

# UC Berkeley

## NCRCDSLLEducational Practice Reports

### Title

Instructional Conversations in Special Education Settings: Issues and Accommodations

### Permalink

<https://escholarship.org/uc/item/0tq0d304>

### Authors

Echevarria, Jana  
McDonough, Renee

### Publication Date

1993

NATIONAL CENTER FOR RESEARCH ON CULTURAL DIVERSITY  
AND SECOND LANGUAGE LEARNING

EDUCATIONAL PRACTICE REPORT: 7

**INSTRUCTIONAL CONVERSATIONS IN SPECIAL EDUCATION SETTINGS:  
ISSUES AND ACCOMMODATIONS**

**JANA ECHEVARRIA**  
CALIFORNIA STATE UNIVERSITY, LONG BEACH

**RENEE MCDONOUGH**  
LOYOLA MARYMOUNT UNIVERSITY

**1993**

---

**OVERVIEW**

Traditional approaches to special education instruction tend to be individualized and focus on skill building. In contrast, an interactive instructional approach, *instructional conversations* (Tharp & Gallimore, 1988), seems to capitalize on what the child brings to the learning situation rather than focusing solely on remediation of deficit areas. While an instructional conversational approach does not replace teaching that emphasizes the acquisition of skills and knowledge, it does appear to provide additional learning opportunities within a meaningful context. However, accommodations particular to students with learning disabilities may be necessary when implementing such an approach in a special education setting.

**INTRODUCTION**

The goal of most instruction is to teach skills and impart knowledge. Historically, it has been assumed that a transmission or direct instruction model is the most efficient and effective way to teach. In recent years, however, such an approach, which is characterized by teacher domination and student passivity, has been criticized as ineffective for developing higher level conceptual and linguistic skills (Bennett, 1986; Durkin, 1978; Goodlad, 1984; Sarason, 1983; Sarason, Davidson, & Blatt, 1986).

Does that mean we abandon direct instruction? On the contrary, research indicates that such an approach can be quite effective for helping students acquire skills and knowledge that can be taught in a step-by-step manner (Rosenshine & Stevens, 1986), including primarily low-level skills and learning bodies of information, such as reading decoding and explicit reading comprehension strategies. For concepts that are difficult to teach in a structured, step-by-step fashion, another instructional approach is necessary, one that involves students in meaningful interaction and helps them to grasp complex concepts such as literary themes and written composition.

The past decade has brought increasing challenge to traditional instructional approaches in the field of special education as well. Special education methodology typically has been reductionistic, wherein instructional tasks are broken down to their component parts (Cummins, 1984). Reading instruction, for example, focuses on the acquisition of subskills thought necessary to the reading act, without much consideration given to other aspects of reading, such as comprehension. Critics suggest that reductionism takes the task out of context so that it becomes a meaningless, even trivial, exercise. Some educators assert that with a predominately reductionistic approach to instruction,

Children are reduced to their disabilities: language is reduced to fragments; learning is reduced to the performance of subskills to be individually mastered in a sequential way. Also reduced, however, is the chance for these children to function in an environment where language and literacy are used in meaningful ways to communicate and learn. (Smith Burke, Deegan, & Jaggard, 1991, p.58)

The need for an alternative instructional approach has never been more pronounced than it is in the changing face of special education. The exploding population of language minority students in American schools is being felt in special education programs. Students with learning disabilities are at risk for school failure, and language minority students in special education are at even greater risk (Baca & Cervantes, 1989). Issues of language proficiency are of particular importance as they relate to students whose primary language is other than English, especially when these students come from low socioeconomic backgrounds. Research finds low-income children less verbal than middle- or high- income children (Guthrie & Hall, 1983), and minority children from low socioeconomic backgrounds who speak a language other than English have been characterized by persistent underachievement and high dropout rates (Arias, 1986; Orfield, 1986). This problem has been addressed with the assumption that specific skill deficits can be corrected with more control and structure from teachers, increased review, drill and practice, and low-level questions (Brophy & Good, 1986). Such instruction involves reductionistic skill-building to the exclusion of other areas of learning.

Some researchers specializing in issues involving culturally and linguistically diverse populations have called for an instructional approach that moves away from a reductionistic model and promotes an interactive or experiential model (Cummins, 1984, 1989; Ortiz & Wilkinson, 1991). Cummins (1989), for instance, advocates instruction that consists of genuine dialogue between the student and teacher, as well as student-to-student collaborative talk. The teacher's role is one of facilitator, encouraging students to use meaningful language without focusing on the correctness of form. Development of higher level cognitive skills, rather than factual recall, is the goal.

## **INSTRUCTIONAL CONVERSATIONS**

While there are many calls for alternative instruction, few programs are actually implementing the kind of instruction Cummins and others promote. One response to the call for change is an interactive approach called *instructional conversations* (or *ICs*) (Tharp & Gallimore, 1988, 1989). IC is an approach to teaching that goes beyond imparting knowledge and teaching skills: It encourages thoughtful discussion as students grapple with ideas.

Goldenberg (1991) defines IC as having as instructional intent but appearing to be a spontaneous conversation with natural language interactions. It has an idea or concept as its focus that remains discernible throughout. There is a high level of participation, regardless of students' language ability. Any and all contributions are accepted without attention given to the correctness of the language used. It is free from the didactic characteristics normally associated with formal teaching, in particular teacher domination and control. Teachers and students are responsive to what others say so that each statement made builds upon, challenges, or extends a previous statement. The teacher presents provocative ideas or experiences, then questions, prods, coaxes--or keeps quiet. He or she clarifies and instructs when necessary, but does so efficiently, without wasting time or words. The teacher is skilled at knowing when to bear down to draw out a student's ideas and when to ease up and allow for thought and reflection. Perhaps most important, the teacher manages to keep everyone engaged in a substantive and extended interactive conversation, "weaving participants' comments into a larger tapestry of meaning" (Goldenberg, 1991, p.3).

Instructional conversations are holistic in their presentation, but differ from a whole language approach in several ways. Successful ICs depend upon identification of a text-specific theme that is significant, meaningful (tied to the students' experiences), and provocative. In contrast, a whole language curriculum uses themes that are more general and less provocative in and of themselves. Moreover, instructional conversations have been defined by 10 specific elements (Goldenberg & Gallimore, 1990) (see Table 1), which can be reliably coded (Rueda, Goldenberg, & Gallimore, 1992). The elements are divided into two groups: instructional and conversational. The instructional elements include a thematic focus as well as other components of which the teacher is ever mindful, such as assisting students to clarify their thinking and language. The conversational elements encourage spontaneous student participation with the teacher facilitating the process.

**TABLE 1: ELEMENTS OF INSTRUCTIONAL CONVERSATION**

**INSTRUCTIONAL ELEMENTS**

1. **Thematic focus.** The teacher selects a theme or idea to serve as a starting point to focus the discussion and has a general plan for how the theme will unfold, including how to "chunk" the text to permit optimal exploration of the theme.
2. **Activation and use of background and relevant schemata.** The teacher either "hooks into" or provides students with pertinent background knowledge and relevant schemata necessary for understanding a text. Background knowledge and schemata are then woven into the discussion that follows.
3. **Direct teaching.** When necessary, the teacher provides direct teaching of a skill or concept.
4. **Promotion of more complex language and expression.** The teacher elicits more extended student contributions by using a variety of elicitation techniques, for example, invitations to expand ("Tell me more about "), questions ("What do you mean by "), restatements ("In other words, "), and pauses.
5. **Promotion of bases for statements of positions.** The teacher promotes students' use of text, pictures, and reasoning to support an argument or position. Without overwhelming students, the teacher probes for the bases of students' statements: "How do you know?" "What makes you think that?" "Show us where it says \_\_\_\_ ."

## CONVERSATIONAL ELEMENTS

6. **Few "known-answer" questions.** Much of the discussion centers on questions and answers for which there might be more than one correct answer.
7. **Responsivity to student contributions.** While having an initial plan and maintaining the focus and coherence of the discussion, the teacher is also responsive to students' statements and the opportunities they provide.
8. **Connected discourse.** The discussion is characterized by multiple, interactive, connected turns; succeeding utterances build upon and extend previous ones.
9. **A challenging, but non-threatening, atmosphere.** The teacher creates a "zone of proximal development" where a challenging atmosphere is balanced by a positive affective climate. The teacher is more collaborator than evaluator and creates an atmosphere that challenges students and allows them to negotiate and construct the meaning of the text.
10. **General participation, including self-selected turns.** The teacher encourages general participation among students. The teacher does not hold exclusive rights to determine who talks, and students are encouraged to volunteer or otherwise influence the selection of speaking turns.

Because instructional conversations are measurable, we can determine if IC is taking place in a given lesson and to what extent. This aspect of IC is quite helpful in the teacher training process. Group analysis of videotapes can lead to teachers' self-analysis of IC instruction. Whole language, on the other hand, is more difficult to define or measure, because "there is simply not uniform set of practices prescribed by whole language theory" (Edelsky, Altwerger, & Flores, 1991, p.77).

Engaging students in interactions like ICs, which promote analysis, reflection, and critical thinking, is hardly new to education (Goldenberg, 1991; Tharp & Gallimore, 1988). The philosophical roots of IC can be traced back to Socrates, Dewey, and, more recently, L.S. Vygotsky. Specifically, the writings of Vygotsky (1962, 1978) contribute two important ideas to instructional conversations: the zone of proximal development and language as the primary vehicle for intellectual development.

The zone of proximal development is defined by Vygotsky (1978) as the distance between a child's actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (p.86).

Vygotsky's theory is distinct in the importance he assigns to the social context and expert scaffolding. He suggests that a great deal of development is "scaffolded" by a more competent person. Thus, the role of the teacher in an IC lesson is one of facilitator, assisting students to move through the zone of proximal development. Such assistance includes helping students construct meaning from texts and understand ideas and concepts that they would otherwise not understand on their own.

The important relationship between language and cognition is clear in Vygotsky's view that language is the primary vehicle for intellectual development. He conceives of thinking as an activity dependent on speech. Thinking is developed and maintained through interpersonal experience, which necessarily involves

communication. Language development occurs in the context of functional communication (Rogoff, 1990), not through the decontextualized basic skills emphasis of many traditional instructional approaches. An important aspect of instructional conversations is that they rely heavily on contextualized, meaningful communication.

A study was conducted in a regular education class setting (Saunders & Goldenberg, 1992) to analyze the effects of instructional conversations on student learning. The subjects were 27 fourth-grade students who had previously been classified as limited English proficient and received instruction in Spanish. Their current placement was a transition class where instruction was in English, with consideration given to the fact that they were second language learners. The study was conducted entirely in English, with the students reading a short story about two mischievous friends. In one condition, the teacher conducted an IC; in the other, the same teacher used a more conventional basal-like comprehension approach. Students' learning was determined by a short-answer comprehension test and an essay on friendship they were asked to write, both in English. Results indicated that while students in both conditions achieved equivalent levels of literal comprehension (76%), the discussion of the concept (friendship) in essays of students in the IC condition demonstrated a more complex and differentiated conceptualization of friendship. The results suggest that the IC promotes higher level understandings of significant concepts, without sacrificing literal comprehension. Studies such as this prompted exploration of instructional conversations in a special education setting.

## **PURPOSE OF THE PRESENT STUDY**

The purpose of the study to be described here was to implement instructional conversations in a special education class and to explore the issues raised by using this instructional approach with students in special education. Specifically, we were interested in these questions:

- 1) Does the approach seem appropriate for special education?
- 2) What are the salient aspects of IC in a special education setting?
- 3) What kinds of learning opportunities are created through IC?
- 4) Are adaptations necessary when using IC with this population?

Previous IC projects involving culturally and linguistically diverse students were conducted in regular education classrooms (Goldenberg, 1991; Goldenberg & Gallimore, 1990; Saunders & Goldenberg, 1992). However, such a promising approach seemed all the more fitting for research with students who had already experienced school failure. After only a few years of experience in the educational system, special education students find themselves significantly behind their peers in most academic subjects, usually due to low reading levels and underdeveloped language skills.

Motivated by an interest in improving students' reading comprehension and conceptual understanding, the special education teacher in the study (second author) volunteered to participate in data collection activities. Activities included attending an on-site seminar that focused on the implementation of instructional conversations, conducting an IC lesson at least once a week (which was observed or videotaped), and participating in interviews.

## **METHOD AND DATA SOURCES**

Data were collected by naturalistic observation, videotape, teacher self-report, and interviews conducted over a year and a half with a single teacher. Throughout the course of the study, there were 16 visits to the class for observation, and 17 interviews were conducted with the teacher. Each classroom visit lasted approximately 1 1/2 hours, for a total of approximately 26 contact hours. Lessons were videotaped approximately once a month, and exact transcriptions were acquired from videotape when necessary.

The study was conducted at an elementary school in a Southern California district whose low-income student population is approximately 90% language minority. Subjects ranged in age from 6 to 10 years old. They were in a self-contained special education class for students with learning disabilities. Because students may begin receiving special education services at any time during the academic year, the composition of the class changed several times throughout the year. This resulted in varying student characteristics, reported as follows: The majority of the students were classified by the schools as having either a learning disability or mild mental retardation. Other disabilities represented included delayed language, hearing impairments, and multiple disabilities (both mental and physical). Of the 10 to 12 students enrolled in the program throughout the study, 8 to 9 were boys, and 2 to 3 were girls. The ethnic makeup of the class was 9 to 10 Hispanic students and 1 to 3 African-American students. All the Hispanic students were classified as limited English proficient (LEP) and received instruction in Spanish. Because the teacher was bilingual, she conducted some IC lessons in Spanish and others in English, as appropriate. When working with the Spanish-speaking group, the teacher consistently modeled Spanish, but students were free to express themselves in whichever language they wanted, which was typically Spanish. All of the students were mainstreamed from one to three hours throughout the day to achieve the least restrictive environment mandated by federal and state legislation.

The data were compiled and analyzed for purposes of a case study that examined implementation of ICs in a special education classroom. Both authors reviewed the data and analyzed it for relevant themes that answered the questions being explored. The focus of the questions was continually reshaped throughout the process of data analysis, with the emergence of the themes as a contributing factor in the shaping process (Spradley, 1980).

## **RESULTS**

Several themes emerged from the data:

- 1) In contrast to the reductionistic approaches most prevalent in special education, ICs provide a holistic context for learning. In particular, selection and use of a theme to guide the discussion about a story lead to a more cohesive focus during the lesson and seem to facilitate children's attention to the story.
- 2) ICs promote oral participation and student-to-student interaction during reading lessons. These experiences provide additional opportunities for language development, particularly for language-delayed children.
- 3) For an IC lesson to be successful, the special education teacher must make adaptations for students with learning disabilities. Each of these themes will be discussed below.

### **Holistic Presentation and Thematic Focus**

Most remedial reading and special education programs follow reductionistic theories, which promote breaking learning tasks into their component parts (Alpert, 1975; Hiebert, 1983; Pflaum, Pascarella, Boswick, & Auer, 1980; Poplin, 1988a, 1988b). For instance, the focus of reading instruction would be mastery of letters, then sounds, then words and punctuation. Although there is a rational basis for reductionism and a task analysis approach in some learning situations, there is growing awareness that some learning opportunities are missed when such an approach is used extensively. Instruction becomes more meaningful when presented in context, which broadens the scope of learning (Sawyer, 1991).

Instructional conversations present material in a holistic manner, providing a contextual foundation for learning. Language is expressed in a natural fashion within a meaningful context. The teacher endeavors to present the lesson in a systematic way, all the while remaining flexible, allowing for learning opportunities as they arise. The data gathered in this study revealed that the teacher followed this sequence in a typical presentation of IC:

- Introduced the theme or idea related to the text;
- Began relating theme to students' background experiences;
- Showed the text to be read and asked prediction questions;
- Read the text, chunking it into sections to provide opportunity for discussion;

Related theme and background knowledge to a text-based discussion.

The following example of an IC was observed June 2, 1991. Five English-speaking boys, ages 7 to 10, read a story about two friends, Thelma and Frances, who were not completely honest with each other. The theme centered on treatment of friends. (T = teacher; Ss = several students; students' names are pseudonyms)

T: Before we read, let's talk about friends. Tell me something about friends. Do you play tricks on friends?

Ss: No.

T: Why?

Eddie: Because he might not be your friend anymore.

Marco: It might hurt their feelings, then they don't be friends.

(Several students give examples of when they have been tricked by friends. For instance, Jim begins telling a story about some friends that put handcuffs on him and left him without the key. He went home and his sister helped him get them off.)

T: How did you feel?

Jim: Sad.

T: This book is about friends and you've been telling me a lot about friends and tricks. Let's read the story and tell me if you see tricks or if they're being good friends.

Throughout the story the teacher asked the students to point out when Thelma tricks Frances. It was clear that the students did not approve of the tricks, especially since they were reminded during their prereading discussion of how it feels to be tricked. There was a clear link between their experiences and those of Frances, which seemed to make the story particularly interesting to them. Field notes taken by the researcher during her observation of the lessons contained two separate notations indicating that the students were "all listening

intently" to the story. Moreover, the students seemed to comprehend the story quite well. Their comments were on target and they readily recognized when Thelma tricked Francis, although this was not explicitly stated in the story. Their comments indicated that they were able to follow the story accurately. For example, Jim, who has difficulty focusing and staying on task, was able to contribute to the discussion.

T: Why do you think the friend will trick Frances?

Eddie: Because she's not really her friend.

(At this point Jim brought up the friends who had handcuffed him and how they weren't really good friends.)

In another lesson, conducted in Spanish, the story was about a fox (*zorro*) who wanted to use a rope to get to the moon. The theme involved resolving the problem of getting to a special place. The teacher wrote the students' ideas on a small chart sitting on the table. She began the lesson by writing on the chart, *Un lugar especial* [A special place]. Without teacher prompting, the students began telling where they'd like to go.

Laura: *Quiero ir arriba.* [I want to go up.]

Juan: *Yo, si tambien. Porque vuela.* [Me, too. Because you fly.]

Sergio: *Yo tambien.* [Me, too.]

(Several student make comments at the same time about being up high, flying, etc.)

T: *Uds. han ido a un lugar especial aqui en la tierra?* [Have you been to a special place here on the ground?]

Sergio: *No.*

Laura: *Yo, a mi pueblo. Alli hay montanas, grillos, y muchas cosas, caballos.* [I have, in my village. There are mountains over there, crickets, and lots of things, horses.]

(A discussion begins about how one gets to a special place such as by plane, taxi, or car. The teacher writes the students' comments on the chart.)

T: *Vamos a leer un cuento de un amigo que quiere ir un lugar especial. Y vamos a ver si tiene que comprar un boleto o pedir ayuda o ir en avion u otra cosa .* [We're going to read a story about a friend who wants to go to a special place. And (pointing to their comments on the chart) let's see if he has to buy a ticket or ask for help or go by plane or something else.]

(The group begins reading a story about a fox who decides to go to the moon. When Elva finishes reading the sentence, "*Esta noche me voya la luna*" [Tonight I'm going to the moon], the teacher says:

T: *Tengo una pregunta para Uds.* [I have a question for you.]

(Oscar interrupts her and she follows his lead (Element #7)):

Oscar: *El topo quiere ir a la luna.* [The mole wants to go to the moon.]

Laura: *Yo digo que el zorro quiere ir a la luna.* [I say that the fox wants to go to the moon.]

Marco: *Yo digo que no, que el lobo quiere ir la luna.* [I say no, that the wolf wants to go to the moon.]

Oscar: *Y el zorro, el zorro se caye en el arbol.* [And the fox, the fox falls in the tree.]

Juan: *Y el zorro va a ir a la madriguera.* [And the fox is going to go to his hole.]

T: *OK. Tenemos tres cosas diferentes. Oscar dice que el topo quiere ir la luna, Laura dice que el zorro quiere ir la luna y Juan dice que el zorro quiere ir a su madriguera. A ver. Busquen en la pagina pare ver si me han dicho que quiere hacer algo. Ensename en el libro donde dice que quiere hacer esto.* [We have three different things. Oscar says that the mole wants to go to the moon, Laura says the fox wants to go to the moon,

and Juan says that the fox wants to go to his hole. Let's see. Look on the page to see if you have told me that he wants to do something. Show me in the book where it says that he wants to do it.]

(Here the teacher implements Element #5 by having the students use the text to back up their comments. Obviously this kind of clarification is essential to comprehension of the story.)

Oscar: (pointing to the word) *Madriguera*. [Fox hole.]

T: *Ok, dice que quiere ir a su madriguera?* [Ok, does it say he wants to go to his hole?]

Elena: *Sale de su . . .* [He leaves his . . . ]

Laura: *Que sale de su madriguera*. [That he leaves his hole.]

Several: *Sale de su madriguera*. [He leaves his hole.]

T: *Asi que quiere ir a la madriguera ?* [So does he want to go to his hole?]

All: *Sale de su madriguera*. [He leaves his hole.]

T: *Sale de la madriguera*. (To Juan) *Tenias razon que habla algo de la madriguera pero salio*. [He leaves his hole. You (to Juan) were right that there was something about the hole but he left it.]

(A couple of students read the sentence again from the book.)

T: *Ya tenemos dos cosas, que el zorro quiere ir a la luna o que el topo quiere ir a la luna. Vamos a buscar para ver esto*. [Now we have two things, that the fox wants to go to the moon or that the mole wants to go to the moon. Let's look to find this part.]

Oscar: *El topo*. [The mole.]

T: *Donde dice que el topo quiere ir a la luna?* [Where does it say the mole wants to go to the moon?]

(All the children look for the passage in the book.)

Elena: *El zorro quiere ir*. [The fox wants to go.]

T: *Elena dice que el zorro*. [Elena says the fox.]

Oscar: *El topo*. [The mole.]

T: *Donde dice que el topo y donde dice que el zorro quiere ir?* [Where does it say the mole and where does it say the fox wants to go?]

(All the children continue looking.)

Oscar: *Aqui*. [Here.]

T: *Dice que el topo quiere ir a la luna? Ensename. Esta noche. . . dime*. [It says that the mole wants to go to the moon? Show me. Tonight . . . tell me.] (Oscar reads the sentence.)

Oscar: *Esta noche yo voy a ir a la luna*. [Tonight I'm going to go to the moon.]

T: *Que dijo eso?* [What said this?]

Oscar: *El topo*. [The mole.]

Elena: *El zorro*. [The fox.]

(They laugh.)

T: *Porque dices tu el zorro?* [Why do you say the fox?]

Elena: *Que el zorro esta hablando*. [The fox is talking.]

(When it is established that the fox is talking, the teacher reinforces it by asking Oscar):

T: *Quien esta hablando?* [Who is talking?]

Oscar: *El zorro*. [The fox.]

T: *El topo quiere ir a la luna?* [Does the mole want to go to the moon?]

All: *No*.

T: *Quien quiere ir a la luna ?* [Who wants to go to the moon?]  
All: *El zorro.* [The fox.]  
T: *Uds. estan leyendo bien.* [You all are reading well.]

Throughout this process the teacher implemented as many IC elements as the situation necessitated: utilizing elicitation (#2), promoting bases for statements (#5), and direct teaching of a skill or concept (#3) within the context of the situation.

The holistic focus of ICs provide low-functioning students with opportunities to participate in meaningful academic activities that a more reductionistic approach might not afford. In the lesson transcribed above, the group consisted of Spanish-speakers at a variety of reading levels. Rather than dividing the group by levels, the teacher paired each low reader with a higher reader and instructed the higher readers to follow the story by pointing to each word for their partner. Thus, all students could follow the story as well as participate in the discussion.

Another example of the effect of IC is the teacher-reported case of Juan, who after two years of a specific skill mastery reading program had made little progress, was very unmotivated, and seemed unable to grasp the targeted skill: sound-symbol relationship. Acquiring this skill was virtually the sum total of his reading program. IC broadened the range of learning opportunities in which Juan engaged. In an interview, the teacher assessed the effect of IC:

Juan confidently participated in thoughtful conversation. His contributions demonstrated comprehension of the story and an understanding of the underlying theme. In addition, the vocabulary he used during IC was above the level that he typically used during reductionistic lessons. One of the most important benefits, however, was that he did not stand out as the lowest functioning student, as happens when lessons focus on isolated skills or ability levels. He eagerly looked forward to IC lessons, which showed a motivation previously not evidenced.

Although Juan still needs to work on skills such as word recognition (which could be addressed through direct teaching, Element #3), it seems likely that he can at the same time benefit from extended opportunities for participation in meaningful activities.

Perhaps the most salient aspect of an IC--and that which contributes the most to its holistic quality--is its thematic focus. The thematic approach used in IC differs from thematic approaches used in other educational contexts. In the most common current usage, themes tend to be of a general nature and may be used for the purpose of integrating curriculum. With younger readers, animals may be the theme of activities across the curriculum (Strickland & Morrow, 1990), while legal rights may be an appropriate theme for older students (Cooler & Griffith, 1989; Davis, 1990). With IC, a theme is selected for each story introduced to the students, the purpose of which is to make a cognitive link between prior knowledge and what is being read.

IC themes are selected for their relevance to the individual stories as well as to the students' background, thus providing a link between their everyday experiences and the text. The teacher in this study (Renee) made

reference to this relationship throughout each lesson. The following notes are from observation of a Spanish lesson on September 15, 1991.

Lesson theme: Has there ever been something you didn't want to do at first but that ended up making you happy? Renee wrote on chart paper, "*Primero no queria . . . despues estaba feliz.*" [At first I didn't want to . . . I ended up happy.] Students gave examples of such situations in their own lives. As she read the story, Renee stopped every couple of lines and asked questions such as, "*Quiere ir?*" [Does he want to go?]; "*Creen que vaya a estar feliz al fin del cuento?*" [Do you think he'll be happy at the end of the story?]. At the end of the story Renee asked what the boy didn't want to do at the beginning of the story. Then she asked if he was happy at the end. She wrote the example on the chart and asked for other examples. A student gave an example of another situation pertaining to the theme.

Because special education and remedial instruction typically focus on skill building (Allington, 1983), learning discreet skills such as sounding out words may be the student's only experience with reading. Sawyer (1991) quotes the poignant comment of a six-year-old: "I used to think reading was making sense of a story but now I know it is just letters" (Michel, 1990, p.43). The thematic element of IC helps the students to realize that there is more to reading than just sounding out letters and words in order to complete the story. There is something to be gained from the story--something to think about beyond the text. As the teacher put it: "Rather than simply trying to get through the story by sounding out the words, it teaches them that they have to think in order to understand the story. They have to use what they know and link it to a new idea to make sense of a story." This was perhaps the most salient aspect of IC: The theme provided a vehicle for thinking about a story that seemed to go well beyond disconnected questions.

The teacher noted that "keying into themes" was one of the most useful elements of IC: "Having a central theme is critical because concentration is very difficult for LH [learning handicapped] students. A theme approach keeps them interested and motivated. It provides cohesiveness for LH students." A well selected theme is the glue that keeps the discussion of the story together and helps students understand that there is a beginning, middle, and end to a story--a relationship between the pages. The themes make questioning less random and much more engaging for the students.

The theme-based discussions in this study appeared to facilitate student attention, which resulted in longer lessons. Using a basal approach, students were able to attend to a task for approximately 20 minutes; after 25 minutes, they became distracted, and the teacher had difficulty maintaining their interest. With IC, the lessons increased to 30 to 40 minutes. Some of the characteristics of students identified as having a learning disability include attention deficit, distractibility, and hyperactivity (Heward & Orlansky, 1992; Lerner, 1985). A common goal in special education instruction is to increase students' time on task, because there is a strong correlation between time on task and achievement (Carroll, 1963; Good, 1986). IC seemed to provide a setting that promoted student attention to task. Observation and videotaped data revealed that the students, seated around a horseshoe table, were leaning forward throughout the duration of the lesson toward the teacher, who was holding the text. This indicated a high level of engagement and interest in the text. For the most part, students maintained eye contact with the teacher and made frequent contributions. Based on the characteristics of

students in special education, particularly young learners, it was notable that the children were so thoroughly engaged throughout a relatively lengthy lesson.

### **Oral Participation and Opportunities for Language Development**

The literature suggests that language problems are key to early reading problems (Mann, 1991). In fact, reading problems are experienced by children with speech and language disorders at least six times more often than by children in control groups (Ingram et al., 1970; Mason, 1976). Although we did not collect data to permit a definitive test of this hypothesis, it seemed that instructional conversations encouraged opportunities for language development in several ways.

First, oral participation was emphasized, and students were encouraged to contribute their ideas through spontaneous, self-selected turn taking and student-to-student discussion (Elements #8 & #10). This contrasts with the typically teacher-dominated question-and-answer approach to discussions. The interaction of IC resembled a conversation where all participants were free to give opinions, ask questions, or clarify a point as the opportunities arose.

According to the teacher, initially the students "were shocked to talk without raising their hands." For several years the school district had been utilizing a language development curriculum that relied heavily on scripted teacher presentation and directed student response. The students, when introduced to IC, had to be taught to participate spontaneously. This included formulating their own thoughts and expressions rather than repeating the modeled vocabulary. The self-selected oral participation promoted through IC appeared to allow for vocabulary development and language expression that would possibly have been limited using a traditional approach.

In an effort to get optimal participation from the students, the teacher employed a strategy that encouraged student contributions throughout the lesson. The story was introduced to the middle-ability- level group the day before the IC lesson. Their familiarity with the story stimulated conversation, because they had already thought about some aspects of the story. An added benefit was that these higher functioning students modeled complete expression for the students with lower language ability within the heterogeneous group.

The IC format allowed for different perspectives, which seemed to make the discussion more accessible to students. Students were not expected to come up with the teacher's answer. Instead, they were given opportunities to express their own ideas. Students were able to exchange ideas during a lesson in English about a seal who leaves the zoo to find adventure. The following videotape transcription is from a lesson on May 14, 1991.

T: Has he had a good time in the city, away from home?

Eddie: Yea, uh huh.

Sergio: Nooooo.

Jim: He gonna go to that, to the man house.

Eddie: He gonna go to the zoo.

T: (Pointing to the picture) Why would he go to the man's house?

Frank: Because...

Sergio: He's going to go back to the zoo.

Frank: . . . to take a bath.

(Several comment at once.)

Eddie: . . . back to the zoo.

T: Why would he go back to the zoo?

Eddie: Because it's too hot and it's not hot at the zoo.

Frank: No, he's going to take a bath.

Eddie: Uh-uh. He's going to the zoo.

Frank: No.

T: He tells us what he wants. (They read: He says, "I am hot. I want to go swimming," said Sammy.)

(The story continues about how Sammy looks for a place to swim, to no avail. Finally Sammy says, "Here is the place for me," referring to the man's house.)

Frank: He's gonna go to the man's house.

Eddie: (reading) Here is the place.

Frank: The man's house.

Jim: See. I told you.

(Jim and Frank look at each other triumphantly.)

Jim: See, we told you.

(They read on to find out that Sammy bathes at the man's house.)

Frank: Then he's going to go back to the zoo.

Eddie: Back to the zoo.

Jim: He, he, he going back to the, the

Eddie: zoo.

T: Do you think he had a good time when he was out?

Eddie: Uh-huh, yea.

Sergio: No.

(Others mumble their opinions.)

T: You guys disagree (indicating Eddie and Sergio).

Sergio: Because he was hot.

Eddie: When he was out, he was happy, at first. When he was walking around in the country.

T: What do you think, Sergio?

Sergio: He was happy at first.

Eddie: But now he's not. Now he's not.

Students were able to give divergent opinions and come to consensus without the teacher directly intervening at every turn. This process goes beyond simply arguing opinions, because the students are encouraged to use the text to back up their positions.

A second way that opportunities for language development were encouraged was through the teacher's effort to remain quiet herself. This behavior is consistent with the literature on "wait time," which is defined as allowing children sufficient time to answer. The amount of wait time is culturally dictated (Cazden, 1988). The teacher reported trying to refrain from talking too much to give the students an opportunity to express themselves. Students were allowed "think time" so that ideas could be thought through. The teacher did not jump in and finish the students' answers for them, but allowed them time to formulate their thoughts. The following notes are based on observation and an interview with the teacher on December 13, 1990.

Renee intentionally remained quiet herself. She reported that she was actively trying to refrain from talking much herself in order to give the students an opportunity to express themselves. Renee was observed sitting with her chin resting on her fists and replying “Hmmm” or simply nodding while students talked. On several occasions she had her fingers across her lips, indicating her concentration on not speaking. Renee excitedly reported that two students with low language abilities had talked together for the first time (student-student exchange). Later, in reference to her assessment of progress Renee commented that "they carry the ball now more than [with a] question-answer [format].

When a child made a contribution, and someone else commented, the first child was allowed to think more deeply about his answer. This process encouraged the students to clarify their thinking and express unique perspectives, which is the goal of Element #4 (promoting more complex language and expression). Without the threat of there being only one right answer (Element #6, few known-answer questions), students were more willing to think through their ideas. The teacher said, "Giving them time to think helped, because they gave thoughtful responses and good language." Element #7, responsiveness to students' contributions, challenged the teacher to be flexible and avoid having a single preconceived plan for exactly how the lesson would proceed. Being responsive to the students' ideas and comments led the teacher to modify the lesson as the discussion evolved. The following notes are from an interview with the teacher on February 21, 1991.

Following several lessons Renee reported that she had not planned to run the lesson the way it turned out, but that she was following the students' lead. In one case, the students commented on nearly every page with remarks appropriate to the theme. Renee said that she had planned to chunk differently than the way she did, but the students "had so much" to contribute that she responded accordingly and let them comment. In another case, the students responded with a range of feelings. Renee said she wasn't expecting such appropriate feelings [to be expressed by the students] and had to change her ending activity as a result.

By respecting the students' contributions and following their lead (when appropriate), the teacher enabled the students to give an opinion or defend their position. Researchers have often noted that teacher questions seem to inhibit discussion (Cazden, 1988). With IC, a framework is created where questions appear not to have an inhibiting effect. Renee commented, "Being receptive to the students' remarks brings out more language." The element of IC that developed the students' ability to think through their answers and defend their positions was Element #5: promoting bases for statements or positions. In the skill-building orientation of most special education instruction, students would rarely be asked to provide a rationale for their answers. With IC, the teacher accepted speculative answers but also urged the students to provide bases for their answers.

The teacher frequently modeled how to use the text to derive meaning from the pictures and words. One lesson, conducted in Spanish, was about a girl who sold lemonade to make money to buy a toy. The pictures showed several friends coming by and placing money on the girl's plate. The teacher emphasized the text. The following transcript is from a videotaped lesson on October 29, 1991.

T: *Dice aqui en el libro que ella paga?* [Does it say in the book that she pays for the lemonade?]

S: Si.  
T: *Donde dice que ella paga ?* [Where does it say she pays?]  
S: *No, no paga.* [No, she doesn't pay.]  
T: *Dicen las palabras que hemos leído que ella paga?* [Do the words we've read say she pays?]  
S: *No.*  
T: *No dice, verdad? cPero Uds. creen que paga ella?* [It doesn't say, but do you believe she pays?]  
S: *No.*  
S: *Si.*  
Juan: *Si, porque antes estaba dos monedas y ahora hay tres.* [Yes, because there were two coins before and there are three now.]

The teacher also scaffolded the way one may defend a position by functioning as a facilitator. Scaffolding provided the students with a model of how to defend their positions or ideas. At times the students were able to support their statements on their own initiative, without teacher prompt.

T: *Esta bien vender algo para comprar juguetes o solo para comprar comida?* [Is it all right to sell things in order to buy toys, or only to buy food?]  
Juan: *Yo digo que sí* [I say yes.]  
Jose: *Yo digo que no.* [I say no.]  
Liliana: *Yo digo que está bien con los juguetes porque ya tiene todo.* [I say it's all right because she already has everything.]

The teacher stopped frequently to ask questions, elicit impressions, and encourage student talk. Such a format provided the students with ample opportunity to participate orally with apparently positive results. The following notes are from observation and videotape of a lesson on May 14, 1990.

Although difficult to quantify, there appeared to be improvement in students' language and expression. Michael, for instance, is language delayed and seldom participated. Renee reported that he can now give an on-topic coherent idea. When asked what he thought Sammy the seal would do, he was observed giving the immediate reply, "I think he'll go home." Another time he was observed replying in unison with others.

Because of the low language skills of many of the students, grouping was very important to successful IC lessons. A group of five or six students was ideal. Too few students did not stimulate conversation and too many did not provide consistent opportunities for all students to participate. In terms of functioning level, heterogeneous grouping met the needs of higher and lower ability students. Higher ability students frequently served as readers or initiated discussions. In the English-speaking group, for example, one student was a significantly better reader than the others. The teacher often allowed him to read the story aloud while the others followed along. The lower ability students appeared to gain both from the model of good reading fluency as well as through opportunities to participate in the discussions.

## **Adaptations for Students with Learning Disabilities**

Although there are issues related to implementing a new instructional approach such as IC in any setting, the degree of impact differed in special education settings. It seemed particularly important to select an appropriate theme for each story. While regular education students may be able to "fill in the blanks" if the theme is too abstract, students with learning disabilities tend not to respond well to abstractions. For example, in the story mentioned above about Sammy, a seal escapes from the zoo only to find life on the outside was not what he expected. After several incidents, he decides that the zoo isn't so bad after all. The theme of the lesson was, "there's no place like home." It was too abstract a theme for the students in special education, because they were expected to infer that the story considered the zoo to be the seal's home. The students' idea of home for the seal did not seem to be the zoo, so they didn't recognize that he was home at the zoo. In discussing homes, students had provided examples of situations in their own homes, but references to animal homes were not made. Perhaps their understandings could have been linked to the theme through careful teacher scaffolding, but this was not done.

The challenge of theme selection came in finding ideas that were interesting and relevant. On the one hand, the theme must not be too abstract for the students to grasp nor inhibit them from making a connection between the text and theme; on the other hand, it must not be too obvious or mundane.

In another lesson, involving a story about farm animals, the theme selected was, 'We all have unique strengths to offer.' The rooster's vital role on the farm was the point that Renee wanted to clarify, but the kids thought that was obvious. Many of the students' families had owned roosters, and the children, therefore, had experiences with them. They didn't need Renee's planned comparisons to the function of the cow, the hen, and so forth--it was obvious.

Students with learning disabilities respond to concrete teaching because it is contextualized. IC provides the context to push the boundaries of strictly concrete teaching, but the theme needs to be appropriate in its level of abstraction.

In this study, the way in which the theme was introduced changed over time, in response to the students' needs. The teacher reported that initially she simply talked about the theme and related it to the story by posing a question such as, "Have you ever told a lie?" Students would relate their experiences, then the teacher would say something like, 'Well, today we're going to read a story about a boy who lied.'" Then, realizing that the students would benefit from a visual clue, she began writing ideas on the board and talking about them. The conclusion of the lesson usually included reference to the ideas explored during the introduction to tie it all together.

Another area that was particularly important in a special education setting was the need to match the level of questioning to the students' conceptual level. Questions that were too high level or abstract could bring discussion to a halt, as could trite or mundane questioning. Ineffective high level questioning included comments such as, "If you were a dog and your owner was sick, why would you stay with him?" The students had no experience or context from which to respond. On the other hand, trite questions posed to the students include, "Is it good to be mean?" and "Are you going to be nice or mean?" These questions invited a chorus of "no" and "nice" as students provided the answers they believed the teacher was looking for.

Behavior management also required adaptation. As an adaptation to one student's tendency to dominate the conversation, the teacher introduced "talking chips," a cooperative learning structure in which every student has a different color token, and everybody must put their chip out on the table (take a turn) before anyone may have a second turn. This was a very concrete method of teaching the students to take turns. Introducing this adaptation allowed for more equitable participation by the students and eliminated domination by any one student. After this skill was demonstrated consistently, the students were able to allow all members to speak without having to rely on the chips.

The teacher found that presenting students with a visual stimulus during the lesson's introduction increased on-task behavior. As a result, she wrote the students' comments on the board during discussion. While writing on the board served as a way to help get schema up and running, it was discovered through videotaping that one of the students was using the time the teacher turned around to write on the board as an opportunity to misbehave. So the teacher began using a large piece of paper placed on the table to write the students' ideas. In this way, she was always facing them and had constant contact with them. Finally, a small easel was used for recording information given by the students. This proved helpful for one group, but unnecessary for another group.

The amount of time the teacher dedicated to different segments of the lesson was another aspect of IC that was adapted. It seemed that students' attention was lost toward the end of some especially lengthy lessons (45-50 minutes). While it initially seemed that the problem must be in the structure of the closing discussion, it became clear that too much time was being used in discussion before the story began (students were restless during both opening and closing segments). When the teacher shortened the introductory sections, students were better able to attend to the lesson through the final moments of discussion.

A variety of reading levels are usually represented in special education classes, making reading aloud in a group problematic. During ICs, reading of the story was done by different group members, depending on reading levels and behavioral characteristics of the students involved. In one instance, the teacher read the story to the group because a new third grader was a non-reader, and the teacher did not want him to be self-conscious about not being able to read like his classmates. By reading the story to the group, the teacher enabled all of the students to understand the story, regardless of their decoding abilities. With another group she had the most skilled reader (who also demonstrated a constant need for attention) read the story. This positive use of his energy as well as his skills helped him to control his behavior in an appropriate way.

The students in special education seemed to need more prompting and encouragement to feel confident enough to develop original ideas. Most students who are placed in special education bring with them a history of failure. They do not attribute their successes to their own actions, yet they may feel very responsible for their failures. Learned helplessness is often evident in students with learning disabilities, as they resist risk taking in order to avoid failure (Wilgosh, 1984).

The use of instructional conversations in a special education setting may reduce this sense of failure and helplessness. Students are encouraged to express original ideas and personal experiences, which validates them as individuals with something important to contribute. As the students' thoughts are carefully scaffolded by the teacher, they seem to develop a sense of themselves as thinkers and learners whose opinions and perspectives matter.

## CONCLUSION

Rather than focus on remediation of deficit areas, instructional conversations offer an approach that capitalizes on what the child brings to the learning situation. In this way, ICs provide expanded learning opportunities for students in special education. These opportunities are related to the areas of language development (in the child's first or second language), reading comprehension, and understanding of important concepts. An added benefit may be increased student motivation. Further investigation of the effect of IC on motivation is warranted, because there is a strong relationship between motivation and achievement.

The most salient aspects of IC in this study appeared to be a holistic presentation of the lesson; the use of a theme that linked the students' background knowledge to the text, thereby creating a more cohesive focus throughout the lesson; and occasion for interaction that seemed to foster language development. While IC does not replace teaching that emphasizes the acquisition of skills and knowledge, it does appear to provide additional avenues for learning within a meaningful context.

It is clear that IC is an appropriate approach for special education and may actually be preferable to more common reductionistic approaches in terms of the kinds of learning opportunities it provides. However, accommodations are likely to be necessary when implementing IC in a special education setting. In particular, attention must be given to forming workable groups, since a variety of ability levels are usually represented in special education classes. Also, selection of a theme that is neither too abstract nor too mundane is important. Finally, specialized behavior management techniques will facilitate a more successful IC lesson, as will providing visual stimuli for the students.

Further experimental studies are needed to determine the effects of the learning opportunities on special education students' actual learning. One possibility would be to explore the effects of IC on academic language development, because academic language use is critical to school success (Cummins, 1984).

---

## REFERENCES

- Arlington, R. (1983). The reading instruction provided readers of differing ability. *Elementary School Journal*, 83, 255-265.
- Alpert, J. (1975). Do teachers adapt methods and materials to ability groups in reading? *California Journal of Educational Research*, 26, 120-123.
- Arias, M. B. (1986). The context of education for Hispanic students: An overview. *American Journal of Education*, 95, 26-57.
- Baca, L., & Cervantes, H. (1989). *The bilingual special education interface*. Columbus: Charles Merrill.
- Bennett, W. J. (1986). *First lessons: A report on elementary education in America*. Washington, DC: U.S. Department of Education.
- Brophy, J., & Good, T. (1986). Teacher behavior and student achievement. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 328-375). New York: Macmillan.

- Carroll, J. B. (1963). A model of school learning. *Teachers College Record*, 64, 723-33.
- Cazden, C. (1988). *Classroom discourse*. Portsmouth, NH: Heinemann.
- Cooter, R., & Griffith, R. (1989). Thematic units for middle school: An honorable seduction. *Journal of Reading*, 32, 676-81.
- Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy*. San Diego: College-Hill.
- Cummins, J. (1989). A theoretical framework for bilingual special education. *Exceptional Children*, 56(2), 111 - 119.
- Davis, S. (1990). Breaking the cycle of failure through the thematic experience approach. *Journal of Reading*, 33, 420-23.
- Durkin, D. (1978). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly*, 14, 481-533.
- Edelsky, C., Altwerger, B., & Flores, B. (1991). *Whole language: What's the difference?* Portsmouth, NH: Heinemann.
- Goldenberg, C. (1991). *Instructional conversations and their classroom application* (Educational Practice Rep. No. 2). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.
- Goldenberg, C., & Gallimore, R. (1990). *Meeting the language arts challenge for language-minority children: Teaching and learning in a new key* [Progress report]. Los Angeles: University of California, Office of the President, Presidential Grants for School Improvement Committee
- Good, T. L. (1986). Classroom research: A decade of progress. *Educational Psychologist*, 18, 127-144.
- Goodlad, J. (1984). *A place called school*. New York: McGraw Hill.
- Guthrie, L., & Hall, W. (1983). Continuity/discontinuity in the function and use of language. In E. Gordon (Ed.), *Review of Research in Education* (Vol. 10). Washington, DC: American Educational Research Association.
- Heward, W., & Orlansky, M. (1992). *Exceptional children: An introductory survey of special education*. New York: Macmillan.
- Hiebert, E. H. (1983). An examination of ability grouping for reading instruction. *Reading Research Quarterly*, 18, 231-255.

- Ingram, T. T. S., Mason, A., & Blackburn, I. (1970). A retrospective study of 82 children with reading disability. *Developmental Medical Child Neurology*, 12, 271 -281.
- Lerner, J. (1985). *Learning disabilities*. Boston: Houghton Mifflin.
- Mann, V. (1991). Language problems: Key to reading problems. In B. Wong (Ed.), *Learning about learning disabilities* (pp. 130-162). San Diego: Academic Press.
- Mason, W. (1976). Specific (developmental) dyslexia. *Developmental Medical Child Neurology*, 9, 183- 190.
- Michel, P. A. (1990). What first graders think about reading. In R.W. Blake (Ed.), *Whole language: Explorations and applications*. Schenectady, NY: New York State English Council.
- Orfield, G. (1986). Hispanic education: Challenges, research and policies. *American Journal of Education*, 95, 1-25.
- Ortiz, A., & Wilkinson, C. (1991). *AIM for the BEST: Assessment and intervention model for the bilingual exceptional child*. Austin, TX: University of Texas at Austin.
- Pflaum, S. W., Pascarella, E. T., Boswick, M., & Auer, C. (1980). The influence of pupil behaviors and pupil status factors on teacher behaviors during oral reading lessons. *Journal of Educational Research*, 74, 99-105.
- Poplin, M. (1988a). The reductionistic fallacy in learning disabilities: Replicating the past by reducing the present. *Journal of Learning Disabilities*, 21(7), 389-400.
- Poplin, M. (1988b). Holistic/constructivist principles of the teaching/learning process: Implications for the field of learning disabilities. *Journal of Learning Disabilities*, 21(7), 401 -416.
- Rogoff, B. (1990). *Apprenticeship in thinking*. New York: Oxford University Press.
- Rosenshine, B., & Stevens, R. (1986). Teaching functions. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 376-391). New York: Macmillan.
- Rueda, R., Goldenberg, C., & Gallimore, R. (1992). *Rating instructional conversations: A guide* (Educational Practice Rep. No.4). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.
- Sarason, S. B. (1983). *Schooling in America: Scape goat and salvation*. New York: Free Press.
- Sarason, S. B., Davidson, K. S., & Blatt, B. (1986). *The preparation of teachers: An unstudied problem in education* (2nd ed.). Cambridge, MA: Brookline.
- Saunders, W., & Goldenberg, C. (1992). *Effects of instructional conversation on transition students' concepts of "friendship."* An experimental study. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.

- Sawyer, D. (1991). Whole language in context: Insights into the current great debate. *Topics in Language Disorders, 11*(3), 1-13.
- Smith-Burke, M. T., Deegan, D., & Jaggar, A. (1991) Whole language: A viable alternative for special and remedial education? *Topics in Language Disorders, 11*(3), 58-68.
- Spradley, J. (1980). *Participant observation*. New York: Holt, Rinehart and Winston.
- Strickland, D., & Morrow, L.M. (1990) Integrating the emergent literacy curriculum with themes. *The Reading Teacher, 43*, 604-5.
- Tharp, R., & Gallimore, R. (1988). *Rousing minds to life*. New York: Cambridge University Press.
- Tharp, R., & Gallimore, R. (1989). Rousing schools to life. *American Educator, 13*(2), 20-25, 46-52.
- Vygotsky, L. S. (1962). *Thought and language* (E. Hanfmann & G. Vakar, Trans.) . Cambridge, MA: MIT Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds. & Trans.). Cambridge, MA: Harvard University Press.
- Wilgosh, L. (1984). Learned helplessness in normally achieving and learning disabled girls. *Mental Retardation and Learning Disabilities Bulletin, 12*(2), 64-70.
- 
- 

## ACKNOWLEDGMENTS

This report is based on a paper presented at the Annual Meeting of the American Educational Research Association, April 24, 1992, San Francisco, CA. Research reported herein was supported in part by U.S. Department of Education Personnel Preparation Grant H029B10146 awarded to Loyola Marymount University. The opinions expressed are the authors' and do not necessarily reflect the position of the funding agency. Special thanks to Claude Goldenberg whose guidance and valuable feedback made this work possible

---

---

This report was prepared with funding from the Office of Educational Research and Improvement (OERI) of the U.S. Department of Education, under Cooperative Agreement No. R117G10022. The findings and opinions expressed here are those of the author(s), and do not necessarily reflect the positions or policies of OERI.

---

---

*The HTML version of this document was prepared by NCBE and posted to the web with the permission of the author/publisher.*