangirsuk due to Teacher Training.

involved in the study. Lessons in these two subject areas were selected in order to account for possible variation in teaching methods and strategies as a result of differences in subject matter. The bracketed sections were transcribed and translated from Inuktitut to English by experienced translators from the Ungava Bay region who were fluent in the Ungava dialect of Inuktitut. A single taped sequence which consisted of an oral language lesson was transcribed for Teacher 6. This teacher had returned to the classroom for one morning only in order to be involved in the research and did not teach a math lesson.

Selection criteria. Sequences of videotape were bracketed for transcription according to the following selection criteria:

1. that the sequence conformed to the linear lesson structure outlined by Mehan (1979) consisting of an opening phase, an instructional phase, and a closing phase
2. that the sequence was defined on the teacher's lesson plan as one of the target activities
3. that the sequence was not overly lengthy, thus avoiding transcription and translation difficulties.

Videotape transcriptions. Transcriptions of videotapes included all talk which went on in the classroom during the selected sequence. Gestural and other non-verbal acts and behaviours were noted as necessary in order to aid in the understanding of the overall sequence. Ambient noise and overlapping talk occasionally made transcription difficult. Transcripts were reviewed for spelling, translation and meaning

in conjunction with the original transcriber upon completion of a bracketed sequence. Each selection was given a title for easy reference. A table of the titled sequences selected for each teacher as well as a brief description of each sequence is found in Appendix B.

After bracketing, translation and transcription, the eleven transcripts of taped classroom sequences described above were entered into the CHILDES data base system (MacWhinney and Snow, 1990) following the required CHAT transcription format. One transcript for each teacher was selected for coding and analysis using the CHILDES CLAN system. The decision of which transcript to analyze was made by the researcher based on the comments of the cultural experts.

CHAT transcription format. The three main components of the CHAT transcription format are the file headers, the main tier, and the dependent tiers. File headers provide information regarding the participants, the setting and any important aspects of the transcript to be analyzed. Speaker utterances are transcribed on the main speaker tiers. Dependent tiers follow the main line tier and can contain codes, comments, events, and descriptions of events which are of interest to the researcher. Any number of dependent tiers can follow the main tier containing the speaker utterance (MacWhinney, 1991). The coding of each utterance on the transcripts involved five obligatory dependent tiers and four optional tiers which depended on the main tier utterance. (See Appendix D and E).

Participant Observation Notes

Observation notes were kept in all classrooms and concentrated on the activities and interactions which occurred both during and between formal lessons. In addition, field notes and observations were recorded during the two teacher training sessions in which the researcher was involved, and a record was kept of any pertinent comments made by teachers, counsellors and transcribers both directly and indirectly involved in the research.

Interviews

Formal interviews were conducted with all six teachers in the study. In addition to questions pertaining to personal teaching experience and educational history, a set of six questions was developed in order to examine the teacher's views on various aspects of teaching (see Appendix C). Interviews were conducted by the researcher accompanied by an Inuk interpreter who was usually also a teacher. These interviews generally took place in the classroom after school hours.

Informal interviews consisted of questions asked of Inuit teachers, parents, and cultural experts and non-Inuit teachers during informal situations and in conversation. Such questions typically stemmed from situations which presented themselves on the tapes and which were unclear to the researcher. These informal interviews took place both inside and outside the school setting, either during and after school hours.

Artifacts

Wherever possible xerox copies were made of teacher's manuals, student worksheets and other teaching materials used during the lessons. These were used to supplement the videotaped data.

Apparatus

A Panasonic Omniview VHS X6 video camera with internal microphone and zoom lens was used to record the videotapes used in the study. This equipment had a built-in time generator used to record running time on all videotapes.

Second Layer Data

A second layer of data consisted of comments on videotapes made by the two cultural experts involved in the study as well as comments made by teachers during the presentation of findings at the two teacher training session. In addition to aiding in the selection of taped sequences to be transcribed and translated, the two cultural experts commented on the teaching methods used by the various teachers, clarifying how these strategies reflected traditional Inuit values and socialization practices. Comments made by teachers while viewing videotapes of their own teaching were also recorded.

Data Analysis

This section describes the generation of categories and

themes that were used to interpret and analyze the data. A description of the sensitizing concepts used in the development of these categories as well as an example of the process of hypothesis testing and verification that occurred in the research and the means by which the reliability and validity of the findings was established is discussed.

Coding and Analysis of Transcript Data

Transcript analysis

CLAN data analysis. Using the CLAN data analysis programs of the CHILDES data base system, transcripts were analyzed for the overall distribution of talk, the frequency and format of teacher elicitations and turn allocations, co-occurrence relationships between teacher elicitations and student responses, various forms of evaluation, overlapping talk, student initiations and teacher responses to student initiations, peer exchanges, and the frequency of the use of repetition in Inuit classrooms. Individual differences between Inuit teachers were also analyzed.

Statistical measures. The CLAN analysis of the transcripts resulted in the calculation of total frequencies of the various aspects of classroom discourse outlined above. Proportions of these aspects of classroom interaction were calculated and compared to data presented by Mehan in his (1979) study. The significance of differences in these proportions was calculated using non-parametric statistical measures comparing two

proportions. Levels of significance for a two-tailed test are reported for all comparisons.

Coding Categories. Coding categories for classroom discourse were based on those of Ervin-Tripp and Wong Fillmore (1988), features of classroom discourse and interaction of Aboriginal children described in the literature, and a series of categories developed from Mehan's (1979) description of mainstream classroom interactions. Throughout the process of attempting to code the data, the set of coding categories was revised and expanded through the addition of categories stemming from the data itself. These captured the particularities of the interactions occurring in the Inuit classrooms. A complete list of the categories used in the final coding of the lesson transcripts can be found in Appendix D and an excerpt from a coded transcript can be found in Appendix E.

Coding and Analysis of Note and Interview Data

Participant observations, field notes and interview data were coded using broad labels as categories. These broad categories stemmed from the researcher's own eight years of teaching experience with Aboriginal children, concepts and labels derived from the literature, as well as Inuit's stated concepts regarding the important aspects of teaching and interacting in the classroom. These data were coded using processes known as "open" and "axial" coding (Strauss & Corbin, 1990).

Open and axial coding

The process of open coding breaks data down into properties and dimensions for purposes of examination, comparison, and conceptualization. Systematic comparison of the phenomena contained within the data led to the identification and labelling of various general categories which were organized according to whether they related to the teacher, the students, or the lesson and which were broken down into a number of sub-categories. A list of these broad open categories and their related subcategories can be found in Appendix F. These general categories were then related back together through the process of axial coding whereby open categories were formulated into more specific entities. This process allowed subcategories and dimensions of the original category to be identified and interpreted, and connected general categories back together to reflect the interrelatedness of the data. Through the axial coding process, three main themes were identified in the data, those of fostering awareness, cooperation and equality; the maintenance of face through keeping the child close; and the importance of strong language.

Verification of Findings

Discrepant Case Analysis

Hypothesis Generation and Breakdown

Throughout the data collection process, various hypotheses

were formulated and tested by means of discrepant case analysis (Goetz and LeCompte, 1984). Schemas were developed and presented to the cultural experts and participants in teacher training sessions in order to test the validity of the hypotheses. An example of schema development and subsequent breakdown which occurred early in this research serves to illustrate the process of hypothesis verification.

Based on Crago's (1988) finding that Inuit caregivers rarely asked questions of their children, it was hypothesized early in the research that Inuit teachers would use questions only infrequently as a teaching strategy in their classrooms. Examination of one of the earliest Inuit classroom sequences to be translated and transcribed, the "Black" sequence, caused the immediate breakdown of this hypothesis. Within this sequence, the majority of the interactions which occurred between Teacher 1 and her students consisted of straight elicitation-response sequences composed of wh-questions such as "What is this?", "What about this one?", "What colour is this?". Almost no similar forms of interaction had been documented in Crago's (1988) videotapes of family discourse.

Discussion of this sequence with a number of Inuit teachers during a teacher training course led to the discovery that these teachers said they, too, had taught or would teach this lesson using similar discourse and interaction patterns. The breakdown of the original hypothesis that Inuit teachers would ask few questions in their classroom interactions was then reformulated.

It was hypothesized that such question-answer sequences were actually examples of discontinuous forms of classroom dialogue for young Inuit children, which perhaps stemmed from the Inuit teacher's own previous educational experiences. Further discussion of this particular sequence with one of the cultural experts, however, caused this hypothesis also to break down. This expert pointed out that the lesson in question was based on a Kindergarten mathematics teacher's manual which had been developed in the early 1970s by a group of non-Inuit consultants at the Kativik School Board. Examination of the manual confirmed that the forms of questioning interactions documented in the "Black" sequence were indeed specified as part of the teaching strategies for this particular lesson in the manual.

The history of the interpretation of the "Black" sequence clearly demonstrates the hypothesis verification process of schema development and breakdown within the framework of ethnographic research. It also serves to illustrate the central role of the cultural experts in the verification of hypotheses as well as the means by which subsequent data collection can influence the interpretation of earlier data.

Establishing Reliability and Validity

The criteria used in establishing reliability and validity in this research are based on those outlined by Goetz and LeCompte (1984) for use in ethnographic research.

External Reliability

In order to account for external reliability, the status of the researcher, the informants, the sources of data and the contexts in which this data was collected have been clearly identified. The derivation of the categories and themes used in the analysis of the data are outlined and the methods utilized for data analysis are described.

Internal Reliability

Internal reliability has been accounted for through the use of the cultural experts and expert teachers as research collaborators in the lamination process, the mechanical recording of data through the use of videotapes, and a multi-layered data base. Reliability in the coding of transcript data was accounted for by re-coding a number of short segments of transcription for the purpose of comparison to previous coding.

External Validity

The four types of effects which are used to establish validity in ethnographic research have been accounted for in this research. Selection effects were reduced through following the randomly selected tracer unit child into his kindergarten and first grade classrooms and through the matching of the first grade teachers selected through the process of informed subject selection with kindergarten teachers in the same communities. Setting effects were accounted for through the use of a variety of observation settings and through the use of participant observations. Historical effects relevant to the communities

involved in the research have been outlined in the chapter on the socio-cultural contexts of Inuit education. Construct effects have been reduced through consultation with Inuit in the development of coding categories and through the derivation of categories based on prior research in the area of Aboriginal education.

Internal Validity

Internal validity was established through accounting for three types of effects: observer effects, selection effects and maturation effects. Observer effects were reduced through using informants who were experienced teachers and had a strong knowledge of Inuktitut and Inuit cultural values, through use of a consultative process in the establishment of categories of analysis, and through having extensive contact with a variety of Inuit teachers in a number of different situations. Selection effects were reduced through gathering data in six different classrooms and at two grade levels. History effects were reduced through the collecting of data in a number of classrooms simultaneously.

A Caveat

Before continuing, it must be stated that certain caveats apply to the study of language socialization practices within cultures which also apply to ethnographic examinations of classroom discourse and models of classroom competence. These

caveats have been mentioned by numerous ethnographers (Mohatt and Erickson, 1982; Heath, 1982c, 1983; Schieffelin and Ochs, 1984, 1986) and are succinctly outlined by Crago (1991):

> All cultures vary in their ways of socializing their children through language. However, no culture is a monolith. Variation exists in communities, families, and individuals. Language socialization practices are not the unique holding of any one culture. Within a culture, language socialization varies according to whom, how, when and where (p. 4).

This is also true for educational research, where individual differences between schools and teachers must be taken into account in the analysis process. These considerations have been kept in mind in the examination of Inuit classroom discourse and interaction patterns which follows.

Chapter 7

RESULTS: THE ORGANIZATION OF INUIT LESSON STRUCTURE

This chapter presents the results of the examination of the organization of discourse in Inuit classrooms. Data regarding the organization of the three phases of Inuit lesson structure are presented first. Co-occurrence relationships, IRE sequences, turn allocation formats, forms of evaluation and correction, student initiations and the uses of repetition in Inuit classrooms are described in separate sections. These are followed by results concerning the role of the teacher in Inuit classrooms, peer interactions, and the important role of the school in the maintenance of Inuktitut. As often as possible, Inuit data are compared to data for mainstream classroom discourse. Ethnographic observations are interwoven with results of aspects of Inuit discourse patterns which emerged from the CHILDES coding of transcribed videotaped sequences in order to provide a contextualized description of Inuit classroom discourse and interactions.

The Three Phases of Inuit Lesson Structure

Inuit lesson structure appears to follow a modified version of the mainstream sequential organization of lessons. While the

three phases of the lesson organization- the opening phase, the instructional phase, and the closing phase- were present in all six of the transcribed sequences, aspects of all three phases differed markedly from those described for mainstream classrooms.

Getting in Touch

Inuit teachers typically spent some time before the beginning of the actual school day circulating among the students and "getting in touch". "Getting in touch" included such activities as brushing children's hair, inquiring what students had done the previous evening or before coming to school, and asking about family members or other members of the class. These conversations were conducted in a quiet tone of voice, and constituted private rather than public interactions. The teachers then went on to an opening prayer and attendance and calendar activities which comprised the opening activities in all six classrooms. The "getting in touch" time had a calming effect on the students, beginning the day slowly and smoothly.

The Opening Phase

Most of the lessons selected for analysis took place with both teachers and students seated on the floor. The opening phase in Inuit lesson organization typically consisted almost exclusively of directives informing students where they were to place themselves physically on the floor to begin the lesson. None of the lessons began with any form of teacher monologue, and

teachers rarely provided any information about what the class would be doing or discussing. The opening phase of a lesson conducted by Teacher 1 provides an example of the organization of discourse in the opening phase:

Teacher: We're going to be here.
Teacher: Come on over now.
Teacher: Richard, Richard come here.
Teacher: Rhoda you too.
Student: What are we going to do?
Teacher: Form a circle.
Teacher: Come on, Jaaji.
Teacher: What's this? @

(@ signals the beginning of the instructional phase)

(Tape BLK01.EN01.011790)

Teacher 5 differed from the other teachers in the organization of the opening phase of her book-reading lesson. This teacher did not begin her lesson by calling the students over to the floor directly, but instead sat down herself in the desired spot and informed the students who were moving about the tables, "I am going to read a story", without raising her voice. The students then slowly began to move away from the tables and joined her on the floor. She continued to speak in a relatively quiet voice, saying, "I am going to read a story about someone who lives in a tent". By this time most of the students had joined her on the floor. Some of them repeated the final word of her utterance. One student remained at the table. The teacher called this student's name and then said, "I wonder what they (the words) will say". She then began the instructional phase by pointing out the pronunciation of an Inuktitut syllabic. At this point the last student joined the rest of the group seated on the

floor. This teacher was the only one to provide any form of information regarding the focus of the lesson. She did not wait until all the participants were seated and ready to begin the lesson, nor did she direct them specifically where to be seated. Instead, this teacher modelled the desired behaviour by seating herself on the floor and drawing attention quietly to the object of the lesson, the book.

The Instructional Phase

The Overall Distribution of Talk

The overall distribution of talk in Inuit classrooms in the instructional phase is represented in Table 4. While in mainstream classrooms it has been observed that teacher talk comprises approximately two thirds and student talk one third of the total talk occurring in the classroom, talk in Inuit classrooms is shared much more equally between teachers and students.

Teacher Initiation Acts

The distribution of initiation acts in the instructional phase utilized by Inuit teachers as compared to Mehan's mainstream teacher is summarized in Table 5.

While in mainstream classrooms elicitations made up over 75% of the instructional phase with informatives and directives being utilized primarily in the opening and closing phases, directives and informatives continued to make up almost 50% of the total teacher initiations which occurred in the instructional phase of

Inuit classrooms, with elicitations making up the other 50% of the overall teacher initiation acts.

Table 4

Overall Distribution of Talk in Inuit Classrooms

Speaker	# of Utterances	% of Total Utterances
Teacher	1074	49.06
Student	1115	50.94
Total	2189	100

Table 5

Teacher Initiation Acts

Teacher Initiation Act	Mainstream	%	Inuit	%	Level of Significance
Elicitation	363	75.62	378	52.43	$p<.001$
Informative	89	18.54	172	23.86	$p<.05$
Directive	28	5.83	171	23.72	$p<.001$
Total	480	100	721	100	

Table 6 outlines in more detail the specific forms of teacher initiation acts in both mainstream and Inuit classrooms. This table breaks down the forms of elicitation acts into choice, product, process, and metaprocess elicitations in order to compare their frequency between Inuit and mainstream teachers. According to this analysis, product elicitations made up the majority (58.1%) of teacher initiation acts taking place in the

mainstream classroom, while directives and informatives continued to make up a large portion of the teacher initiations in Inuit classrooms (47.5%). The category of non-verbal elicitations was added to the table because of its relatively high frequency in Inuit classrooms.

Table 6

Summary of Teacher Initiation Acts

Teacher Initiation Act	Mainstream	%	Inuit	%	Level of Significance
Directive	28	5.8	171	23.7	p<.001
Informative	89	18.5	172	23.8	p<.05
Choice Elicitation	61	12.7	116	16.1	n.s.
Product Elicitation	279	58.1	160	22.2	p<.001
Process Elicitation	15	3.1	45	6.2	p<.05
Metaprocess Elicitation	8	1.6	0	0	p<.001
Nonverbal Elicitation	0	0	57	7.9	p<.001
Total	480	100	721	100	

Co-occurrence relationships in teacher initiated acts

Table 7 illustrates the distribution of student replies following teacher initiation acts. The co-occurrence rules outlined by Mehan in Chapter Two, whereby product elicitations require product replies, choice elicitations choice replies, and process elicitations require process replies, appear to be

Table 7

Distribution of Student Replies Following Teacher Elicitation Acts in Inuit Classrooms

Teacher Elicitation Act	Student Replies							
	Choice Response	Product Response	Process Response	Metaprocess Response	Repetition Response	Informative Response	Other	Total
Choice Elicitation	51	2	0	0	4	4	9	70
Product Elicitation	1	110	0	0	3	5	14	133
Process Elicitation	0	3	25	0	1	3	5	37
Metaprocess Elicitation	0	0	0	0	0	0	0	0
Nonverbal Elicitation	0	55	0	0	1	1	0	57

maintained in Inuit classrooms. Within the Inuit classrooms, non-verbal elicitations appeared to function primarily as product elicitations which required product replies.

Extended sequences. As was the case in the mainstream classroom, interactions between Inuit teachers and students were maintained by means of extended sequences until the appropriate form of the teacher's elicitation was provided in the response. Teachers utilized similar strategies to mainstream teachers to obtain the desired response. The strategies included simplifications, expansions, repetitions and prompts.

In this example from the Animals lesson, Teacher 6's initiation was in the form of a product elicitation to which the students responded with a choice response. The teacher continued the exchange through simplifying her elicitation until the correct answer was provided. The teacher then repeated the student's response.

Teacher:	Do the people eat this one?
Students:	No.
Teacher:	What is its fur used for?
Students:	No.
Teacher:	What do they usually use it for?
Student:	For parkas.
Teacher:	For parkas.

(Tape ANI20.RE06.120490)

Another example of an extended sequence as a result of an incorrect response form, this time following a process elicitation, is taken from the Feelings lesson.

Teacher:	What's wrong with this one?
Rhoda:	Uum...
Teacher:	What is he doing?
Rhoda:	I thought it was number six.

Teacher: Rhoda, what?
Rhoda: He's playing.
Teacher: He's playing.

(Tape FLGS13.EAU02.112890)

As in the previous example, the teacher maintained the exchange through simplification and repetition until the student provided the desired response which the teacher then repeated.

The Closing Phase

Just as the Inuit teachers rarely explained what was going to take place before beginning an activity, they also did not tend to summarize activities in order to draw them to a close. Instead, much of the pace and sequencing of activities depended on the student's responsiveness and not primarily on the teacher's agenda. The closing phase of the transcribed lessons often consisted of no more than a single sentence in which the teacher would tell the students that the activity was finished.

Teacher 1's lesson ended when the majority of the students had left the circle on the floor. Teacher 2's lesson on feelings ended when the teacher said, "It's the right time to quit". Teacher 3's closing phase consisted of directing the students to clean up the materials they had used and asking them if they wanted to play a game. Teacher 5 ended her lesson by telling the students, "We will stop. Have a seat now". Teacher 6 terminated her lesson by informing the students that they would cut in the next activity.

Teacher 4's closing phase differed from that of the other

teachers. She ended her lesson by overtly praising the group as a whole for their performance. This was one of the few examples of overt praise used in any of the lessons. The focus of the evaluation was on the performance of the group as a whole and not on individual members.

Teacher:	You guys are very good now.
Teacher:	You guys are very good now, right?
Students:	Yes.
Teacher:	You guys sit down at your seats now.

(Tape INS19.LK04.120490)

In the Inuit classroom, it was not necessary that everyone complete an activity before moving on to the next lesson. During the taping the teachers were often observed to call the students away from the tables to the floor, instructing them to leave their unfinished work to complete at a later time. This typically occurred when the majority of the students had completed the activity and only a few were left at work. As one teacher commented,

> Kids don't have to wait for the others to finish. If they finish they can do work from the day before or colour until others are done. They should never be just sitting, waiting for others. They can go get things on their own and take what they need. This is a good way to get others to do it also.

Turn Allocation Format

Table 8 compares the distribution of the three forms of turn allocation according to teacher elicitation act in the mainstream and the Inuit classrooms. While in the mainstream classroom

Table 8

Distribution of Turn-Allocation Procedures

Teacher Initiation Acts	Individual Nomination		Invitation to Bid		Invitation to Reply		Total	
	Mainstream	Inuit	Mainstream	Inuit	Mainstream	Inuit	Mainstream	Inuit
Directive	22	70	0	0	6	101	28	171
Choice Elicitation	37	25	3	0	21	91	61	116
Product Elicitation	137	39	37	0	105	121	279	160
Process Elicitation	11	15	1	0	3	30	15	45
Metaprocess Elicitation	8	0	0	0	0	0	8	0
Nonverbal Elicitation	0	0	0	0	0	57	0	57
Total	215	149	41	0	135	400	391	549

directives were typically addressed to individual students, Inuit teachers typically addressed directives to the group as a whole in the invitation to reply format. Choice, product, process and metaprocess elicitations were fairly evenly distributed between individual nomination and invitation to bid formats in the mainstream classroom, while the invitation to reply format occurred primarily in product elicitations. In the Inuit classrooms, there were no instances of teacher elicitations in the invitation to bid format. The majority of Inuit teacher elicitations were in the invitation to reply format, with some use of individual nomination in directives, choice elicitations, product elicitations, and process elicitations. Non-verbal elicitations were always addressed to the group in the invitation to reply format.

Table 9

Turn Allocation Procedures

Turn Allocation Procedure	Mainstream	%	Inuit	%	Level of Significance
Individual Nomination	215	54.99	145	26.85	p<.001
Invitation to Bid	41	10.49	0	0	p<.001
Invitation to Reply	135	34.53	395	73.15	p<.001
Total Elicitations	391	100	540	100	

Table 9 illustrates the overall distribution of turn allocation in the mainstream and Inuit classrooms. Table 9 shows highly significant differences in the use of turn allocation formats across the two groups.

Group Responses to Individual Nominations

Even in those situations where individual nominations were used, the tendency of the students was to continue to give group responses. These group responses to individual nominations were not commented on or sanctioned by the teacher.

Teacher: This one Richard, what is he doing?
Students: Moving.

Teacher: Anita, where do you go?
Students: To number 5.

(Tape FLGS13.EAU02.112890)

Teacher: Jaani have you ever been in an igloo before?
Student A: <I was before>.
Student B: <I never was yet>.
Student C: <I was in an igloo before>.

< > indicates overlapping talk

(Tape ANI20.RE06.120490)

In an example from the Black lesson, the teacher had selected an individual student to respond to her elicitation. When another student's response overlapped with the nominated student's response, the teacher did not sanction the "interruption" of the other student, and instead prompted him to correct his response despite the fact that he had not been selected as speaker in the initial elicitation.

Teacher: Rhoda.
Rhoda: <Black pen>.
Richard: <Black eraser>.
Teacher: Is it an eraser?
Richard: No it's a pen.

(Tape BLK01.EN01.011790)

Student Participation in Group Elicitations

While students were not discouraged from responding to elicitations directed specifically at individual students, those students who chose not to talk or did not respond to teacher elicitations directed to the group were not put on the spot or pushed to reply. As Teacher 3 commented:

> I would never force my students to participate. It only makes them feel bad. They should only do it if they want to.

Children would participate orally "when they were ready" or "when they wanted to". Teachers would often ask the students as a whole "Are you listening?" or "Do you remember this well now?", but they did not typically check comprehension through nomination of individual students to answer questions. Teachers demanded attentiveness to the topic but did not require active oral participation.

Issues in Turn Allocation in Inuit Classrooms

In discussing the issue of turn allocation in Inuit classrooms, Cultural Expert 2 commented that she typically used both the individual nomination and the invitation to respond formats in her teaching, depending on the nature of the lesson. When questioned further she explained that she felt that asking

individuals to answer questions was a good way to teach specific information, but that when she wanted to encourage the children to "think and use their imagination", the group responses were preferable. Cultural Expert 1 on the other hand commented that she felt the individual nomination style of teaching "seems to weaken Inuit ways and strengthen the Qallunaat (non-Inuit) ways".

During her visit to the Montreal-based classroom, Teacher 3 commented that she felt that the invitation to bid format of nomination used by the teacher caused the students to have to wait too long to have a turn to speak:

> Waiting for each person to have a turn like this is too long for Inuit children. They want their turns much quicker. In our way of teaching there is no need to wait.

Indeed, she was so unfamiliar with this manner of controlling classroom talk that she did not recognize at first that the Montreal students were sitting quietly with their hands raised in order to be selected to ask her a question. She turned to the researcher rather disappointedly and said, "I guess no one wants to talk to me".

Overlap In Classroom Talk as a Result of Turn Allocation Format

The use of the invitation to respond format of turn allocation resulted in a great deal of overlapping talk in the classrooms of Inuit teachers. Out of a total of 1992 utterances coded for overlaps in the transcripts, 206 utterances or 10.34% of the total classroom talk contained overlaps. In Mehan's

analysis of mainstream classroom interactions, overlapping talk was considered to be an interruption in the turn of another speaker and students were typically reprimanded by the teacher for such interruptions. This was not the case in any of the Inuit classrooms.

Initiation-Response-Evaluation Sequences

Inuit IR Routines

The absence of individual nomination in Inuit classrooms was accompanied by the use of a revised form of IRE sequences which this researcher has elected to call "Inuit IR routines". In these IR routines, the teachers typically initiated an elicitation sequence and the students called out the answer as a group. In addition to avoiding the selection of individual speakers in these exchanges, there was generally also an absence of overt evaluation of the correctness of the group reply after each elicitation in the Inuit classrooms. The correctness of student responses in most cases was implicitly signalled by the Inuit teachers through the continuation of the teacher-student dialogue.

Teacher:	His beak. What colour is it?
Students:	Orange.
Teacher:	What about his head?
Students:	Um, black eyes, umm black. Black.
Teacher:	What about his neck?
Students:	White.
Teacher:	What about his body?
Students:	Umm, brown.
Teacher:	At the end of his feathers, what colour

	is it?
Students:	Umm, white. White.
	(pause)
Teacher:	Look. That one has some leaves.

(Tape HP07.EN01.030890)

Teacher:	This one, what is it?
Students:	Irqiq. (A kind of insect)
Teacher:	Where did it used to be?
Students:	On the hair.
Teacher:	How did they smash it before?
Students:	Like this.
	(Students demonstrate.)
Teacher:	(Laughing) It used to be smashed, right?
Students:	Yes.

(Tape INS19.LK04.120490)

Teacher:	So what does he do in the storm?
Student A:	Inside... he goes inside.
Student B:	He goes inside.
Student A:	He's making an igloo.
Teacher:	He makes an igloo and when he is finished the igloo he stays inside because it is stormy.

(Tape ANI20.RE06.120490)

Evaluation in Inuit IR Routines

In these sequences, teachers did not overtly evaluate each elicitation-response sequence in typical IRE fashion. Table 10 illustrates the frequency with which Inuit teachers evaluated student responses to elicited sequences. This table shows that only approximately one quarter of all Inuit teacher initiations were evaluated. The frequency of evaluated acts in the mainstream classrooms was reported to be 53 percent, indicating that there is a highly significant difference ($p<.001$) in the frequency of instances of evaluation in the mainstream and the Inuit classrooms.

Table 10

Summary of Evaluation in Inuit Classrooms

Total Evaluations	Total Teacher Initiations	% of Evaluated Initiations
190	720	26.4

Evaluation of individual student contributions within the group response did occur, but was typically carried out subtly, and in a manner which would not cause individuals to stand out from their peers. Teachers would often repeat the same question several times, observing the responses and participation of individual children in the group without having attention drawn to them. In one oral language lesson, Teacher 3 repeated the same question four separate times, observing various students' responses while never singling them out to answer individually or overtly evaluating their performance.

Teacher:	This one, what is it?
Students:	Fish spear.
Teacher:	What?
Students:	Fish spear.
Teacher:	Fish spear. It's a small one. What is it?
Students:	Fish spear.
Teacher:	Look.
Students:	Fish spear.

(Tape KAK23.QQ03.120790)

Peer Models in IR Sequences

Responses to teacher elicitations were often provided by a single student and then repeated by the group. Appropriate student responses resulting in the building of classroom

discourse depended to a great extent on students listening to and picking up on peer models. Teachers occasionally allowed these peer modelling interactions to continue over many turns.

Teacher: 0 (shows object)
Student: Black ball.
Students: Black ball.

(Tape BLK01.EN01.011790)

Teacher: What about this one?
Everybody.
Student: He is sad.
Students: He is sad.

(Tape FLGS13.EAU02.112890)

Teacher: (turns page in book)
Body.
Students: Body.
Student A: Body his body.
Student B: Body his body.
Student C: His body.
Student D: Body his body.
Student A: His body.
Student D: He gained weight.
Teacher: He gained weight.

(Tape BK14.EAN05.112890)

In the following sequence from the Insect lesson, we see an example of the students using peer models to self-correct their group response without the necessity for the teacher to intervene in the flow of student responses.

Students: Mitjuajuk.
Teacher: Where does it live?
Students: <In the water>.
Students: <In the house>.
Students: In the house. In the house.
Teacher: What does it do?
Students: It hangs on.
Teacher: Who has seen this insect before?
Students: I have!

(Tape IN19.LK04.120490)

Inuit IRe Routines: The Necessity for Evaluation

Variations in IR sequences occurred when the group did not produce the desired response, when only a few members or even a single individual within the group produced the correct response within overlapping talk, or when an error occurred in either a group or an individual response. In these situations more overt teacher intervention into the flow of student responses was required. This intervention usually consisted of some form of evaluation, which, in most cases was indirect. For this reason, these sequences will be referred to as Inuit IRe routines.

Direct versus Indirect Forms of Evaluation in Inuit IRe Routines

Evaluation in Inuit IRe routines took a number of different forms which are summarized in Table 11. Table 11 separates the evaluation strategies used by Inuit teachers into direct and indirect forms.

Overt evaluation and correction of errors are considered direct evaluations, while repetition, acknowledgement and requests for acknowledgement, and teacher models are considered more indirect evaluation strategies. Table 11 shows that Inuit teachers tended to utilize more indirect forms of evaluation in the majority of instances in which evaluation was required. Direct evaluations were used 40.5% of the time, while indirect evaluations comprised 59.5% of the total evaluations.

Table 11

Summary of Forms of Evaluation in Inuit Classrooms

Form of Evaluation	# of Evaluations	% of Total Evaluations
Overt Evaluation	55	28.9
Correction	22	11.6
Repetition	58	30.5
Acknowledgement/Request for Acknowledgement	34	17.9
Model	21	11.1
Total Evaluations	190	100

Direct Forms of Evaluation

Overt evaluation and correction. Overt evaluation of student responses in Inuit classrooms functioned in a similar manner to the IRE sequences described for mainstream classrooms, except that the Inuit teachers rarely accompanied these overt evaluations with any form of praise or reprimand for individual students. Since the tendency in classroom discourse was not to evaluate when students answered correctly, positive evaluations of student responses occurred less frequently than negative evaluations.

Teacher: What about you Rhoda?
Student: Black beanbag.
Teacher: Yes.

(Tape BLK 01.EN01.011790)

Teacher: Where does he (the wolf) stay?
Student: <Umm.. Inuit snow>.
Student: <Under the ground>.
Teacher: No.
On the land.
Students: On the land.

(Tape ANI20.RE06.120490)

Teacher: What sound does he (a bird) make?
Students: Oooooh.
Teacher: No.
Another bird says that.

(Tape ANI20.RE06.120490)

Teachers frequently accompanied overt correction of student responses with a request for acknowledgement which often functioned as rhetorical questions in these exchanges.

Teacher: Where does this insect live?
Student: Aaam ... in mosquitoes.
Student: <In mosquitoes>.
Teacher: <No it doesn't>.
Student: Small flies.
Teacher: No it doesn't.
Student: On a skeleton's head.
Teacher: Meat flies are always on dry meat right?
Students: Right.

(Tape IN19.LK04.120490)

Indirect Forms of Evaluation

Repetition of student utterances. Exact repetition of student responses was the indirect evaluation strategy used most frequently by Inuit teachers. The use of exact repetitions of student responses on the part of the teacher was commented on by Mehan (1979) as a form of evaluation which frequently followed extended sequences in mainstream classrooms. In his description, these repetitions of student responses by the teacher were accompanied by overt evaluation of the response. As is seen from

the examples which follow, repetitions were not usually accompanied by overt evaluations in Inuit IRe routines.

Students:	Ammaukaluk. (a type of insect)
Teacher:	Ammaukaluk. Where does it live?
Some Students:	<Inside the stomach>.
Other Students:	<In the intestines>.
Teacher:	In the intestines.

Students:	Qaurulliq. (a black beetle with a white forehead)
Teacher:	Qaurulliq. Why is it called qaurulliq?
Students:	<Because it has a forehead>.
One Student:	<His forehead is white>.
Teacher:	His forehead has white on it. It's a qaurulliq.

(Tape IN19.LK04.120490)

Teacher:	This one what is it?
Some Students:	<A fox>.
Other students:	<A wolf>.
Teacher:	A wolf.
Teacher:	Where does he live?

(Tape ANI20.RE06.120490)

Teacher:	What is this here?
Student:	He is happy.
Teacher:	He is happy. Why is he happy?

Teacher:	Where do you go?
Student:	To angry.
Teacher:	To angry. Why do people get angry anyway?

(Tape FLGS13.EAU02.122890)

<u>Requests for acknowledgement</u>. Another form of indirect evaluation frequently used by Inuit teachers was the addition of the Inuktitut word "illai" (right) to the end of their repetitions of student responses in what have been called requests for acknowledgement. These requests for acknowledgement

usually functioned as rhetorical questions which did not necessarily require verbal agreements from the students.

Teacher:	What do the people from N.W.T. call this insect?
Students:	Mitjuapaq.
Teacher:	They say mitjuapaq, right?
Students:	Yes.
Students:	Lice lice.
Teacher:	Whose namesake is it?
Students:	Kumak's.
Teacher:	It's Kumak's namesake, right?

(Tape IN19.LK04.120490)

Models. When students did not provide the correct response or did not respond to a teacher elicitation, the teacher often paused and then provided the students with a model of the desired response. The students then typically repeated this teacher model. Teachers would often allow student exchanges to continue for a relatively long period of time before intervening with the correct model, presumably hoping that one of the students would eventually provide the correct response.

Teacher:	What is happening here?
Students:	It is rocky.
Teacher:	It is stormy.
Students:	It is stormy.

(Tape ANI20.RE06.120490)

Teacher:	What is this one?
Student:	A duck.
Student:	A duck.
Student:	A duck.
Teacher:	A goose.
Students:	A goose.
Students:	A goose.
Teacher:	A goose.

(Tape ANI20.RE06.120490)

Teacher:	What about this one Richard?

Richard: Black pen.
Teacher: Is this a pen?
Students: No.
Richard: Black uumm...
(pause)
Teacher: Top.
Students: Top top.
Teacher: Black top.
Students: Black top.

(Tape BLK01.EN01.011790)

Teacher's Use of Peer Models in Correction

Teachers often relied on peer models in the correction of student errors, quietly and often subtly guiding students to observe or listen to others within the group who were completing an activity as desired or who had the correct response. In an example of an elicitation from the Insect lesson, rather than providing the answer herself Teacher 4 directed the students to listen to a number of overlapping student utterances, one of which was the correct response.

Teacher: What about this one?
Student: Uumm...
Student: He has long legs.
Teacher: What is it?
Student: <Uumm...>
Student: <A star>.
Student: <An earthworm>.
Teacher: Listen.
Students: An earthworm.
Teacher: An earthworm.
(Laughs)
Student: An earthworm.
Teacher: It's an earthworm, right?

(Tape IN19.LK04.1200490)

There were numerous examples of peer correction and peer modelling in the transcripts of Inuit classroom discourse. One such example occurred in the Kindergarten classroom of Teacher 5

where a group of six students were all seated around a large table for a math lesson. In this lesson the children had been directed to use only the colours red and blue to make a drawing. The teacher noticed that one of the students was not following directions and was using all the colours. The teacher repeated the directions several times for the group, looking at the individual student without correcting her directly. A number of the students who had noticed what the girl was doing then began to model the directions on their own initiative, still without commenting directly about the error.

Teacher:	You will draw with blue and red only. (Pause) You will only use blue and red.
Students:	Yes.
Teacher:	You can draw anything you want.
Students:	Yes. (Pause)
Student A:	(Holding up a different colour crayon) I don't use this one.
Student B:	Yes, you're right.
Student C:	Right on.

After this exchange, the original student was still colouring with all her crayons. The teacher then quietly went up to her and corrected her.

In another example demonstrating the use of peer modelling in Inuit classrooms, Teacher 5 allowed the students to continue modelling the correct pronunciation of an Inuktitut word form several times for a student who spoke both English and Inuktitut at home before intervening in the flow of student models to correct the student herself.

Teacher:	What is this one?
Student A:	It's nashaga (his hat- no error in

pronunciation).
Student B: Nasanga (his hat-error).
Students: <Nashaga>.
Teacher: <Nashaga>.
Students: Nashaga nashaga.
Student D: Nashaga.
Student B: Nasha.
Student A: Nashaga.
Teacher: Pita what is it?
Student B: Nashaq nashaq.
Teacher: Again.
Student B: Nashaq.
Teacher: Nashaga.
Student B: Nashaga.

(Tape BK14. EANN05.112890)

During a visit to a Montreal-based classroom Teacher 3 commented that she felt the Montreal-based teacher corrected the children's reading errors unnecessarily. In her own classroom, she said, she encouraged her students to correct each other's reading errors, and in fact she did not feel that this way of correcting errors was an appropriate role for the teacher, as it did not encourage the children to listen to and help each other. This teacher would intentionally make errors in her use of vocabulary or mention facts which were incorrect in her teaching. The students would then correct her by calling out the proper answer or fact. When asked why she did this, she replied that rather than the teacher holding sole responsibility for correcting the group, she wanted to encourage the students to listen to others and to feel free to correct other's errors. She felt that this way of teaching encouraged students to take a more active and responsible role in the learning for themselves as well as for the other members of the group. Indeed, during her visit to the Montreal-based classroom this Inuk expert teacher

was stunned when the teacher directed the students to separate their desks, informing them that it was now time to do some work. She commented that this was exactly the situation in which Inuit teachers would encourage the students to get together. As this teacher commented:

> Students can't learn by themselves. No one pushes them to learn if they are by themselves, listening only to the teacher and not to each other. Students don't learn alone. They need the others to learn from.
>
> (Interview, Teacher 3)

Correction through checking in. Teachers would "check in" frequently with individual students within the context of the group lesson, providing feedback on a one-to-one basis rather than in front of the group. The majority of class activities were conducted with teacher and students sitting on the floor, allowing the teacher to physically move in closer to the students in order to offer individual suggestions or make corrections. This sort of checking in was conducted at a lower voice level than the group instructions, making them off the record comments intended only for the individual student. When the students were seated at their desks or tables, the teachers spent a lot of time circulating to each student and making individual comments or corrections, again at a lower voice level.

In a videotaped segment of a grade one math lesson on place value, six students and Teacher 4 were seated in a semi-circle on the floor. The teacher modeled with one student's materials how she wanted the activity to be set up, making only occasional comments. One student was having difficulty arranging the

appropriate units and number cards to form the desired numeral. The teacher repeated the directives often, "Put the orange ones here", "Put them like this", "How many orange ones do you have?", "Put seven of the orange ones". She called the student's name softly once but made no other comment. Finally she moved over to the student and tapped on the number seven card, showing the student his error without speaking or evaluating. The student then fixed the error in silence. Other students did not comment on these individual corrections.

Non-verbal correction of errors. Correction of student errors was not always accomplished verbally. Teachers would often complete an activity or directive for a child who was having difficulty, providing the child with a direct model of what was desired without verbal comment. When the students were engaged in individual written activities the teachers would circulate frequently, sometimes simply pointing at errors on the paper and other times even erasing errors and fixing them for the student, often without comment.

When a group of grade one students was having difficulty putting a set of number cards in the correct order during the cleaning-up phase of a math lesson, Teacher 4 said, "Those cards, are they all in order now? No? Give them to me." She then put the cards in order without talking, and handed them back to the student, who responded "Oh. They will be like that." The student then finished putting the rest of her cards in order while the teacher asked the next student, "Daisy, you want them to be

fixed?".

The Use of Prompts in Teacher Elicitations

Teachers frequently used prompts in order to elicit the desired response rather than providing the response themselves. These prompts often extended over numerous student exchanges before the students were able to arrive at the correct answer. Prompts often took the form of providing the first syllable of the desired response or shortened Inuktitut words in order to help students respond correctly to their elicitations.

Teacher:	This one, what is it?
Students:	Uumm...tutuva (an insect).
Student:	Tutuva.
Teacher:	What is it?
Students:	Tutuva.
Teacher:	What else?
Student:	Tut..
Teacher:	What?
Student:	Uumm...
Teacher:	All of us look carefully.
Students:	Kituqianiuti (insect).

(Tape IN19.LK04.120490)

Teacher:	What do they (wolves) eat?
Student A:	Ptarmigans.
Students:	Ptarmigans.
Student B:	Inuit.
Teacher:	Car...
Students:	Caribou!
Teacher:	Caribou.

(Tape ANI20.RE06.120490)

Teacher:	What about this one?
Student:	Niuvalluk (an insect).
Teacher:	This one down here.
Student:	Qitirulik (an insect).
Teacher:	Qitu... (a short name for the insect).

Students: Qittulapik!
Teacher: Its qittulapik.

(Tape INS19.LK04.120490)

Repetitions and Acknowledgements as Prompts

Teacher repetitions and acknowledgements of student responses did not always signal that students had answered the teacher's elicitation correctly. At times teachers would repeat incorrect student responses, presumably in order to prompt them to think about their replies and correct them on their own. The tone of these teacher repetitions or acknowledgements of student responses were not changed to indicate that the repetition actually signalled that an error had occurred.

Teacher: What's wrong with this one?
Student: He's sad.
Teacher: He's sad.
Why is he sad?
Student: Ummm...
Teacher: He's angry.
Student: Oh yes he's angry.
Teacher: He's angry.

(Tape FLGS13.EAU02.111290)

Teacher: It's snowing here like in the others.
What's happening here?
Student: <They are going out>.
Student: <They are going sledding>.
Teacher: Aaahh. (Acknowledgement)
No. These ones what are they doing here?
Student: They are going out.
Teacher: They are going out.

(Tape ANI20.RE06.120490)

Teacher: What about this? (reading from a book)
Student: His eye.
Students: His eye.
Teacher: Eye.
Student: His eye.

Teacher: Aaahh. (Acknowledgement)
Eye his eye.
It says it like that.
Students: Eye his eye.

(Tape ANI20.RE06.120490)

Teacher: What about you?
Student: Black ball.
Teacher: Black ball.
(pause)
I picked up the black hole punch.

(Tape BLK01.EN01.111790)

Student Initiations

Table 12 compares the frequency of teacher and student initiated sequences in mainstream and Inuit classrooms. Table 12 demonstrates that students initiated significantly more sequences in Inuit classrooms than in the mainstream classroom. Table 13 illustrates the percentage of student initiations which were addressed to the teacher as opposed to peer addressed initiations. Table 13 indicates that approximately 35% of all student initiations were addressed to peers, and gives an indication of the amount of peer interaction which occurred in the Inuit classrooms. Mehan's examination of student initiations comments only on student initiations directed toward the teacher.

Teachers' responses to student initiations in mainstream and Inuit classrooms are illustrated in Table 14. No examples of reprimanding students for their initiations were found in the Inuit data. Initiations were ignored, acknowledged and incorporated at approximately the same rate by both groups of

teachers.

Teacher:	Do Inuit people eat wolves?
Students:	No.
Teacher:	What do they do with them?
Students:	Fur.
Student:	Wolves are grey.
Teacher:	Yes, they are grey. The wolves are grey, right?
Students:	Yes.
Student:	And they are white, too.
Students:	White.
Student:	And black.
Teacher:	Yes.
Student:	Some are brown, too.
Student:	My father got a big one.
Teacher:	Oh, yes?
Student:	Harry got one, too.

(Tape ANI20.RE06.120490)

Teacher:	Fishspear. Is it for dogs?
Students:	<No>!
Student:	<For fish>.
Teacher:	For fish. For fish. You guys look at it. Look at it very carefully. Hey, cousin, do you see it well? Do you all see it well?
Students:	Yes.
Teacher:	You little boys who are here, do you need to use this?
Students:	Yes.
Student A:	I wonder how it was made?
Student B:	By hand. It was made by hand, right?
Student C:	Was it made by a <u>Qallunaat</u>?
Teacher:	This one, was it made by a <u>Qallunaat</u>?
Student B:	By an Inuk man.
Student D:	No. By Inuit people.
Teacher:	By Inuit people. (Pause) Look. It has hooks.

(Tape KAK23.QQ03.120790)

During her visit to a Montreal-based classroom, Teacher 3 commented on the Montreal-based teacher's lack of responsiveness to student's contributions during the lesson she observed.

Table 12

Frequency of Teacher and Student Initiated Sequences

Initiator	Mainstream		Inuit		Level of Significance
	# of Initiations	%	# of Initiations	%	
Teacher	480	81.1	721	69.6	p<.001
Student	110	18.9	315	30.4	p<.001
Total	590	100	1036	100	

Table 13

Inuit Student Initiation Acts According to Addressee

Addressee	Number of Initiations	%
Teacher	203	64.4
Peer	112	35.6
Total	315	100

Table 14

Teacher Responses to Student Initiations

Student Initiation	% of Student Initiations		Level of Significance
	Mainstream	Inuit	
Reprimanded	5.48	0	p<.001
Ignored	40.39	40.61	n.s.
Bound-Off (Acknowledged)	40.78	40.00	n.s.
Incorporated	12.09	19.39	n.s.
Other	1.25	0	n.s.

> When students make comments in the lesson, I would reply and not ignore them as long as they stay on the topic. The students can talk when they want and I can also.

From her comment it appears that Inuit teachers may have a wider interpretation of what constitutes being "on topic" in class discussion than do non-Inuit teachers.

Repetition in Inuit Classrooms

The frequency with which repetition was used by both teachers and students in Inuit classrooms is summarized in Table 15. While repetition was mentioned by Mehan as a form of

Table 15

Use of Repetition in Inuit Classrooms

Speaker	Total Utterances	Total Repetitions	% of Total Utterances
Teacher	1074	85	7.9
Students	1115	191	17.3

evaluation used by teachers in mainstream classrooms, he does not comment on students' use of repetition in the classroom. The amount of repetition occurring in Inuit classrooms and particularly the percentage of student talk which contains repetition in Inuit classrooms appears to be very high.

The Uses of Repetition in Inuit Classrooms

Repetition in Evaluation

The role of repetition in teacher's evaluations has been discussed in the section examining the forms of direct and indirect evaluation utilized by Inuit teachers. Repetition constituted the most frequently used indirect evaluation strategy in Inuit classrooms.

Repetition as Acknowledgement of Student Initiations

Teachers frequently repeated student initiated utterances or portions of utterances as acknowledgements.

Student: My father shot the wolf.
Teacher: Aaah, the wolf.

(Tape ANI20.RE06.120490)

Student: This is to blow your nose.
Teacher: Aaah, this is to blow your nose. A cloth.

(Tape BLK01.EN01.011790)

Repetition in the Maintenance of Classroom Dialogue

Repetition served an important function in the maintenance of exchanges in the classroom. Students frequently repeated the utterances of the teacher or of other students as a means to maintain turn-taking in an exchange. Teachers also frequently repeated students' utterances for this purpose.

Teacher: The shoulder is here.
Student A: Shoulder arm.
Student B: Arm.
Teacher: Shoulder.
Student C: His shoulder.
Student A: His shoulder.
Teacher: His shoulder.
Student D: Shoulder.
Student C: xxx.

Student E: Shoulder.
Student B: <Shoulder>.
Student A: <Shoulder>.
Teacher: Listen carefully.

(Tape BK14.EAN05.112890)

Topically Related Sets in Inuit Classroom Discourse

Inuit IR and IRe routines and their variations typically built upon each other without overt praise or direct evaluation to make up Topically Related Sets in a similar manner to IRE routines in mainstream classrooms, yet usually without the overt evaluative act which signalled the closure of these exchanges in the mainstream classroom. The amount of repetition contained in these exchanges gives the impression that Inuit classroom discourse, rather than consisting of a series of IRE routines, is instead composed of interactions which build on each other by repetition on the part of both the teacher and the students.

Teacher: So what is he doing here?
Student A: Catch a seal.
Teacher: He's trying to catch one.
Student B: He's trying to catch a seal.
Teacher: And here he caught one.
Teacher: He got a seal.
Student C: He got a seal.

(Tape ANI20.RE06.120490)

Teacher: What about this one?
Student: A black plastic bag.
Teacher: A black plastic bag.
Students: A black plastic bag.

(Tape BLK01.EN01.011790)

Teacher: She's sewing kamiks.
What else is happening?

Student A: There are many.
Student B: There are many.
Teacher: There are so many now.

(Tape BK14.EAN05.112990)

Differences Between Teachers

No culture is a monolith. Differences in teaching styles exist both across cultures and within cultures. Cultural Expert 2 stated that not all Inuit teachers teach in the same way, and that differences between teachers were important to recognize and understand. This section will outline areas in which differences between teachers were observed.

Differences Between Experienced and Inexperienced Teachers

The Three Phases of Lesson Organization

The more experienced teachers took a significantly longer period of time to "get in touch" with their students, sometimes twice as much time as the less experienced teachers. They also generally had longer opening phases in their lessons, often twice as long the opening phases of the less experienced teachers. These teachers spent time arranging the students in a circle on the floor, telling them to be comfortable and to give each other plenty of room. They showed an awareness of the individual needs of group members by seating those with hearing difficulties next to them in the circle or by phrasing questions in such a way that a student exhibiting elective mutism might still participate in

group activities through yes/no head nods. The opening phase of Teacher 4 is provided as an example.

Teacher:	You guys come here.
Teacher:	Tugai has to be here.
Teacher:	Who else has trouble hearing?
Teacher:	You sit here.
Teacher:	You move over.
Teacher:	Move over.
Teacher:	Tugai, which ear is hard to hear with?
Teacher:	Come sit here.
Teacher:	Be between each other.
Teacher:	Be very comfortable.
Teacher:	You guys back up, back up.
Teacher:	You guys listen very carefully because we will be on camera.
Teacher:	We are going to do the pictures. @

(Tape INS19.LK04.120490)

The more experienced teachers had fewer activities overall during the school day than the less experienced teachers. While the less experienced teachers had an average of 9 activities in a morning or afternoon period, the more experienced teachers had an average of 6 activities in this same time period. The experienced teachers also managed to tie these activities together more easily than the less experienced teachers, in a similar manner to "Whole Language" classrooms in southern schools. The pace of their lessons was slower and there were longer transition times between activities than in the classrooms of the less experienced teachers. This pacing resulted in a general feeling of calmness in these classrooms.

Turn Allocation

Table 16 illustrates the distribution of turn allocation across the lessons of individual Inuit teachers. As can be seen in this table, the younger, less experienced teachers (Teachers

Table 16

Turn Allocation in Individual Classrooms

Teacher	Individual Nomination (IND)	Invitation to Respond (INR)	Total Turn Allocations	% IND	%INR
1	29	27	56	51.79	48.21
2	56	27	83	67.47	32.53
3	10	96	106	9.43	90.57
4	16	137	153	10.46	89.54
5	27	36	63	72.86	57.14
6	7	72	79	8.86	91.14

Table 17

Forms of Evaluation in Individual Classrooms

Form of Evaluation	Teacher					
	1	2	3	4	5	6
Elicitation	59	92	109	157	65	66
Direct Evaluation	11	3	3	18	4	16
Correction	0	6	0	2	4	10
Acknowledgement/ Request for Acknowledgement	2	5	2	12	5	8
Repetition	1	16	21	11	8	2
Model	3	4	0	3	8	3
Total Evaluations	17	34	26	46	29	39
% of Elicitations Evaluated	28.81	36.96	23.85	29.30	44.6	59.09

1, 2 and 5) attempted to control the lesson through individual nominations to reply much more frequently than the experienced teachers.

Evaluation in IRe Routines

Table 17 illustrates the forms of evaluation and the total percentage of elicitations evaluated in the classrooms of individual teachers. While there are no clear trends in these data distinguishing experienced and inexperienced teachers, both Teachers 5 and 6 evaluated student utterances much more frequently than the other teachers. The request for acknowledgement form of evaluation was used most often among the experienced teachers and particularly often by Teacher 4.

Table 18

Teacher Responses to Student Initiations Across Classrooms

Teacher	% of Initiations Ignored	% of Initiations Acknowledged	% of Initiations Incorporated
1	45.5	36.3	18.2
2	50	40.6	9.4
3	39.3	50	10.7
4	51.7	17.3	31.0
5	44.4	37.8	17.8
6	25.9	53.4	20.7

Student Contributions

Table 18 shows individual teacher's responses to student initiations across classrooms. According to Table 18, two of the

three experienced teachers (Teachers 4 and 6) incorporated student initiations into the classroom dialogue much more easily than the less experienced teachers. All the teachers except Teachers 4 and 6 ignored and acknowledged student initiations at approximately the same rate, and markedly more often than incorporating them.

Differences Between Younger and Older Teachers

Teacher 4, the older teacher, spent less time interacting directly with her students than did the younger teachers. While she was always physically involved in class activities such as book reading or art projects, she did not always interact verbally with the students during these times. There were also many more instances of silent modelling in her classroom than in the younger teachers' classrooms.

The Role of the Teacher

Through the interviews conducted with the teachers involved in the study, it emerged that Inuit teachers considered one of their most important roles in the classroom to be the facilitation of peer exchanges. When asked what they considered to be the most important goal in their classrooms, they replied with such comments as:

> "that my students should know how to get along and help each other" (Teacher 4)
>
> "that my students learn to cooperate" (Teacher 3)

"that my students respect each other" (Teacher 5)

"to keep all the children equal" (Teacher 4)

"to be a good example to the students" (Teacher 6)

Promoting Positive Thinking

Teachers refrained from scolding or negatively evaluating student errors in front of the peer group. In her red and blue math lesson described above, Teacher 5 did not overtly correct the student's error despite the fact that most of the other students were aware that she had made a mistake. When finally forced after much indirect modelling to correct the student, Teacher 5 terminated the exchange on a positive rather than a negative note through emphasizing the desired behaviour. Rather than scolding or raising her voice to discipline the student, the teacher emphasized what the student was able to do well, explaining the desired behaviour through positive rather than negative examples.

Teacher:	Lucy, use only the red and blue ones. You will use only those ones.
Student:	I won't be able to have a sun.
Teacher:	Oh, yes. With red and blue. (Pause) You will listen very well now.

(Tape BK14.EANN05.112890)

This positive approach to dealing with students is typified in a comment made by Teacher 3 regarding helping students who are experiencing difficulty in the classroom:

> I would use encouraging talk to help the student in his thinking. I would say "You have to try" or "You will

> do it better for the next time". I would never tell them they can't do it. This is not a good way. We have to help the children with this thinking.

This same teacher said she would often tell her students that they would not remember a new or difficult word, in order to encourage them to do the opposite. She used this strategy in teaching her grade one students a large number of very specific and difficult words for the body parts. At one point she told the class she would ask them only the ones they did not know well, thus encouraging them to get all the words right. The children were happy and proud to participate in the activity, and called out the answers loudly. She said she used this strategy in order to coax and motivate the students into learning these difficult words without her having to repeat them often, and also to promote success and good feelings among the group.

This teacher would also occasionally call out individual names in a teasing way and tell them to forget a word. This way of teasing made the difficult word "stand out" for the students and thus encouraged them to remember it.

Teacher:	What is this called?
Students:	Uttuvik (part of the head).
Teacher:	Is it called uttivik?
Students:	Yes. Uttuvik.
Teacher:	Uttuvik. Uttuvik. Don't forget this word, because I erased it.
Students:	Uttuvik. Uttuvik.
Teacher:	Look.
Students:	Uttuvik.
Teacher:	I want Elijah, Putulik and Josie to forget about uttuvik.
Putulik:	I won't forget.
Elijah:	Uttuvik. Uttuvik.

Teacher: Yes.

(KAK23.QQ03.120790)

Keeping Participants Equal

The Inuit teachers were careful in the ways in which they attended to individuals within the context of the class. They avoided singling students out for evaluation, praise or correction in front of their peers and were careful not to emphasize one student over another in group interactions. An example of this care and attention to promoting the equality of group members can be found in the following excerpt from the Bookreading lesson of Teacher 5.

Teacher:	(pointing to a picture) Who's mother is she?
Student A:	This one.
Student B:	Lucy's.
Teacher:	Lucy's. And Jessie's and Danieli's and Emalie's and Pita's.
Student C:	Everybody's.

(Tape BK14.EAN05.112890)

All the Inuit teachers spent much time sitting on the floor teaching their students. They rarely sat at their desks, stood at the front of the classroom or at the blackboard even when teaching new concepts and ideas. During her visit to the Montreal-based classroom, the Inuk teacher commented that she felt that the Montreal-based teachers distanced themselves much more from their students than did Inuit teachers. She noticed that while the Montreal-based students were often seated on the floor during reading or circle times, the teachers usually sat on

chairs in front of the group. The Inuk teacher commented that in this way of teaching "the teacher is on top, the kids are down. We don't teach in this way".

Helping Children with Special Needs

The Kativik School Board has recently begun to add positions in special education in all their schools which are open to Inuit teachers who have received some specialized training through the Kativik teacher training program. When asked during the interviews how they dealt with students who were having difficulty in class, the younger teachers praised the idea of special education and replied that they frequently sent these students to the special education teachers. Teacher 4, who was an older woman, seemed uncomfortable with this interview question however, and, while praising the work of the special education teacher in her school, she indirectly expressed her discomfort with the notion of labelling or singling out any one child as a special education student. Instead this teacher replied:

> I try to be close to them, to have them listen, obey and work well. If all the students can do the activity together, I keep all of them together. Sometimes these children need more attention.
>
> (Interview, Teacher 4)

On the same question Teacher 6 commented:

> Inuit teachers have kids close to them, especially kids with problems.
>
> (Interview, Teacher 6)

Promoting Cooperation and Responsibility

There was little emphasis on competition within the Inuit classrooms. While teachers circulated frequently, commenting on students' work, they never overtly identified any one student's work as superior to another in front of the rest of the class. While they did tend to guide students who were having difficulty to observe peer models, they avoided emphasizing either the positive or the negative aspects of any individual student's work in front of the group.

Students did not attempt to monopolize teacher attention or class conversation, and did not appear to be trying to outdo each other in their performance or participation in class activities. While students and teachers often played games which resulted in either individual or group winners, this aspect of the game was not emphasized and the students did not tend to comment on winning or losing at the end of the game. Even when the students played team games in which the class was split in half, often boys against girls, with one team obviously competing against the other, the students and teachers seemed less concerned with the accumulation of points than with participation in the activity itself. Indeed, teachers often neglected to mention how many points each group had received or which group had won at the end of the game. At times games would be terminated before a winner could be determined. The focus of these games appeared to be on the process of participation and not primarily on the final outcome or score.

Similarly, the sense of possessiveness of materials, books, and workbooks so prevalent in mainstream classrooms was not apparent in the Inuit classrooms. Class materials such as colouring pencils, crayons, and scissors were typically kept in large cans and were distributed when needed rather than kept in individual desks. Students were often seen sitting in groups of two or three chatting quietly while engaged in colouring on a single xeroxed picture. Often large groups of children, up to six or seven, would all look together at the same library book, and it was not uncommon to see one student work on another student's notebook or worksheet. Many class activities at the grade one level involved working on assignments in small groups, with one student acting as the group's recorder. The notion that each student must do their own work and that this work then 'belonged' to the individual student was noticeably absent in these classrooms.

During clean-up times, all the students were encouraged to help tidy up toys and blocks, whether they had played with them or not. Before leaving school at the end of the day, the students would again be told to clean up the classroom and help put objects in their proper places. In this way the teachers encouraged all the students to assume responsibility for the classroom and its contents, emphasizing group pride in the appearance of the classroom and communal rather than individual ownership of class materials. One expert teacher observing a sequence where all the students but one were cleaning up after an

activity commented:

> Everyone must clean up together. The one student who is not helping needs to be encouraged to watch the others so she will become responsible.

Non-Verbal Interactions

Teachers and students spent much time involved in joint attention to an object or activity, often without much direct verbal interaction. In one activity, Teacher 4 was seated on the floor with six of her students. Everyone was engaged in making paper flowers out of egg cartons. The students spent much of the activity observing the varieties of flowers that the teacher constructed and tried to copy them. The teacher rarely looked up at the students and rarely spoke throughout the twenty minute activity. At one point, when the teacher had made a particularly beautiful flower, she held it up to the group and drew in her breath loudly while looking at the flower to call their attention to it. The students looked at the flower and many of them then attempted to copy the teacher's idea. Most of this activity took place in silence, with attention focused almost exclusively on the objects and materials. The students and teacher rarely looked at or spoke to each other throughout the lesson. At the conclusion of the lesson the teacher directed one student to get a large can from the bookcase. All the egg carton flowers were placed together into this can. There was no attempt to identify any single flower as belonging to any one student.

Dealing With Student Misbehaviour

In instances where students misbehaved in the Inuit classrooms, the teachers tended to either ignore the behaviour or gently call the children's names, directing them back toward the group. At no time during the videotaping were any instances of any teacher raising her voice or scolding the children observed.

During the Bookreading lesson conducted by Teacher 5, one of the students got up from the floor to get herself a chair which she then placed in her spot in the circle. Teacher 5 ignored this behaviour until two other students got up from the circle to get themselves chairs also. Teacher 5 then intervened, instructing the students in a quiet voice to put the chairs back. She did not single out the student who had begun this behaviour for reprimand, nor did she scold the class.

Teacher: Here. You guys don't have to have a chair.
You are not supposed to have a chair over here.
Please put them back where they belong.
Put them back where they belong.

During Teacher 2's Feelings lesson, a number of the boys began wrestling and rolling around on the floor. The teacher spoke to them quietly, telling them to "Stop moving" and trying to re-involve them in the game by calling on them to take a turn. She did not scold or reprimand them for their behaviour. One of the girls in the class began to sing a song loudly in the lesson, which the teacher ignored. The teacher attempted to encourage the students to follow along by telling them, "Please, let's talk together". She then stopped the lesson, informing the students,

"It's the right time to quit".

When asked in the interviews about dealing with bad behaviour in the classroom, the teachers made the following comments:

> We Inuit teachers would rather model and encourage the children before getting mad. The kids have to know how to fix their behaviour. They can tell you are mad by the way you talk, so there is no need to raise your voice. It's important for them to understand why you are mad. When I was little my mother never yelled at me, but I knew when she was angry. (Teacher 3)

> My idea of the classroom is to have happiness and cooperation. If there are problems there is no need to search out and blame others. When I was a new teacher I tried this but it didn't work. (Teacher 6)

> We try to explain through what is right and how to improve. Students need to know how to continue to be good. (Teacher 4)

During her visit to the Montreal-based classroom, Teacher 3 noticed one of the student's desks had been moved away from the other students and was placed at the very front of the classroom. She asked why this had been done and then commented:

> I would never take a child and move his seat like this. It is not right to single a child out in this way. It will hurt him. We need to encourage the students to learn from others, not single them out and get mad at them. In my class everyone must be treated the same. An Inuk child would not understand this treatment.

Peer Talk in the Classroom

Students were not discouraged from interacting with peers during teacher-led lessons in the Inuit classrooms. Peer talk occurred during almost all activities which took place in the

classrooms with the exception of story telling and book reading activities. As was shown in Table 15, approximately 35% of all student initiated sequences were directed to peers. Students were not expected to be quiet during class time and were not reprimanded for talking to each other during the lessons unless their talk involved disruptive behaviour or the teasing of others. The percentage of overlapping talk occurring in these classrooms also gives an indication of the amount of peer interaction which takes place in Inuit classrooms. Peer talk and peer interactions constituted an important aspect of Inuit classroom conversations, since these peer interactions often involved some form of peer tutoring or modelling.

Teacher: They (the geese) don't stay here all winter.
Student A: (to peer) They used to.
Student B: Where?
Student A: In Amatuq.

(Tape ANI20.RE06.120490)

Student A: Oh! I like to do this.
Student B: Another yellow.
Student A: Another yellow.
Student C: Where did Rhoda put it?
Student B: Those ones are here.

(Tape FLGS13.EAU02.112890)

The Role of the School in Promoting Strong Language

An important theme which emerged from this research was the perceived role of the school in the maintenance of Inuktitut. Both teachers and parents had very strong opinions about this

issue, and provided suggestions about how this could best be accomplished in the classroom. This section describes various aspects of the roles of teachers and schools in keeping Inuktitut strong.

Correcting Inuktitut and English Usage

The Inuit teachers frequently told students to pronounce Inuktitut words properly and modelled correct pronunciation, new vocabulary and appropriate word endings for the students. Teacher would often direct students to "Say it like this" or "Pronounce it properly" when correcting or modelling in the classroom.

Teacher:	This one, what is he doing? Where is he going?
Student:	<He's going to shoot>.
Student:	<He's going seal hunting>.
Teacher:	He's going hunting on the ice.
Student:	Going seal hunting.
Teacher:	It's called hunting on the ice. Seal hunting we don't say that.

(Tape ANI20.RE06.120490)

Teacher:	What about this one Emalie?
Student:	Caribou.
Teacher:	No, this one.
Student:	Caribou's meat.
Teacher:	Here inside here it's called marrow.
Student:	Marrow.
Students:	Marrow.
Teacher:	Caribou's marrow, right?

(Tape BK14.EAN05.112890)

They were also very conscious of the use of English by their students and would correct English usage when it occurred.

Student:	Me first*.
Teacher:	No.

You talked in English.
Student: Oh. I see.

(Tape FLGS13.EAU02.112890)

Teacher: 0 (shows object)
Students: Uumm... black ashtray*.
Teacher: What is it again?
Students: Black ashtray*.
Teacher: In Inuktitut.
Students: Ashtray...uumm ashtray black black.

(* indicates word spoken in English)

(Tape BLK01.EN01.011790)

Teaching Hard Words

The Insect lesson serves to demonstrate the important role of the school in the maintenance of language. Teacher 6, who was present in the classroom during the taping of the Insect lesson and who often team-taught with Teacher 4, commented that the words for the names of the insects used in the lesson were rare and were being lost from the language of the community. She said that she did not know these insect names before they were taught to the children of this class. Indeed, the Inuk translator who transcribed the Insect lesson was unfamiliar with many of these insect names, and the examples from this lesson used in the text often utilize Inuktitut names for the insects as the translation of these insect names is unavailable. Teacher 4 had instructed the children to go home and teach these words to their parents so they would not be forgotten. A number of the parents of these students had mentioned to Teacher 4 that they had learned many traditional Inuktitut words from their seven and eight year old children. When Cultural Expert One observed this segment of

videotape she commented:

> These words for insects are not heard much. She's teaching the Inuktitut language, the real language. It's worth spending the time to teach these words. It keeps the children thinking. They are busy learning the language. When she teaches the children she uses hard words that are not used much any more. The children need to know these words. To us now, the Inuktitut language is very poor. The teachers need to teach the children the correct ways of saying things. We need to tell them "Say it like this" and "Talk like this" since our language is getting weaker. It's very important to use the proper words to make the language strong.

This activity took place in late December, when insects are scarce in the North. The point of this lesson was not only to teach the children about insects per se, but also to demonstrate to them the importance of vocabulary and the knowledge of difficult words.

In a teacher training session which took place in March, 1990 Teacher 3 was asked to organize and demonstrate the teaching of a lesson for the less experienced teachers to observe. In her lesson, Teacher 3 concentrated on the Inuktitut word for icicle. In her comments about this lesson, Cultural Expert 2 mentioned that this word was a 'little word' which was not heard much in Inuktitut. By concentrating on an obscure Inuktitut word, Teacher 3 had really been giving the students a lesson in the importance of these 'little words' in Inuktitut. Cultural Expert 2 felt that teaching such words was an important way for Inuit children to recognize and begin to appreciate the complexity and depth of the Inuktitut language.

The School's Responsibility in Teaching Inuktitut

A number of parents of children taped during this study brought out in various ways the notion that their children had been "given to the school", making the school responsible for much of the education which traditionally took place at home. One of the most important components of this education was felt to be the teaching of Inuktitut. Since this critical and highly valued aspect of the child's development has now fallen more and more within the domain of the school, many parents and teachers expressed concern about the quality and 'strength' of the language being used in the classroom. One of the teachers involved in a teacher training course in which aspects of the present research were presented summarized the problem in the following way:

> In the past children would stay with their mothers until they married, and so they learned the mother's language. Now children are given to the teacher very young. This is especially true for kindergarten children learning in a second language. Kids now don't pronounce properly, and mothers need to understand that is because children are not with their mothers all day and so they don't pronounce in the mother's way. Now children use the teacher's language more.

The Need for Teachers with Strong Language Skills

The cultural experts commented on the need for experienced teachers with excellent command of Inuktitut to be teaching in the early grades. Since the children have only three years of classroom exposure to Inuktitut before changing to a second language, they felt it was crucial that this time be used in the

most effective way possible.

> It's very important for kindergarten teachers to have a strong knowledge of Inuktitut. These teachers need to be good in Inuktitut and teach it well.
>
> We need strong teachers for kindergarten with a good knowledge of the language. Kindergarten is the most important grade. It is the beginning of school. This is when they learn about school.
>
> Kids are learning how to talk at school. The teachers need to model the correct way of talking. It's important for the children to speak properly, and the teachers need to tell them how.
>
> Some new teachers don't speak well. They talk like a baby, and make the kids talk this way. Sometimes they make mistakes in Inuktitut. They don't know the language well enough. Younger teachers need to be more careful of how they speak to children.

Teaching the Community Dialect

A number of the teachers involved in the study felt very strongly that teachers should remain in their own communities in order to teach children in their local dialect. These teachers believed that the practice of teaching in other communities weakened the local dialect of Inuktitut and would eventually erode important vocabulary and usage differences of which individual communities are very proud.

> Nowadays the languages from all the communities are getting mixed up. Quebec and NWT dialects are all together. This causes many arguments. People who say others are using "wrong words" or having "weak language" may be because of this. There are problems with the secondary students who all go to school together and learn the Kangiqsujuak language and then take this back to their communities. Teachers must be strong in the language of their community. These languages must be saved and preserved through the proper use of vocabulary. Teachers shouldn't go to other communities to teach. This will weaken the

language of the community.

Sensitizing Children to Dialect Differences

The Expert Teachers felt that Inuit children should become sensitized to the styles and vocabulary differences in the dialects of Inuktitut spoken in other places, since it was important for all Inuit to recognize and be proud of their own dialect while understanding those of Inuit living in other places. Some of the teachers encouraged their students to recognize and learn such differences in the classroom.

Teacher:	How do the NWT people say this?
Students:	Mitjuapaq.
Teacher:	Yes. They say mijuapaq, right?
Students:	Yes.
Teacher:	What is it?
Students:	Mitjuaju.
Teacher:	Mitjuaju. People who live here say what?
Students:	Mitjuaju.
Teacher:	(Laughs)

(Tape IN19.LK04.120490)

Chapter 8

DISCUSSION AND CONCLUSIONS: THE TRANSFORMATION OF COMMUNICATIVE INTERACTIONS IN INUIT CLASSROOMS

This ethnographic study examined communicative interaction and discourse patterns found in six Inuit-taught classrooms in three remote communities in Northern Quebec. The purpose of the study was to investigate the ways in which Inuit teachers have transformed classroom discourse and interaction patterns in order to preserve the cultural appropriateness of Inuit social interactions within the classroom. Aspects of the organization of discourse structure, the role of the teacher, and peer interactions were documented and presented in comparison to results outlined in Mehan's (1979) examination of the organization of mainstream classroom discourse. In this chapter, the nature and significance of these differences will be discussed from a transformational perspective, indicating the ways in which Inuit school interactions have been made more continuous with home practices and cultural values regarding appropriate communicative interactions with children. Issues in the development of a model of classroom competence for Inuit children will be presented. The findings of this study will be compared with those found in the literature on teaching in other Aboriginal classrooms. Implications of the findings of this

study for the theory of the transformation of discourse in its cultural context as well as for theories of minority school failure, particularly in the area of home school discontinuity, will be discussed.

The Organization of Inuit Classroom Interactions: A Cultural Interpretation

The results of this examination of Inuit classroom discourse and interaction have pointed to significant differences in the organization of classroom conversations between Inuit and mainstream teachers. Rather than simply interpreting these differences as representing aspects of teaching style which vary between Inuit and mainstream teachers, however, the perspective taken in this research is that these differences actually reflect transformations which have taken place in Inuit classroom discourse through the incorporation of culturally congruous ways of interacting with children and the promotion of appropriate cultural values regarding social interactions in Inuit classroom conversations. In this section, the transformations which have occurred in Inuit classroom discourse will be outlined and interpreted within a cultural framework in order to demonstrate how the organization of discourse and the roles of both teachers and students in Inuit classrooms have been affected by the incorporation of fundamental Inuit assumptions regarding culturally-appropriate communicative exchanges with children in the classroom.

Transformations in Inuit Classroom Discourse

Within mainstream classrooms, discourse is typically organized around elicitation sequences which are initiated and controlled by the teacher. IRE sequences, the basic discourse pattern in mainstream classroom interactions, establish the role of the teacher as one of orchestrator, regulator and evaluator of classroom communication. The flow of classroom dialogue is typically maintained by the teacher through use of turn allocation procedures which identify and regulate speakers within classroom interactions. Student-initiated sequences are filtered through the teacher before being allowed to influence the conversation of the group. Within mainstream classroom exchanges, then, teachers hold a central and authoritative position as conversational partners and interactors with students, establishing and maintaining control of all aspects of the conversation within teacher-directed lessons. Students are expected to participate actively and verbally in these exchanges in order to demonstrate their knowledge of teacher elicited information. Competent participation in these classroom conversations necessitates the integration of academic knowledge and complex interactional skills on the part of the student.

On the surface, it would appear that the situation of the classroom would therefore represent a significantly discontinuous experience for both Inuit children and adults, forcing both teachers and students into communicative roles which are contrary to language socialization practices and cultural values regarding

appropriate interactions in Inuit society. The role of the teacher as a regulator and controller of conversation and the child as an active verbal participant in these conversations is discontinuous with findings regarding langauge socialization practices and social interactions with children in their families (Crago, 1988). Differences in the forms and functions of discourse in the classrooms of mainstream and Inuit teachers outlined in the results section between Inuit and mainstream teachers appear to reflect significant differences in basic principles and assumptions which underlie the organization of classroom discourse and the roles of teachers and students.

The results of this examination of Inuit classroom interactions indicated that transformations of discourse in Inuit classrooms occurred in the organization of the various phases of the lesson structure, the structure of elicitation sequences and IRE routines, nomination formats in turn allocation, the exercise of social control by teachers over students, the approach to correction and evaluation of performance, the incorporation of student initiations into classroom exchanges, the importance of peer interactions and modelling, and the distribution of talk in the classroom.

The Organization of Inuit Classroom Discourse

The Three Phases of Lesson Organization

The Inuit teachers seemed to organize and structure their lessons based on their perceptions and awareness of the students' behaviour and responsiveness, concluding lessons and beginning

new activities according to the students' degree of attentiveness and participation. Individual activities would be changed or left for later completion when the teacher felt the students were not following carefully. These lessons were student-centred rather than stemming primarily from the teacher's agenda. This attentiveness to student participation in the structuring of classroom interactions was also commented on by Erickson and Mohatt (1982).

Unlike the mainstream classroom described by Mehan (1979) Inuit teachers avoided using extensive monologues in their classrooms, with the exception of bookreading and story telling times. Directives and informatives were used significantly more frequently than elicitations in Inuit teachers' interactions with students. The overall distribution of talk in Inuit classrooms was almost equally divided between teachers and students. This division of talk is more reminiscent of mainstream conversational exchanges than classroom interactions. These findings pointed to significant differences in the overall forms of the organization of classroom discourse and the distribution of talk between the Inuit classrooms and the mainstream classroom described by Mehan (1979).

Turn Allocation and Peer Models

Directives and teacher-initiated elicitations in Inuit classrooms were formulated primarily through use of the invitation to reply format of turn allocation. Students tended to treat individual nominations as invitations to reply, and were

not discouraged from answering elicitations directed at other individuals. No instances of the invitation to bid format were found in the data. This finding is similar to that described by Lipka (1992) in the Yu'pik classroom. Peer models were utilized very effectively in the organization of discourse as well as in the correction of errors and in group activities. Indeed, Inuit classroom discourse appeared to progress by means of repetition and a subtle building onto peer models provided within the group response rather than through the regulatory intervention and of teacher discourse. A great deal of overlap in both teacher and student utterances was a characteristic of Inuit classrooms.

Inuit IR and IRe Sequences

Inuit classroom discourse was not organized around the IRE pattern of lesson structuring typically found in mainstream classroom interactions (Cazden, 1988; Mehan, 1979). Instead, the Inuit teachers tended to engage in longer interactional sequences which focused on group participation and in which evaluation of student responses was typically absent unless some type of error occurred. The form of these exchanges in Inuit classrooms has been called IR and IRe as opposed to IRE routines since the Inuit teachers either utilized no evaluation mechanism or used more indirect forms of evaluation in which the evaluative aspect did not stand out in an overt way within the interaction. Inuit teachers acknowledged and repeated student responses more often than directly evaluating them, avoiding personal judgements and placing the emphasis more on the information requested and less

on the correctness of contributions by individual members. The absence of overt evaluation on the part of the teacher after each student response gave the impression of less teacher-intervention in the overall classroom talk. Lipka (1991) also commented on the lack of overt evaluation in the Yu'pik teacher's classroom. This finding is contradictory to that described by Mehan (1979) and Cazden (1988) for mainstream classrooms.

Student Initiations

Students were able to interject comments, informatives and elicitations towards both their peers and the teacher relatively freely within the context of the lesson, and much more easily than in the mainstream classroom described by Mehan (1979). The incorporation of student initiations into classroom conversations, especially among the more experienced teachers, allowed students to directly influence classroom exchanges and participate in their overall development as more equal members. Inuit teachers did not consider student initiations as interruptions or threats to teacher authority and control in the classroom. Students were not reprimanded for this behaviour in the manner noted by Philips (1983). Instead, student contributions were a consciously promoted and highly valued aspect of Inuit classroom interactions.

Correction of Errors

Teachers used more privatized and individualized forms of correction in their classrooms, and avoided drawing attention to individual student performances within the group. The

privatization of individual corrections by the teacher was also observed in the Aboriginal classroom described by Erickson and Mohatt (1982). The Inuit manner of checking in with individuals outside of the public arena, the subtle use of peer models, and the forms of teacher prompts all allowed students to participate in classroom exchanges without pressure.

The Significance of Transforming Classroom Discourse: Changing Communicative Roles in the Classroom

The transformation of discourse in Inuit classrooms had the effect of changing the roles of both teachers and students in classroom communicative exchanges, allowing them to participate in more culturally-congruous ways in classroom conversations. Both the role of the teacher as the authority and controller in classroom interactions and the role of individual students as performers and communicative partners of adults were de-emphasized as a result of these transformations. These transformations also allowed teachers to incorporate the cultural values of equality, cooperation, group awareness and respect for individuals into their classroom interactions. Lipka's (1991) cultural interpretation of the communicative exchanges which occurred in the Yu'pik classroom was based on similar observations.

The Role of the Teacher

Emphasis on peer rather than individual responses in the organization of classroom discourse allowed teachers to capitalize effectively on peer models in providing correct

responses and correcting errors. This reduced the necessity for teachers to intervene in classroom dialogue as regulators and evaluators. The de-emphasized role of the teacher in the classroom exchanges of the Aboriginal teacher was also discussed by Erickson and Mohatt (1983). While the Inuit teachers tended to initiate elicitation sequences and to control the overall topic of conversation within the lesson, they focused on the importance of the peer group and peer models as an integral part of the building of classroom talk. The emphasis in Inuit classroom exchanges was on listening to others as opposed to talkativeness and individual performance and participation. This situation allowed the teacher to avoid the role of authoritarian, regulator and evaluator in the building of classroom conversations typical in mainstream classrooms (Mehan, 1979), and also promoted important Inuit values of respect for others, cooperation, and responsibility for the peer group.

The shift of focus away from the teacher as the sole communicative partner and source of information in the classroom caused students to take a greater responsibility in the maintenance of classroom exchanges. Avoidance of overt praise or positive evaluation for individual group members by the teacher also served this purpose. By placing the teacher in a less controlling position of the classroom talk, students were encouraged to take more responsibility not only for the progression of the lesson, but also for their own learning.

De-emphasizing Individual Student Performance

The re-organization of discourse also served to shift the focus of attention onto the peer group as a whole, and avoided spotlighting individual performances within the group. The organization of classroom exchanges through directives and group responses to teacher elicitations placed no overt verbal demands on the students, allowing individuals to participate successfully in those activities in which they felt comfortable and to remain silent in order to listen and observe in others. Use of the invitation to respond nomination format and the avoidance of overt evaluation of student responses served to promote the equality of all group members and prevented competition and potential loss of face for individual students, permitting the possibility that all members participate in classroom exchanges equally and without fear of standing out from the rest of the class. Students with special needs were incorporated into the classroom in such a way as to allow them to remain inconspicuous and thus to maintain face within the group. This organization of classroom discourse allowed students to build on their home competencies of listening and observing others, of following peer models, of responding to directives, and of avoiding overt individual verbal performances in direct interactions with adults. Students were able to take greater responsibility in their own learning and the progress of the group while at the same time learning central Inuit values concerning the importance of group cooperation.

Incorporating Cultural Values

These transformations of Inuit classroom discourse reflect underlying cultural beliefs regarding appropriate social interactions and communication in Inuit society, and serve to promote important cultural values in the classroom. One of the essential goals of the Inuit classrooms appeared to be promoting the Inuit social values of respect for others, cooperation between group members, and the equal status of all individuals in the group, values which are extremely important in wider Inuit society. Competition, verbal displays of knowledge, and overt social control of the teacher over the class are common aspects of mainstream classroom interactions which were not observed in any of the Inuit classrooms. The re-organization of discourse reflected the relatively equal status of both teachers and students within the classroom conversation. The lack of competition and possessiveness in Inuit classrooms allowed students at various levels to work together and cooperate without judgment and without loss of face. Use of subtle evaluations, individual correction, group responses and peer modelling all served to promote equality and cooperation among members of the peer group, while not over-emphasizing the role of the teacher within the classroom context.

The research also documented the important role of the teachers in promoting strong language in the classroom. Through the teaching of hard words, the importance of speaking "properly", and the sensitization of children to dialect and

community differences in language use teachers promoted the preservation and maintenance of Inuktitut and developed in their students an awareness and appreciation for the complexity and richness of their language.

The egg carton flower lesson seems to exemplify how many traditional Inuit values are maintained and emphasized in the classroom. The notions of learning by looking, teaching through modelling and not only through talk, the respectful silence of children in the presence of an elder, and the notions of cooperation and lack of emphasis on possession and individuality are all inherent within this one simple lesson. When one considers that this lesson took place in late December, when the average outdoor temperature hovers around -20 C, it is obvious that the teacher did not have a seasonal activity in mind. Instead, it appears she wished to emphasize certain values which she considered important to the proper development of her students. It was not the activity itself or the even the product of that activity which formed the basis of the lesson, but the process by which this product was achieved.

Classroom Competence For Inuit Children

The development of classroom competence in Inuit classrooms appears to rely on the acquisition of very different skills from those required for successful participation in mainstream classroom exchanges. Emphasis in the Inuit classrooms was on

action and appropriate group participation rather than on individual verbal displays of knowledge. Appropriate use of peer models, the interpretation of subtle prompts and evaluations, the various forms and uses of repetition in the classroom, and the successful incorporation of initiations into the classroom conversation are all necessary skills to successful participation in Inuit classrooms. Based on these findings, it would appear that classroom competence for Inuit children relies less on oral production and verbal displays of knowledge, and consists primarily of successful integration into the peer group and appropriate group membership and behaviour.

The development of competence in Inuit classrooms stresses very different interactional skills from those which form the basis of competence in mainstream classrooms focusing on individual verbal performance in classroom interactions. These two forms of competence do share one fundamental characteristic. Within Inuit classrooms, student replies to teacher initiation acts required the same forms of response as those outlined in the mainstream classroom by Mehan, indicating that similar co-occurrence relationships are in effect in both classroom situations. When student replies did not follow these co-occurrence relationships, Inuit teachers would prompt students to come up with the appropriate form of the reply through the use of extended sequences in a similar manner to mainstream teachers. The understanding of the co-occurrence relationship between teacher elicitations and student replies is one aspect of

classroom competence which is shared by both Inuit and mainstream children.

While Inuit children had a somewhat better chance of getting their initiations incorporated into the classroom discourse, their initiations were nevertheless ignored and bound off at approximately the same rate as student initiations in mainstream classrooms. The incorporation of student initiations into mainstream classroom conversations requires specific and complex interactional and interpretive skills on the part of the students. While these skills are likely to be significantly different for Inuit children, there do appear to be some requirements regarding the components of successful student initiations in order for them to be incorporated into Inuit classrooms as well. This research has not concentrated on teasing out the necessary components of successful student initiations in Inuit classrooms. However, the incorporation of student initiations into the stream of classroom talk is another aspect of classroom competence shared by Inuit and mainstream students.

The Continuity Between Home and School Discourse for Inuit Children

The findings of this study reveal important parallels between classroom interactions and those described in the home study conducted by Crago (1988). In the home, children were found to have few direct verbal interactions with adults, with

most of the talk occurring between peers and siblings. Interactions with adults in the home tended to consist primarily of directives. A hierarchy of silence existed between elders and children in which adults would interact less directly with children when younger adults were present. Talkativeness and the verbal display of knowledge were discouraged in the home, and children learned primarily through listening, observation and example.

Inuit teachers valued and encouraged peer interactions and exchanges in the classroom. Peer responses served as examples for the group and were often used as models in the indirect correction of errors. Teachers utilized significantly more directives in their teaching than did the mainstream teacher in Mehan's (1979) study, and did not require individual verbal performance in classroom interactions. Much teaching in Inuit classrooms was accomplished through teacher modelling which was often non-verbal. This focus on peer interaction and the awareness of others in the classroom de-emphasized the adult as a conversational partner in the classroom, a role which would be discontinuous with home practices, while simultaneously promoting important values stressing appropriate group participation and awareness. The older teacher in this study utilized more modelling in her teaching than did the younger teachers, and often seemed to distance herself from student interactions through silence. This may be an example of how Crago's (1988) hierarchy of silence plays itself out in classroom interactions

with older teachers.

Similarities in Discourse and Interactions Across Aboriginal Classrooms

The findings of this study are consistent with many of those previously outlined in other Aboriginal classrooms (Erickson & Mohatt, 1982; Philips, 1983; Lipka, 1991; Scollon & Scollon, 1981). The organization of discourse in these classrooms shared a number of features including the lack of teacher monologues, the use of directives, the use of indirect, privatized methods to assist and correct individual student performance, and the use of the invitation-to-respond format of teacher elicitation. The role of the teacher in the overt social control of student behaviour and in the maintenance and evaluation of classroom exchanges was de-emphasized while students were left more free to comply or not comply with certain aspects of the organization of lessons and were given more responsibility in the construction of classroom dialogue. Overt social control was avoided by all the Aboriginal teachers, and peer models served an important function in classroom conversations. The evaluative aspect of IRE sequences was softened and made more indirect for these children, and teachers avoided overt criticism as well as overt praise of individuals within the peer group. Lipka also noted the use of acknowledgements and repetition as forms of evaluation in the Yu'pik teacher's classroom.

All of the Aboriginal teachers demonstrated an awareness and

respect for individual student face in classroom interactions, and the values of peer cooperation and responsibility in the overall functioning of classroom exchanges were stressed in all of these classrooms. Respect for individual rights of students, non-interference, solidarity and the role of silence in adult-child interactions are aspects of social relations which form the basis of communicative exchanges in many Aboriginal groups (Basso, 1970; Erickson & Mohatt, 1982; Malcom, 1982; Philips, 1983; Scollon & Scollon, 1981). The transformation of discourse in Aboriginal classrooms allowed teachers to incorporate these important cultural values into their classroom interactions, and can be interpreted as an affirmation of cultural practices regarding appropriate social exchanges with children.

The Potential For Discontinuity

Contrasts between the organization of discourse and classroom interactions of the Inuit teachers documented in this study and those of non-Inuit teachers point to areas of discontinuity which have potentially significant ramifications for the successful learning and teaching of Inuit children. The interactional differences between Inuit and mainstream teachers documented in this study have the potential to result in problematic educational situations for Inuit children when they are placed in classrooms taught by non-Native teachers, a situation which typically occurs at the grade three level in the

Kativik School Board. This shift involves not only a change in the language of instruction, but usually also a change in the cultural orientation of the teacher. The change from Inuit to non-Inuit teachers implies a change in communicative interaction patterns and in the promotion of cultural values in the classroom which requires a significant adjustment on the part of Inuit children. However, at the present time this shift takes place with no transition period or preparation for the students or teachers. Such a shift could endanger the already seemingly precarious position of the Native language and culture in the face of the language of the majority culture which is dominant in the classroom and has significant prestige in the wider community.

Non-Inuit teachers frequently comment that Inuit children are 'silent' in class, that they are unwilling or even unable to answer teacher-directed questions, that they engage in too much peer interaction, that they move about too freely within the classroom, and that they cannot work independently. Based on the description of Inuit classroom interactions outlined above, it is possible that these behaviours may stem from forcing the children, without a transition period, into new and unfamiliar interaction patterns which emphasize individual rather than group responses, as well as from changes in both the teacher's and children's roles in the classroom. The values of independence, competition and achievement, seen as important goals in mainstream classrooms, appear to be in direct contrast to the

cultural values of cooperation, respect for others, and the equality of all participants promoted by the Inuit teachers observed as part of this research. The home-school discontinuities implied by this situation resemble those outlined in Chapter 3 in the work by Erickson (1979, 1986, 1987) and Ogbu (1981, 1982, 1987). They have the potential to place Inuit students at a serious disadvantage in terms of school success.

While it has not been the specific intent of this research to examine discontinuities between Inuit and non-Inuit classroom interactions, it is felt that the information obtained through this study might be beneficial for both Native and non-Native teachers to understand. Previous research in the area of culturally-responsive pedagogy (Au & Jordan, 1981; Heath, 1983; Holm & Holm, 1990; Tharp et al, 1984; Vorih & Rosier, 1978) has pointed to significant improvements in the school performance of mainstream children when classroom interactions were structured in such a way as to allow children to capitalize on their home competencies in classroom exchanges. The findings of this research point to areas in which teachers might re-structure their classroom interactions to reflect more culturally congruent educational situations for Inuit children. These include such aspects of classroom interaction as nomination format, evaluation of student performance, peer interaction, use of peer models, and the incorporation of student contributions into classroom conversations. A sensitivity to those aspects of classroom discourse and interaction in which transformations have occurred

and the accompanying changes in the roles of both teachers and student in classroom interactions might be useful areas to begin in the re-structuring of classroom interactions with Inuit children in such a way as to maximize learning while minimizing cultural loss. An understanding of the social organization of Inuit lesson structure and classroom discourse may eventually be used to make classrooms more comfortable and profitable places for Inuit children when (and if) they are taught by non-Inuit teachers.

A parallel approach which follows along the lines of that proposed by Delpit (1987) might be for Inuit teachers to prepare students for this transition by explaining to them the specific ways in which non-Inuit teachers' organization of discourse differs from that to which they have become accustomed in Inuit classrooms. If both teachers and students were made aware of specific aspects of classroom discourse in which differences were likely to be observed, potential problems might be more easily avoided or resolved.

Future Research

The results of this study show certain similarities to the organization of classroom interactions documented in other Aboriginal classrooms. However, specific aspects of classroom discourse have not been examined in a formal manner. An analysis of classroom discourse occurring in other Aboriginal classrooms

utilizing the coding and analysis system developed for this study would provide interesting information regarding the overall usefulness of the system as well as providing insights into aspects of the transformation of classroom discourse and their variations across communities and Aboriginal groups.

Based on the findings of this study, areas of potential discontinuity for Inuit children in classrooms taught by non-Inuit teachers have been identified and outlined. An examination of such educational situations would determine how many of these areas actually result in discontinuities with the teaching of the Inuit teachers. The effects of such discontinuities on the later school performance of Inuit children needs to be measured. Such information would provide important insights into areas in which attempts at culturally-responsive pedagogy might be focused, as well as providing support for fundamental assumptions underlying the theory of cultural discontinuity.

A number of important differences in the classroom interactions of younger, less experienced teachers and older, more experienced teachers emerged from this research. These included a greater tendency to engage in more direct and overt evaluation of student responses in the classroom, a greater attempt to control classroom exchanges through use of the individual nomination format in elicitations, less time spent in establishing rapport with students at the beginning of the day, and less facility in the incorporation of student responses into classroom exchanges among the younger teachers. It is unclear

whether these tendencies are a result of an overall lack of teaching experience among these younger teachers, or whether the differences actually indicate a change in orientation in teaching toward more mainstream models which is evolving in the schools. Use of these strategies might be reflections of the younger teachers' attempts to incorporate, either consciously or unconsciously, aspects of their own educational experience into teaching in their classrooms. Further examination of the classroom interactions of a wider range of Inuit teachers in a wider variety of grade levels and communities would serve to clarify and elaborate these differences.

The examination and delineation of a set of cultural practices serves not only to make these practices explicit both for the members of the culture and for others, but can also be used as a means to strengthen them. The documentation of the Inuit classroom discourse and interaction patterns in this study has the potential not only to reduce home-school discontinuities in both first and second language classrooms, but also to promote the maintenance and status of Inuit language and culture through an understanding and wider application of traditional values and teaching strategies in both Inuit and non-Inuit classrooms. This awareness and understanding may constitute a significant step in the goal of developing 'additive' rather than 'subtractive' education in Inuit classrooms.

The Usefulness of a Transformational Perspective in Research in Non-mainstream Classrooms

An examination of Aboriginal classroom interactions from the perspective of the transformations that occur in these classrooms as a result of the incorporation of cultural values and congruous communicative exchanges by Aboriginal teachers entails a shift in perspective from that which has been taken in any previous research in the area of Aboriginal classroom communication. Rather than examining various aspects of communicative failure and attempting to rectify these interactions by means of adaptations to the communicative process, the perspective implicit in the research focusing on the discontinuities in educational exchanges, the transformational perspective begins from the standpoint of those aspects of classroom interactions which are proceeding smoothly and successfully for both teachers and students. It entails examining what teachers and students are doing to co-construct classroom interactions to make them work rather than focusing on those aspects that are not working. In this sense it is a more positive and empowering perspective from which to examine Aboriginal classroom conversations, as it focuses on the ways in which Aboriginal teachers themselves are influencing and affecting the educational process and are creating their own models of communication in the classroom rather than the ways they have been influenced and affected by outside models.

At the present time, only very few researchers have examined

the organization of discourse and interaction occurring in Aboriginal classrooms from any perspective. Meanwhile, Aboriginal leaders all over the world are seeking increased self-government, local control of their communities and resources, access to the organizations which control power within the dominant society, and the overall empowerment of their people. The future of these Aboriginal communities lies at least partially in the education of their youth. Aboriginal children must be made aware of and instructed in accordance with the values and socialization patterns in operation within their communities if they are to face their future with confidence and pride in themselves and their cultural background. This entails a greater understanding of what constitutes culturally-congruous education and interactions in schools across Aboriginal nations. One way that this can be accomplished is by examining the specific ways in which Aboriginal teachers have transformed their classroom interactions to incorporate community values and ways of talking into their classrooms.

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APPENDIX A

Sample Tape Log

Tape #5

Place: Kindergarten, Kangirsuk

Date: March 7, 1990

Time: 1:00-3:00

Mood: All quite relaxed. Paying attention to the camera only the first few minutes. No one seemed nervous.

Difficulties: Had to tape in culture room as classroom is being used for teacher training.
Some problems with light from the window.
Limited space in the room made it hard to move around and keep out of the way.
Extra extension cord is very helpful. Battery pack runs out too fast.

Present: Full class.

Rhoda has returned to Salluit.
Anita has gone to Quaqtaq.

Activities: Opening exercises
Songs
Flashcard game
Writing
Plasticine
Names and reading exercise with pocket poster
Snack and freeplay
Dancing game
Art -tissue paper hat making

Comments: Teacher concerned about keeping kids quiet since teacher training is going on next door.

Need to do interview, draw classroom layout.

APPENDIX B
Description of Titled Sequences

TEACHER 1
BLACK

@Filename: BLK01.EN01.011790
@Tape Location: 01:03:56-01:11:00
@Transcriber: Lucie
@Participants: TEA STU STS
@Grade Level: Kindergarten
@Date: 17-JAN-1990
@Time: early afternoon
@Location: Kangirsuk
@Situation:

Prior to activity described, children engaged in whole group cut and paste activity making a flower. Children called to sit on floor by TEA. Not all students have completed previous activity. All objects involved in lesson have been assembled previously by TEA. Lesson is an object-naming sequence revolving around the Inuktitut word for "black". Lesson taken from Kativik math curriculum for kindergarten. General activity type: Question-answer, repetition routine. Full class present. Language used is Inuktitut, the first language of all participants.

TEACHER 2
FEELINGS

@Filename: FEEL13.EAU02.102890
@Tape Location: 0:51:55-1:02:03
@Transcriber: Elisapie
@Participants: STU Student; TEA Teacher: STS Students
@Grade Level: Grade 1
@Date: 28-NOV-1990
@Time: late morning
@Location: Kangirsuk
@Situation:

Prior to activity described, children were engaged in colouring a worksheet at their desks. Children are called to sit on the floor by TEA. Not all students have completed previous activity. Teacher begins the lesson before all participants are seated. Lesson is an oral language lesson on feelings. Students roll a die and move along a game board. When they land on a face portraying a certain expression they must answer questions about this feeling. General activity type: question answer, discussion. Language used is Inuktitut, the first language of all participants.

APPENDIX B (cont'd)

TEACHER 3
KAKIVAK

@Filename: Kak23.QQ03.120790
@Tape Location: 0:33:25-0:49:41
@Transcriber: Elisapee
@Participants: STU Student; TEA Teacher; STS Students
@Grade Level: Grade 1
@Date: 07-DEC-1990
@Time: late morning
@Location: Kangiqsujuaq
@Situation:

Prior to activity described STS and TEA were seated on floor labelling a large model of the body with word cards. STS directed to sit at tables by TEA. TEA circulates among students taking chairs off tables and checking in. Lesson is a discussion of the kakivak or fishspear. General activity type: question-answer, listening. TEA tells story about a fishing experience she had with her father when she was young. Materials used: large picture cards, large and small word cards, kakivak. Language used is Inuktitut, the first language of all participants.

TEACHER 4
INSECT

@Filename: INS19.LK04.120490
@Tape Location: 1:02:49-1:16:21
@Transcriber: Elisapee
@Participants: Stu Student; Tea Teacher; Sts Students
@Grade Level: Combined grade one and two.
@Date: 04-DEC-1990
@Time: Late morning
@Location: Quaqtaq
@Situation:

Students working on a math activity prior to activity described. Children called to sit on floor by TEA. Lesson is a picture naming sequence about insects. General activity type: Question-Answer, repetition routine. Two class members are absent. Language used is Inuktitut, the first language of all participants. Materials used are picture cards of insects with insect names written on the back.

APPENDIX B (cont'd)

TEACHER 5
BOOK

@Filename: Book14.EAN05.112890
@Tape Location: 0:32:00-0:42:00
@Transcriber: Elisapee
@Participants: STU Student; TEA Teacher; STS Students
@Grade Level: Kindergarten
@Date: 28-NOV-1990
@Time: Late morning
@Location: Kangirsuk
@Situation:

STS colouring a picture at tables prior to activity. TEA takes a book from her desk and goes to sit on floor. Not all students have finished the previous activity. Some kids join TEA on floor. TEA begins activity before all kids are sitting on floor. General activity type: Question-answer, repetition routine. Language used is Inuktitut. There are some English first language speakers in the class who have one Inuk and one Qallunaat parent.

TEACHER 6
ANIMALS

@Filename: ANI20.RE06.120490
@Tape Location: 00:23:06-00:34:57
@Transcriber: Elisapee
@Participants: STU Student; TEA Teacher; STS Students
@Date: 04-DEC-1990
@Time: early afternoon
@Location: Quaqtaq
@Grade Level: Kindergarten
@Situation:

Prior to activity described, students were forming syllabic patterns on floor using straws. Children are called to sit at tables briefly, then all move back to floor. Lesson is an oral language about animals found in the region, followed by a discussion of a number of pictures depicting winter activities. General activity type: Question-answer, discussion. Full class is present. Language used is Inuktitut, the first language of all participants. Materials used: large pictures of animals, book containing winter activity sequences.

APPENDIX C

Interview Questions

Background information:

personal educational history

teacher training

teaching experience

1. What do you think is the most important thing that needs to be taught at school?

2. What values do you stress in your teaching?

3. How do you deal with children who are having trouble learning in the classroom?

4. How do you deal with children who are misbehaving in the classroom?

5. How do you plan and organize your lessons?

6. How can you tell if students are learning well?

APPENDIX D

Transcript Coding Categories

@ Begin
@ Filename:
@ Tape Location:
@ Transcriber:
@ Participants:
@ Date:
@ Time:
@ Location:
@ Grade Level:
@ Situation:

*TEA: Main Speaker Tier for Teacher
*STU: Main Speaker Tier For Student
*STS: Main Speaker Tier for Students
%eng: English Translation

%cat: Communicative Act

INF	Informative
PDE	Product Elicitation
PCE	Process Elicitation
CE	Choice Elicitation
PDR	Product Response
PCR	Process Response
CR	Choice Response
NVE	Nonverbal Elicitation
NVR	Nonverbal Response
MPE	Metaprocess Elicitation
MPR	Metaprocess Response
EXCL	Exclamation
COM	Comment
DDI	Directive, Direct Imperative
DINDI	Directive, Indirect Imperative
REP	Reprimand
ACK	Acknowledgment
PMT	Prompt
CNT	Count
NON	Nonsense
REQREP	Request Repetition
REQEXP	Request Explanation
REPTU	Repeat Teacher's Utterance
REPSU	Repeat Student's Utterance
EXPTU	Expand Teacher's Utterance
EXPSU	Expand Student's Utterance
MODTU	Modify Teacher's Utterance
MODSU	Modify Student's Utterance
EVAL	Evaluation
COR	Correction

APPENDIX D (cont'd)

NOM	Nomination
NAR	Narrative

%exi: Exchange Information

IA	Initiate Activity
IE	Initiate Exchange/Turn
IT	Introduces New Topic
ME	Maintain Exchange
MER	Maintain Exchange by Repetition
PE	Promote Exchange
IGI	Ignore Initiation
ACKI	Acknowledge Initiation
INCI	Incorporate Initiation
IECB	Initiate Exchange to Control Behaviour
RT	Reinstates Topic
PS	Self-directed Speech
TA	Terminates Activity

%itt: Communicative Intent

IN	Request opinion, personal experience, internal state
IO	Give opinion, personal experience, internal state
IA	Confirm, acknowledge
RIA	Request confirmation, acknowledgment
IF	Inform, format, context
ID	Give directions, demonstrations
IDCB	Give directions to control behaviour
IDI	Give directions to speak Inuktitut
IG	Request directions, demonstrations
IH	Request identification, description, definition, specification
II	Give identification, description, definition, specification
IX	Request explanation
IJ	Give explanation
IP	Request permission
IT	Give summary
IPR	Prompt, scaffold
IM	Model
IK	Drill
IY	Teach Syntax
IZ	Ask words, vocabulary
IW	Teach words, vocabulary
IL	Provide words, finish sentences/utterances

APPENDIX D (cont'd)

IQ	Immediate repetition of provided information, imitation
IQM	Repetition/imitation of a previous model
IB	Narrate, tell or read a story, describe past events
IR	Request repetition
ISC	Self correction
IC	Correction
DE	Direct evaluation
IDP	Identify participant/speaker
SN	Speaking nonsense
TSE	Tease
BCS	Back Channel Signal

%add: Addressee

tea	teacher
grp	group
stu	student
peer	peer
self	self

%nom: Nomination Format

ind	individual
inr	invitation to respond
inb	invitation to bid

%alu: Alternate Language Use

eng	English

%sit: Situation

APPENDIX E
Sample of Coded Transcript

@Begin
@Filename: Book14.XX.112890
@Tape Location: 0:32:00-0:42:00
@Transcriber: Elisapee Keatainak
@Participants: STU Student; TEA Teacher; STS Students
@Grade Level: Kindergarten
@Date: 28-NOV-1990
@Time: Late morning
@Location: Kangirsuk, Nouveau Quebec
@Situation: STS colouring a picture at tables prior to activity. TEA takes a book from her desk and goes to sit on floor. Not all students have finished the previous activity. Some kids join TEA on floor. TEA begins activity before all kids are sitting on floor. General activity type: Question-answer, repetition routine. Language used is Inuktitut. There are some English first language speakers in the class who have one Inuk and one Qallunaat parent.

*TEA: allanialangajunga.
%eng: I am going to read a story.
%cat: $INF
%exi: IA
%itt: IF
%add: grp
*STU: xxx.
%eng: xxx.
*TEA: Emaly.
%eng: Emaly.
%cat: NOM
%exi: IE
%itt: ID
%add: stu
*STU: allanik.
%eng: books.
%cat: $INF
%exi: IE
%itt: II
%add: tea
*TEA: allanialangajunga tupimiuralumik.
%eng: I will read a story about someone who lives in a tent.
%cat: $INF
%exi: IGI/PE
%itt: IJ
%add: grp
*STU: eeyik kamik tupiq.
%eng: eye boot tent.
%cat: $INF
%exi: IE
%itt: IQM

APPENDIX E (cont'd)

```
%add:   tea
*STU:   eeyik kamik tupiq.
%eng:   eye kamik tent.
%cat:   $REPSU
%exi:   MER
%itt:   IQ
%add:   tea
*TEA:   tuu xxx.
%eng:   tu xxx.
*STU:   hai xxx.
%eng:   look xxx.
*TEA:   aah.
%eng:   yes.
%cat:   $ACK
%exi:   $ACKIN/PE
%itt:   IA
%add:   stu
*STU:   tuu.
%eng:   tu.
%cat:   $REPTU
%exi:   MER
%itt:   IQ
%add:   tea
*TEA:   qanuilijuikia.
%eng:   I wonder what they say.
%cat:   $PDE
%exi:   PE
%itt:   IN
%add:   grp
%nom:   inr
*TEA:   unna suna?
%eng:   this what is it?
%cat:   $PDE
%exi:   PE
%itt:   IH
%add:   grp
%nom:   inr
*TEA:   unna nga lamma.
%eng:   this says nga.
%cat:   $INF
%exi:   ME
%itt:   IY
%add:   grp
*STU:   <nga> [>].
%eng:   nga.
%cat:   $REPTU
%exi:   MER
%itt:   IQ
%add:   tea
```

APPENDIX F

Categories used in Coding Field Notes and Participant Observations

TEACHER

authority and discipline

- ignoring bad behaviour
- singling out individuals
- non-interference
- following child's lead
- supervision
- control
- teacher as helper

correction and modelling

- encouraging talk
- praise
- physical closeness
- repetition
- individual/group help
- checking in
- maintaining face
- evaluation

personal style

- tone of voice
- gestures
- talkativeness
- eye gaze
- use of classroom space

STUDENTS

behaviour

- listening
- attentiveness
- talkativeness
- teasing
- movement in class
- active participation
- passive participation
- independence
- getting help
- obedience

APPENDIX F (cont'd)

- **peer interaction**
  - overlaps
  - peer models
  - peer coaching
  - cooperation
  - sharing
  - competition
  - physical closeness
  - sex role differences

LESSON

- **planning**
  - themes
  - materials
  - cohesion
  - lesson plan
  - teacher's manuals
- **structure**
  - length
  - phases
  - demonstrations
  - directives
  - pace
  - turn-taking
  - talk/lack of talk
  - repetition
  - evaluation
  - timing
- **activities**
  - individual
  - group
  - repetition routines
  - question-answer
  - storytelling
  - games
  - free play
  - clean-up
  - transitions
- **values**
  - cooperation
  - equality
  - non-interference
  - maintaining face

APPENDIX F (cont'd)

	obedience
	respect for others
	sharing
language	
	importance of strong language
	language loss
	speaking properly
	vocabulary
	home/school language
	use of English in class
	language and culture