A set of recorded teacher-child interactions in a successful kindergarten classroom was analyzed using the Mehan interactional model for analyzing the sequential organization of speech acts within classroom lessons. The study identified aspects of teacher-student interaction during formal instruction time at micro-interactional levels. The class had been nominated previously as an example of a successful language minority classroom in Phoenix (Arizona), and a majority of students were limited-English-proficient and of Hispanic origin. It was hypothesized that the model would assist in describing the similarities and differences for teacher-student actions. Results indicate that the teacher fulfilled the general expectation of the model but did not invite instructional interaction in any other than the most communicatively simple mode, inviting student participation mostly with choice elicitations. An 18-item bibliography is included. (Author/MSE)
INSTRUCTIONAL DISCOURSE IN AN EFFECTIVE KINDERGARTEN CLASSROOM: A CASE OF STUDY

Eugene E. Garcia

This article presents an analysis of a set of recorded teacher-child interactions in a successful kindergarten classroom. It identifies aspects of student-teacher interactions during formal instruction time at micro-interactional levels. The Mehan interactional analysis model for analyzing speech acts is used. It hypothesizes that the original Mehan model of instructional interaction assists in describing the similarities and differences for teacher-student actions. The results indicate that the teacher fulfilled the general expectation reported by Mehan (1979), but did not invite instructional interaction other than choice elicitions.

A primary issue in instruction of language minority children is understanding interaction. Children from different linguistic cultures will use language in ways that reflect their different developmental environments (Hymes, 1974; Heath, 1986). For example, a child from a Mexican American or Puerto Rican family will not necessarily talk about the same things, or use language to accomplish the same functions. It is crucial that any instructional strategy used does not penalize the child for speaking the language of his or her environment. At the same time, it is also necessary to assess how language is used in classrooms particularly during instructional events.

The expansion of language theory to incorporate both an interest in language form and function in the classroom is not a recent development. In 1970, Cazden wrote:

The study of the acquisition of language has been based on the assumption that what had to be described and explained was the acquisition of a repertoire of a finite set of rules for constructing utterances (in the terminology of developmental psycholinguistics). On this assumption, the school language problems of lower class children can have two explanations-- either they have acquired less language than middle class children, or they acquired a different language. The less language explanation has been given various names, cultural deprivation, deficit hypothesis, vacuum ideology, all with the connotation of a nonverbal child somehow emptier of language than his more
socially-fortunate age mates. The different language explanation is forcefully argued by William Stewart and Joan Baratz. It states that all children acquire language but that many children -- especially lower-class Black children acquire a dialect of English so different in structural (grammatical) features that communication in school, both oral and written, is seriously impaired by that fact alone. Both the less-language and different-language views of child language are inadequate on two counts. First, they speak only of patterns of structural forms and ignore patterns of use in actual speech events. Second, they speak as if the child learns only one way to speak, which is reflected in the same fashion and to the same extent at all times. On both theoretical and practical grounds, we can no longer accept such limitations (p. 81).

Cazden (1970) was calling for an important view of language, a focus on how the child meets the demands of situations in which language is used. More recently Au and Jordan (1981); Heath (1986) and Diaz, Moll and Mehan (1986) in examining instructional context of language minority students have suggested that until recognition is given to the sociocultural contexts of language development and instruction, educational interventions for language minority students will remain out of reach.

The present study follows this emphasis and discusses an analysis of a set of audio-video-recorded, teacher-child interactions. It selected a kindergarten classroom because of its academic success with language minority students. Specifically, it sought to identify aspects of the teacher-student interactions during formal instruction time (lessons) at micro-interactional levels (Mehan, 1979). This type of analysis is based on the notion that teaching is a fundamental act of interaction (Duran, 1981).

Methodology

In performing the empirical assessment of teacher-student interaction, the Mehan interactional analysis model for analyzing the sequential organization of speech acts within classroom lessons was used. This model concentrates on the sequential characteristics of teacher initiations, followed by student responses, and teacher evaluations. In so doing, this form of interaction analysis takes into consideration both the teacher and student utterances, topic selection, and conversational management in turn taking. It
was hypothesized that the original Mehan model of instructional interaction sequencing would assist in describing the similarities and differences for the teacher-student interactions. Mehan (1979) describes the total lesson discourse with the following:

**INTERACTION MODEL**

```
Teacher Elicitation
↓
Child Replay
↓
Teacher Replay
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However, some modifications of the Mehan model was necessary to accommodate the conversational data actually encountered (Table 1).

**TABLE 1**

**DEFINITION OF INTERACTIONAL CHARACTERISTICS DURING INSTRUCTION**

I. Teacher Initiations

A. Elicitations

1. Choice: An elicitation act in which the initiator provides responses in elicitation itself. ("Is it blue or green?")

2. Product: An elicitation act in which the respondent is to provide a factual response. ("What is this?")

3. Process: An elicitation act which asks the respondent for opinions and interpretations. ("What's he doing?")

4. Meta process: An elicitation act which asks the respondent to be reflective on the process of reasoning itself. ("Why does he?")

B. Directives: These are preparatory exchanges designed to have respondents take specific actions. ("Look here.")
C. Informatives: Acts which pass on information, facts, opinions, or ideas. ("This girl’s dress is blue.")

II. Student Reply

A. No reply: Student does not answer initiation acts, silence for a 2-second period.

B. Topic-relevant reply

1. Choice: Choice response relevant to the initiator’s topic. ("Blue.")

2. Product: Product response relevant to the initiator’s topic. ("Car.")


4. Meta process: Meta process response relevant to the initiator’s topic. ("Cause he’s not scared.")

C. Bid: These constitute statements which attempt to gain the floor, i.e., change the topic. ("What is this?")

D. Initiation: Process statement by the student directed at another student which is (1) topic-relevant or (2) not topic-relevant. Initiations may (a) invite a student response or (b) be a comment only.

E. Reaction: Negative acts taken in response to a directive. ("I don’t want to.")

F. Repetition: Student repeats the previous teacher/child statement.

G. Don’t understand: Student indicates that he did not understand the initiator. ("What?")

III. Teacher Reply
Instructional discourse in a kindergarten classroom

A. Repetition: Teacher repeats previous child utterance:
   (1) partially, (2) exactly, (3) expanded.

B. Evaluation: Teacher (1) accepts (positive) or
   (2) rejects (negative) previous student utterance.
   ("O.K., that's good", "not that way.")

C. Prompts: Statements given in response to incorrect,
   incomplete or misunderstood replies. ("There are
   three.")

D. Student topic initiator: Initiating statements in
   response to initiations or bids by the student.
   ("There are two tigers.")

Most formal lessons follow the solid lines of diagramed Interaction
Model: teacher elicits, students' reply, and teacher replies. However, the
dotted lines indicate that at times the instruction is cut short when the
teacher does not reply, as illustrated below.

"What color is this?" Teacher Elicitation
"Red." Child's Reply

At other times the exchange may be extended:

"What color is this?" Teacher Elicitation
"I think it is red." Child Reply
"That's right." Teacher Reply
"Do you like red?" Child Reply
"I love red." Teacher Reply

Using the above scheme, the purpose of the present analysis was to
assess the instructional style of the effective teacher of Mexican American
language minority students. Specifically the following questions were asked:
1. What type of instruction style does the teacher use when formally fulfilling the role of classroom instruction (Mehan 1978, Garcia, 1983)?

2. Does the instructional style of this "effective" teacher differ from that reported for teachers with the same student population (Garcia, 1985; Morine-Dorshimer, 1985)?

3. Does the instructional style differ in the incorporation of social and linguistic factors of relevance to Mexican American students? (Kagan, 1983; Garcia, 1986; and, Wong-Fillmore and Valdez, 1985)

Selection of Participants

The classroom selected to participate in the study was chosen from kindergarten classrooms nominated as successful language minority classrooms by school district administrative and teaching personnel in 12 metropolitan Phoenix school districts. Only classrooms with 50% or more limited English proficient Hispanic students were requested to be nominated. Specific selection of this classroom was the result of:

A. Consistant nomination and high ratings by nominators.

B. Evaluation of academic achievement (standardized test results for the past two years) indicating that the Hispanic classroom participants were at or above grade level.

Therefore, the classroom chosen for this investigation was one recognized in the local metropolitan area as an excellent classroom demonstrating above grade level academic achievement on standardized measures.

The teacher's activities were audio-video recorded for purposes of teaching style analysis. The teacher was scheduled for audio-video tape recordings during regularly scheduled small group reading lessons once every month for a total period of five months. These lessons included Spanish-language students participating in their first year of a four year language minority education curriculum emphasizing Spanish literacy.
Instructional discourse in a kindergarten classroom

Instructional discourse in a kindergarten classroom. Therefore, Spanish was the predominant language of instruction during these lessons. The teacher was recorded for a period of 15-20 minutes while the teacher interacted with 3-5 students. Coders received 1-1/2 hours of training on video tapes collected in previous classroom observations prior to scoring the resultant audio-video tapes of this study. (An assessment inter-observer agreement indicated significant agreement ($r = .83$) on the independent coding of three randomly selected sessions.)

Results

Table 2 presents the percent of: (1) teacher initiations, (2) child replies and (3) teacher replies during audio-video recorded lessons. Teacher initiation statements tended to be dominated by directives (36%) and informatives (27%) and choice elicitations (26%). Relatively few process (8%) and even less meta-process (1%) type elicitation were observed.

<table>
<thead>
<tr>
<th>TABLE II</th>
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<tbody>
<tr>
<td>PERCENT OF TEACHER INITIATION, CHILD REPLY AND TEACHER REPLY DURING AUDIO-VIDEO RECORDED LESSONS OF THE STUDY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHOICE</th>
<th>PRODUCT</th>
<th>PROCESS</th>
<th>META-PROCESS</th>
<th>DIRECTIVES</th>
<th>INFORMATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHER INITIATIONS</td>
<td>26</td>
<td>10</td>
<td>8</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>CHILD REPLY</td>
<td>6</td>
<td>18</td>
<td>9</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>TEACHER REPLY</td>
<td>8</td>
<td>20</td>
<td>20</td>
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Child replies during these interactions were dominated by child bids (20%) and child initiation (42%) replies to teacher initiations. This finding is most interesting since it reflects the degree of student control of topic as well as the high occurrence of student-student interaction. Teacher replies consisted primarily of repetitions (46%), positive evaluative remarks (24%) and child topic initiations (30%).

The typical teacher-student lesson, discourse style, might best be diagramed as indicated in A below with a heavy weight on product and choice type interaction. However, the student dominated interactional style observed in this classroom is best characterized by B below.

A. TEACHER DOMINATED: B. STUDENT DOMINATED:

Therefore, although teacher initiations were not of the process or meta process type and therefore similar to other reported finding of teacher-student interaction (Ramirez, 1986), the children played an important role in determining the topic of discussion. Moreover, the interactions begun by teachers involved a high degree of student-to-student interaction, a large percentage of these inviting fellow student comment.

The present study examined bilingual instructor-student interaction under conditions which were identified as academically successful. Previous research with ethnolinguistic students t. s suggested a potential mismatch between the culture of the home and that of the school (Ramirez and Castaneda, 1974). Results of the present study extend the notion of potential discrepancies in specific interactional styles.

The study's analysis of instructional styles of an effective kindergarten teacher of successful language minority students indicated that:
Instructional discourse in a kindergarten classroom

1. The teacher tended to provide an instructional initiation often reported in the literature. They elicited student responses but did so at relatively non-higher order cognitive and linguistic levels.

2. However, once a lesson elicitation occurred, students were allowed to take control of the specific lesson topic and were able to do so along by inviting fellow student interaction.

The teacher fulfilled the general expectation reported by Mehan (1979). Unfortunately, she did not invite instructional interaction in other than the most communicatively simple mode, inviting student participation mostly with choice elicitations. This type of elicitation style may be particularly problematic for language minority students. That is, these students may not be challenged by this style of instructional discourse to either utilize their native language or to express more complex language functions. Ramirez (1986) has reported that this type of instructional interaction style is common in language minority classroom throughout the United States.

However, the teacher was clearly allowing student topic bidding and student-to-student interaction in the child reply component of the instructional discourse segment. The teacher was allowing a great deal of student participation once the instructional interaction was set in motion. This finding is particularly significant. Garcia (1983) suggests that such student-to-student interaction discourse strategies are important in enhanced linguistic development. Wong-Fillmore et al., (1985) report a similar finding for Hispanic children. Moreover, McClintock et al., (1983) and Kagan (1983) have suggested that schooling practices which focus on cooperative child-child instructional strategies are in line with developed social motives in Mexican American families. The style documented here is in line with the style linguistically and culturally of benefit to Mexican American students.

Conclusions

The previous discussion and data have focused on aspects related to enhancing language minority student academic success. However, it is important to note that the major issues related to the education of language-minority children pertain to the large number of such children failing in school, differing explanations for their failure, and the kind of evaluation and basic research necessary to help educators and policy-makers
determine how best to structure programs to meet the needs of these students.

Debate continues about why such a large numbers of language-minority students fail and which are the best methods to educate them. As debates continue, research must elucidate how children best acquire a second language in instructional settings and how academic success can be maximized. The present discussion has focused on the importance of culturally sensitive teaching strategies and classroom organization and on the use of native languages. These recent findings demonstrate that linguistic and cultural background influences linguistic development and academic achievement. Recent findings highlight the importance of using students' first language. Tikunoff (1983) and Wong-Fillmore et al., (1985) report that children in classes where first language was used appeared to be more involved in learning and to participate more actively in classroom discussions. Hakuta (1985) maintains that skills learned in one language transfer to another, and that a conceptual framework in the native language provides scaffolding for the acquisition of new knowledge in the second language. Children at risk of failing in school especially need language, literacy, and conceptual development in their first language. However, more research is needed to ascertain the benefits of classroom use of the native language in the cognitive, social, and emotional development of language-minority students.

It seems apparent that language minority students can be served effectively by schools. They are served by schools which are well organized and have developed educational structures and processes which take into consideration the broader attributes of effective schooling practices and specific attributes relevant to language minority students (Tikunoff, 1983; Carter and Chatfield, 1986). These classrooms exemplify instructional strategies which seem to build on socialization factors relevant to the student population. For Mexican American students, effective instruction is characterized by student-to-student instructional opportunities related to academic material. Such instruction builds on culturally relevant interactional strategies and allows engagement of students in instructional interaction which in turn, allows and promotes higher order (process and meta-process) linguistic and cognitive functioning.

It is important to emphasize that language minority education is in a developmental period, immersed in a crisis situation, and in need of further clarifying research. But it is clearly not in its infancy. A serious body of literature addressing its instructional practices, organization, and effects is
emerging. The challenge for the classroom teacher is to consider these emerging data and critically evaluate its implications for the classroom.
REFERENCES


