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ABSTRACT

The collection of readings is designed to provide special education teachers in New York City (New York) public schools with information about and techniques for teaching Limited-English-Proficient (LEP) students. Articles address these topics: the demographics and trends of LEP populations; Hispanic student achievement; meeting the needs of culturally diverse exceptional students; bilingual special education; English-as-a-Second-Language (ESL) in special education; disabilities and language acquisition; language-minority students and special education; language instruction for mild, moderate, and severe disabilities; behavioral diversity; empowering culturally diverse students with learning problems; misconceptions about second language learning; cooperative learning and diverse language backgrounds; portfolios and alternative assessment methods; making the reading/writing connection; sheltered English; ESL through content-area instruction; mathematics instruction; science instruction; computers for story-writing; academic achievement in a second language; multicultural activities; working with culturally diverse parents; parent involvement; why some parents don't come to school; intergenerational literacy; and the role of school paraprofessionals. (MSE)

English as a Second Language Professional Development Manual for Special Education Teachers

Resource Literature

BOARD OF EDUCATION OF THE CITY OF NEW YORK

English as a Second Language Professional Development Manual for Special Education Teachers

Resource Literature

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FORWARD

This volume of ESL resource literature has been produced to accompany the *ESL Professional Development Manuals for Special Education Teachers* (Early Childhood, Upper Elementary, and Intermediate/Junior High School Levels).

The Division of Bilingual Education is pleased to be able to provide teachers with research-based information and strategies on teaching English as a second language to culturally and linguistically diverse exceptional students.

Teachers are encouraged to continue their professional development by participating in conferences and workshops and through the use of professional journals in the fields of bilingual education and ESL, as well as special education.

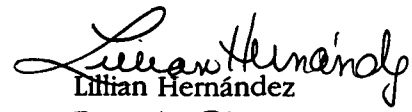

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TABLE OF CONTENTS

INTRODUCTION

The English as a Second Language Professional Development Manual for Special Education Teachers: Resource Literature has been designed to provide a grounding in current research and effective ESL teaching practices for educators who instruct limited English proficient (LEP) students in special education programs. This collection of articles will assist teachers without ESL certification in providing mandated ESL services in all special education settings, including alternate placement, resource room, speech and language therapy, and other related services.

LEP students in special education programs are extremely diverse: they speak a wide variety of languages and are of many cultural and educational backgrounds. Yet there are three primary characteristics which define the learning needs of this population: disability, language, and culture. These characteristics interact in significant ways.

In order to provide an appropriate educational program for each culturally and linguistically diverse exceptional (CLDE) student, it is important to consider the nature and extent of that student's disability. Of equal importance is the consideration of the student's language characteristics in both the native language (L1) and English (L2). Finally, one must consider in addition to these two areas, another powerful concern—the student's cultural background. In responding to the needs of the whole child, these characteristics must be integrated simultaneously into the instructional plan.

The readings included in this ESL resource literature collection are meant to support teachers in designing instructional activities to meet the ESL needs of CLDE students. They provide an overview of current research and trends in the following areas:

- Overview and Trends
- Assessment and LEP Students
- Special Education and LEP Students
- Facilitating Second Language Acquisition
- ESL Approaches and Strategies
- ESL and the Content Areas
- Multicultural Education
- Working with Parents of CLDE Students
- Paraprofessionals

The readings included here can foster an understanding of the wide range of linguistic and cultural needs of CLDE students and introduce strategies for addressing them. Moreover teachers are encouraged to continue their professional development in the field.

LIMITED ENGLISH PROFICIENT STUDENTS: WHO ARE THEY?

CENSUS REPORTS SHARP INCREASE IN NUMBER OF NON-ENGLISH LANGUAGE SPEAKING AMERICANS

More than 31.8 million people—14 percent of the nation's population aged 5 and over—said that they spoke a language other than English in 1990, compared with 23.1 million (11%) a decade earlier, according to the Census Bureau.

Spanish is the most common non-English language spoken in the United States with 17,339,172 speakers, representing 54% of the language-minority population. Since 1980, the Spanish-speaking population has increased by 6.2 million. Spanish is spoken ten times more frequently than any other language and is the most frequently spoken non-English language in each of the four regions of the country. Spanish was the prevailing non-English language in 39 states and the District of Columbia.

Four other language groups have more than one million speakers: French (1,702,176), German (1,547,099), Italian (1,308,648), and Chinese (1,249,213). Their frequency of use varied by region: Italian and German being prominent in the Northeast and Midwest and French and Chinese in the South and West. French was most used in Louisiana, Maine, New Hampshire, and Vermont. German was most frequently spoken in Montana, Minnesota, and North and South Dakota. In Rhode Island, Portuguese was first; in Alaska, it was Yupik; and in Hawaii, Japanese was the language of most non-English language speakers.

The reported English speaking ability of non-English speakers provides significant information on those language groups most in need of bilingual education. Of the 50 most frequently spoken language groups, the following report having more than 25% whose English-speaking ability is either "not well" or "not at all": Hmong (46.3%), Cambodian (42.9%), Korean (30.1%), Chinese (29.9%), Thai/Laotian (28.1%), Russian (27%), Armenian (25.9%), and Spanish (25.9%).

Last fall, the Census Bureau released data on the school-age population of non-English speakers (ages 5-17), reporting that 6.3 million children, or 14% of the total school-age population, do not speak English at home. This represents a 38% increase over the past ten years.

NABE NEWS, National Association for Bilingual Education, May 1993, 16(6).

When Meeting "Common" Standards Is Uncommonly Difficult

Denise McKeon

Because limited English proficient learners bear an exceptionally heavy cognitive and linguistic load, they need stepped-up assistance to help them meet new content standards.

Visionaries foresee a restructured educational system in the United States that will hold all students to high common standards of world-class achievement. According to this vision, the standards will not only result in better teaching and learning, but will also guarantee that schools are accountable for the success of all students. American schools will achieve both equity and excellence.

These goals are laudable, and all citizens can rally behind them. We also need to think, however, about their implications for the more than 2.6 million children classified as Limited English proficient (United States Department of Education, 1992). If anything, this large number underestimates the number of people who are not fluent in English. More than 6.3 million children in the United States report speaking a non-English language at home (National Association of Bilingual Education, 1993).

The size of the LEP population is important because meeting the content standards developed for areas like mathematics, social studies, and so on will be disproportionately difficult for LEP students. They will have to perform at much higher cognitive and linguistic levels than their monolingual English-speaking peers.

The St. Petersburg Problem

To illustrate the dynamics of the difficulty for LEP students, imagine that you are a student working with a group of peers on a science project dealing with the effects of photosynthesis. You have undertaken several experiments with plants. The process requires you to plant, measure, discuss, evaluate results, and prepare a report.

Now imagine that you're doing this project on the outskirts of St. Petersburg. That's St. Petersburg, *Russia.* Other than you, all the members of your group are native speakers of Russian. You have had an introductory course in the language, but you are still limited Russian proficient.

Is the task that you must perform more difficult than it is for the Russian-speaking students? Of course it is. The proficient speakers of Russian are learning content with a language that for them is practically automatic. You, on the other hand, must decipher the many structures and functions of the language before any content will make sense. In order to contribute to the group, you must negotiate your way through a series of unfamiliar sociolinguistic and sociocultural acts. When you use Russian to talk about your experiments or write your part of the report, you must not only grasp the content, but struggle to make the language express what you know. In short, the proficient speakers of Russian can focus primarily on cognitive tasks, while you must focus on cognitive and linguistic tasks.

Educational Leadership, 1994, 51: 45-49. Permission pending.

If before you came to Russia, you studied photosynthesis in a science class taught in English, you and your classmates will be learning different sets of content and procedures. You already understand the concept of photosynthesis and the specialized vocabulary needed to talk about it, so what you need to learn is how to express this knowledge in Russian. Thus, you must focus on the language skills while the rest of the class concentrates on science.

If you've never studied photosynthesis, your cognitive and linguistic burden will be much heavier because you will have to gain access to new scientific concepts and vocabulary through a language that you do not understand, speak, read, or write well. In effect, you must meet a higher standard of performance.

Other Problems for LEP Students

The St. Petersburg problem conveys some, but not all, of the linguistic challenges that many Limited English proficient students face in meeting standards developed for monolingual English-speaking students. For instance, some LEP students enter this country at various points in their academic careers (kindergarten, 4th grade, 11th grade, and so on). The higher the grade level, the more a limited proficiency in English is likely to weigh on students, because at higher levels of schooling, the cognitive and linguistic loads are heavier.

A third factor compounding the burden for LEP students is that they enter the United States from many places. In the different countries of origin, curricular sequences, content objectives, and instructional methodologies may vary dramatically from American practices. Students from China, for example, may use different rules and formulas to work algebra problems, and they often ignore the complicated approaches to problem solving that are common in American classes (Tsang, 1987). Newcomers from China may thus be at a great disadvantage in a class that emphasizes higher-order thinking, and what they actually know and are able to do may not show up in assessments that are based on our content standards.

LEP Students and Content Standards

Let's face facts. Learning about photosynthesis in a language that you speak almost automatically is a different proposition than learning about it in a language that you have yet to master. And being held accountable for knowing long division by 4th grade is hardly fair for test takers who recently arrived from a country where long division isn't presented until 5th grade.

I am not saying that LEP students shouldn't be held to high standards or taught to develop higher-order thinking skills. In fact, for far too long the expectations held for many LEP students have been unreasonably low.

If they are to achieve the content standards being developed, however, we must acknowledge that, for LEP students, meeting content standards is a more complex and cognitively demanding task than it is for students who are proficient in English. We must also pay more attention to the fact that LEP students may know as much as monolingual English speakers, but not the same things (not the least of these accomplishments is being able to understand, speak, read, write, reason, and remember academic content in a language other than English).

Opportunity to Learn

We should all stop talking about lowering standards for LEP students. Then we would have plenty of time to discuss the support that these youngsters need in order to meet high standards.

While those of us who work with LEP students applaud education reformers and policy makers for seizing on the idea that all students can learn and reach high standards of achievement, we are troubled by a lack of systematic attention to opportunity-to-learn

standards. From daily experience, we know that most LEP students do not get sufficient access to high-quality instruction and needed services.

Teacher's of English to Speakers of Other Languages (TESOL), a professional organization of teachers, teacher educator, researchers, and linguists, has recently formulated and announced a set of opportunity-to-learn standards for LEP students. The standards are divided into four areas:

- access to a positive learning environment.
- access to appropriate curriculum.
- access to full delivery of services.
- access to equitable assessment.

Although these items may seem pretty basic, the state of LEP education in the United States is such that attainment of these four conditions would go a long way toward eradicating three problems that impede LEP student achievement:

1. *Programmatic deficiencies.* In 1992, the Department of Education reported data showing that almost one in four LEP students receives no specialized instruction to help smooth the transition to learning in English. Federally funded bilingual education programs serve only 11 percent of the likely candidates for such instruction, and even then, the assistance generally stops prematurely. Students are served for a maximum of three years, despite research findings indicating that LEP students take from five to seven years (or longer) to approach grade-level norms on English-language standardized achievement tests (Collier, 1987, Cummins, 1981).

   Even students who do receive specialized help are often shut off from curricular options. For example, Travers (1987) traced the low mathematics achievement of language-minority students to limited opportunities to learn mathematics. The limitations occur for two reasons: (1) discrepancies between the intended curriculum (the content material found in curriculum guides and textbooks) and the implemented curriculum (what the teacher actually teaches); and (2) the inappropriate placement of LEP students in remedial classes.

   More recently (in 1992), Minicucci and Olsen's report on 27 secondary school programs (that is, programs that offer all content subjects at all grade levels in classes designed to meet the needs of LEP students). The researchers found that more than half of the high schools and a third of the intermediate schools had major gaps in their offerings for LEP students. Some offered no content classes at all for LEP students. It will not surprise you to learn that in several of the schools "the dropout rate was sufficiently high among these students to make 11th and 12th grade content classes unnecessary." One school even had a policy not to enroll new LEP students over the age of 16. Such students were referred to adult education programs.

   Even special instructional services and resources appear to neglect the LEP population. For instance, although LEP students are included in counts to generate Chapter One funding, the LEP students who might benefit from Chapter One services are often denied them (Strang and Carlson, 1991). We have indications, too, that LEP students have scant access to technology. A report from the United States Congress's Office of Technology Assessment (cited in Cummins and Sayers, 1991) shows that students from language minority backgrounds are much less likely to have the opportunity to use a computer for learning. Cummins and Sayers add that only a few commercially available software programs (1 percent) are appropriate for students learning English as a second language.

2. *Teacher preparation deficiencies.* In 1992, only 37 states required any kind of certification or endorsement to teach English as a second language (Stewart, 1993), and only 30 states required certification to teach in bilingual education programs (National Clearinghouse for Bilingual Education, 1993). In states that do require certification, significant numbers of ESL and bilingual teachers hold substandard certificates, in many cases because teachers lack proper coursework (Cooperman, 1986).

   Despite the fact that half of all American teachers teach a Limited English proficient student at some time in their careers (O'Malley and Waggoner, 1984), *no* state requires every certified teacher to have some training or coursework focusing on strategies for teaching second-language learners. Although a number of organizations (such as NCATE, the National Council for the Accreditation of Teacher Education) have urged teacher training institutions to include training in multiculturalism, a 1991 study of 132 universities found more than half deficient in meeting the recommendation (Stewart, 1993).

3. *Assessment.* This issue is of great concern to educators and parents of LEP students. Standardized testing in particular has long been a source of heated debate because, on the basis of test scores, LEP children are often misassigned to lower curriculum tracks or special education (Council of Chief State School Officers, 1990, LaCelle-Peterson and Rivera, 1994).

   Although the current move toward performance assessment seems to offer a more promising method of diagnosing the needs and determining the capabilities of LEP students, it also raises serious new questions of reliability and validity. For example, we don't yet know if LEP students writing in English can be measured accurately with the same scoring rubrics used to judge the writing of monolingual English speakers. It may be that scoring rubrics developed specifically for LEP students would more accurately measure what these students know and are able to do (McKeon, 1992).

   In dealing with these three areas of concern, we must not be misled by occasional news reports that feature some newly arrived LEP student who has put forth phenomenal effort and graduated class valedictorian. Such stories depict the exception, not the rule. They do not reflect the experience of the majority of LEP students.

   Put yourself in the place of an average Limited English proficient student. You attend a school that offers no ESL or bilingual instruction, has no teachers trained in ESL or bilingual education, places you in low-level or remedial classes, cuts you off from some content areas, and fails to provide Chapter One or other specialized services. How would you perform on challenging subject matter tests given in a language you don't understand? Would you be likely to meet or exceed your standards?

Enhancing the Possibility of LEP Student Achievement

To ensure that LEP students will meet content standards and help the nation reach its six National Education Goals, educators need to take five relatively simple steps:

1. School and district officials can systematically examine the academic program open to their Limited English proficient students. Often, it is helpful to select three or four LEP students with different backgrounds to review the type of course offerings available to fill the special needs of each. Do the courses offered provide support in learning English as a second language? Do they provide challenging content teaching, either in the student's first language or in an ESL setting, or do

they "shelter" the content (that is, teach academic language along with the language needed to learn it)?

2. Using the TESOL Access Standards as a guideline, school personnel can review their approach to educating limited English proficient students. The school environment can support all LEP students in their learning and value their linguistic and cultural diversity (approaches should add to, rather than replace, students' cultural repertoires).

3. State and school district officials can make sure that ESL and bilingual educators are included on teams that develop curriculum frameworks. Often, ESL and bilingual educators use alternative instructional techniques (such as bilingual education or content-based ESL) to teach particular subjects (science, social studies, and so on). If these professionals help to develop curriculum frameworks, they can ensure that the instruction for LEP students is up-to-date, effective, and consistent with local standards.

4. State and district officials can discuss alternative ways to judge the performance of limited English proficient students. Some students might show what they know through portfolios. Others, especially those in bilingual programs, might demonstrate achievement in a language other than English.

5. State and district officials can support the development of standards for the discipline of English as a second language. (Although TESOL and the National Association for Bilingual Education are collaborating to develop ESL content standards, calls for federal support of this project have gone unanswered. The federal government has, however, supported standards development in other disciplines).

Professional teaching standards for ESL are needed to ensure that its instructors are highly skilled, and content standards are important because many LEP students receive ESL in place of regular language arts. In other words, ESL is not watered-down language arts, but a discipline-driven, specialized subject for the fastest growing population in the United States today. Without standards for ESL, we have no way of knowing how well or how fast these students are acquiring English, nor can we determine how well ESL instructional programs are meeting students' needs.

Taking these five extra steps in behalf of what is now a poorly served student population is essential. After all, common standards cannot be met if schools fail to provide certain students with common opportunities.

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IMPROVING THE ACHIEVEMENT OF HISPANIC STUDENTS

Christopher K. Howe

Two exploratory studies offer suggestions for addressing the educational needs of our fastest growing student population.

"Compared to blacks or whites, Hispanics enter school later, leave school earlier, and are less likely to complete high school and or enter college. They remain the most undereducated major segment of the United States population," asserts the National Council of La Raza (De La Rosa and Maw, 1990). To those who say that the answer is simply, "Get tough," the research replies, "It doesn't work with this group." For example, while efforts to increase course requirements correlate somewhat with better academic achievement among many groups, they have had no measurable positive effect on Hispanic students (General Accounting Office, 1989).

The ever-growing presence of Hispanic students is a phenomenon that has already dramatically affected our school systems, in larger urban areas more than any other. Indeed, to use adjectives "explosive" or "overwhelming" is not hyperbolic.

Students with Roots in Latin America

Already 1 in 12 persons living in this country can trace his or her origin to Latin America. Since 1980, this population has increased at a rate five times that of non-Hispanic whites, African-Americans and Asians combined.

Not surprisingly, these statistics are mirrored in our schools. Already 1 in 10 eighth graders is Hispanic, and demographic projections indicate a nearly 3 percent increase in their numbers for the rest of the 1990s, more than doubling the increase among African-Americans during this same period, while non-Hispanic white youth will actually see their numbers decline by almost four percent (Hodgkinson 1992). Even though the 1973 Supreme Court case *Lau vs. Nichols* directed schools to "provide an education comprehensible to limited English proficient (LEP) students," administrators without a thorough knowledge of the particular needs of Hispanics have found themselves scrambling to provide curriculums and programs.

At every grade level, a higher percentage of Hispanic children lags behind their modal grade than either non-Hispanic whites or blacks. By the 12th grade, about 48 percent are so categorized. Three out of four 8th graders cannot pass a test of simple mathematical operations using decimals or fractions. Hispanics are consistently less likely to be placed in programs for the gifted than any other ethnic group.

In addition, their SAT scores are significantly below the average. This statistic is all the more distressing when one considers that since 1975, other minorities have made greater strides in improving their subtest scores. In 1991, Mexican-American students scored on the average 45 points below the national average on the math section (Hodgkinson, 1992; De La Rosa and Maw, 1990; National Center for Education Statistics, 1992).

Lucas, Henze, and Donato (1990) have noted that much of the research conducted on "effective schooling" for Hispanics has

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largely ignored the difficulties they face outside school. For example, Hispanic 8th graders are almost twice as likely as African-Americans to be approached by drug dealers, and are only somewhat less likely to have something stolen from them. Further, few Hispanic teachers are available as role models. The ratio of white non-Hispanic students to white non-Hispanic teachers is 17:1; for African-Americans the ratio stands at 40:1. For Hispanics, however, this student to teacher ratio soars to 64:1 (Hodgkinson, 1992).

Nonetheless, the disastrously high dropout rate among Hispanic youth must rank as the most troubling dynamic of this population. Since 1972, the percentage of white non-Hispanics who drop out of school fell by almost 4 percent, and the African-American dropout rate improved some 8 percent. In 1972, 34 percent of Hispanics dropped out before graduation; by 1991 this statistic had risen to 35 percent. What are we to do and where should we start?

Advice Based on Research

My review of the literature over the past several years discovered only two systematic studies of effective education for the Hispanic community. The first comes from Lucas, Henze, and Donato (1990), who conducted interviews at six urban Hispanic-majority secondary schools that were judged to be successful in their educational programs. From their observations, the researchers identified several actions a school staff can routinely perform that lead to positive effects.

1. *Place value on the students' languages and cultures.* Teachers and staff should attempt to gain a rudimentary command of the Spanish language. In addition, they should not punish students for using their native language in contexts where English is not expressly called for.

   At the very least, teachers should become knowledgeable about the various Hispanic cultures. Let us not forget that although "Hispanic" is a convenient label for many of us, most Hispanics consider themselves first and foremost Mexicans, Puerto Ricans, Colombians, and so forth. A child from a Mexican family learns certain customs utterly unknown in a Cuban family, and vice versa.

   While touring a largely Hispanic neighborhood of Chicago, I noticed that the teachers had set aside a separate space, bright and ample, for cultural projects. At that moment, a team of middle school students was constructing out of clay a model of the ancient Aztec City of Tenochtitlán, (present-day Mexico City). They had been encouraged to study architecture: the origins of structures and their uses, such as in temple worship, and their historical significance in the light of Spain's eventual conquest of the region.

2. *Set high expectations for language-minority students.* Educators can, for example, enable students to exit ESL programs quickly, offer bilingual advanced and honors courses, ask colleges to send Hispanic recruiters, and invite Hispanic graduates to return to school to encourage their peers. Further, they should not assume that these students' language barriers make it difficult, if not impossible, for them to succeed. Keep the standards high for them, and they will respond in kind.

3. *Design staff development to help teachers and other staff serve language students more effectively.* Target programs should address the cultural dynamics of this population and teach strategies shown to be successful with Hispanic students. Many common and harmful mistakes could easily be avoided if staff members were simply made aware of the cultural dynamics Hispanic children are raised with.

   For instance, I have overheard several teachers absolutely infuriated with their Hispanic students because whenever

they were being admonished, they look down at the floor and not at the authority figure addressing them. For us, *not* looking at someone is a sign of disrespect: however, in most Hispanic cultures, looking at someone directly while being corrected is a sign of defiance!

4. *Design counseling programs that give special attention to language-minority students.* Obviously, counselors who speak Spanish can more effectively address problems originating in the home. Further, counselors should investigate grants, endowments, and other financial aid available to Hispanic high school graduates for college study.

5. *Encourage parents of language-minority students to become involved in their children's education.* There are numerous ways to accomplish this: offer ESL classes to the parents, hold monthly parents' nights, schedule neighborhood meetings, and arrange parent-teacher conferences for the morning hours. This final suggestion is crucial at a time when most United States households have both dad and mom working outside the home. This is all the more true among the poor, who are often subject to working the least desirable shifts.

   In addition, our whole concept of "family" needs to be revised in light of Hispanic culture. The nuclear family, now so much a part of our mind-set, is very alien to Hispanics. For them cousins and grandparents are as much "family" as are siblings and parents: frequently, all live in the same household. Padrinos (godparents) play as great a role in the upbringing of children as do parents. School files should contain the names, addresses, and phone numbers not only of the biological parents, but also of these "spiritual" parents, the *padrinos,* so that invitations to school meetings and functions can be sent to these extended family members.

6. *Build a strong commitment among school staff members to empower language-minority students through education.* Lucas, Henze, and Donato (1990) call this action "the most fundamental . . . and the most difficult to describe in concrete terms." It is largely demonstrated in those intangible but powerful "investments" that caring teachers make, like tutoring a student during lunch or calling at night to see how a student is getting along with classmates.

   It can include more, however. When students see that their teachers and administrators are aware of the social and political pressures their parents face, and are actively engaged in helping "the system" assists their families, they too become invested in the process of education.

Tools for Bridging the Gap

Other suggestions for improving the educational performance of Hispanic students come from the Hispanic Policy Development Project, Inc., of New York. Reporting on the study, Nicolau and Ramos (1990) claim that the keys are "strong personal outreach, nonjudgmental communication, and the ability to convey respect for the parents' feelings and concerns." Such communication, they acknowledge, takes lots of time, "perserverance," and "creativity." Finally, Nicolau and Ramos maintain that "all the programs that lacked the support of teachers and principals failed to increase Hispanic parent involvement."

What these researchers mean by a "personal outreach" is *not* sending letters. It is phone calls, home visits, and personal greetings by principals and/or teachers at the school door. It must be remembered that new immigrants are often distrustful of "institutions."

Before coming to this largely Hispanic area, I taught at an upper-middle class high school,

where the parents were impressed by sharp presentations and five-year development plans. My experience in dealing with Hispanic parents, however, reveals that they much prefer getting to know the teachers and principals personally, sitting down with them, and sharing their struggles and their dreams. The more humanized and warm the environment, the more they respond. At one school in the study, for example, the principal and teachers invited all the parents to a McDonald's and waited on them!

Being nonjudgmental and respectful of their concerns involves giving families the tools to bridge the gap between their native culture and our own. Too often, administrators imply that Hispanic parents must discard everything that is not "true-blue American." When a parent asks a question that appears "stupid," remember that these newcomers may not be aware of even the most rudimentary elements of our educational systems. How could they be?

Time for a New Approach

Admittedly, little systematic research on Hispanic students exists, and what does is not empirical in nature. Clearly, however, what we're currently doing is not working.

Considering the unique challenges—and the wonderful potential—that Hispanic students bring to our nation's schools, we must break free of our preconceived notions, prejudices, and jingoistic demands and respond energetically and positively. Our fastest growing student population certainly isn't going to go away. By extending our best efforts to these children and youth, we all stand to benefit.

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CULTURALLY AND LINGUISTICALLY DIVERSE EXCEPTIONAL STUDENTS

Toward Defining Programs and Services for Culturally and Linguistically Diverse Learners in Special Education

Shernaz B. García and Diana H. Malkin

Effective program design for services for students from culturally and linguistically diverse (CLD) backgrounds who also have disabilities is based on the same principles and purposes of multicultural education that create supportive learning environments in general education. In the absence of appropriate programs in regular and special education, these students are at higher risk of being misidentified as having disabilities, and their educational experiences may not take into account the reality that linguistic and cultural characteristics co-exist and interact with disability-related factors. For example, a girl with a learning disability may also have limited English proficiency (LEP), be living in poverty, and come from a family of migrant farm workers. Special education programs for this student must address the interacting influence of these variables. How will bilingual education and English as a second language (ESL) instruction be modified for this child? How do the family and large community respond to her disability? How does the presence of an impairment influence the family's goals and expectations for their daughter? Would these differ if the child were male? How? Do her language characteristics—in the native language and in English—reflect linguistic differences, or do they, instead, result from socioeconomic factors? Failure to consider such issues may result in inadequate student progress or the student's dropping out of school.

Special education services must be culturally and linguistically appropriate if they are to be truly inclusive. To meet the needs of CLD students with exceptionalities, special educators need knowledge and skills in four specific areas: (1) information about the language characteristics of learners with disabilities who are bilingual or have limited English proficiency that will assist in the development of a language use plan (Ortiz & García, 1990; Ortiz & Yates, 1989); (2) information about cultural factors that influence educational planning and services; (3) characteristics of instructional strategies and materials that are culturally and linguistically appropriate; and (4) characteristics of a learning environment that promotes success for all students.

Addressing Language Characteristics

Several aspects of the individualized education program (IEP) are influenced by the students' language characteristics. Even when students are proficient in English, their cultural backgrounds may influence language use in academic settings. Dialectal differences, different patterns of language use and function among varied language communities, and nonverbal communication style differences among cultures can have a significant impact on student performance.

Gathering Essential Language Information

An accurate description of the language characteristics of students from language minority backgrounds, obtained from many sources, is necessary before decisions can be made regarding the language(s) of instruction

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as well as type(s) of language intervention to be provided in special education. For each language spoken by the student, several aspects of language proficiency and use should be considered, including information about the student's (a) language dominance and proficiency; (b) acquisition of the surface structures (grammar, syntax, vocabulary, phonology, etc.), as well as functional language use (pragmatics); and, (c) receptive and expressive language skills. Language information should be current to ensure that educational planning is responsive to language shifts that may have occurred since any previous testing. (Readers interested in a more detailed discussion of language profiling are referred to Ortiz & García, 1990.)

Developing the Language Use Plan

When educators assume that students with disabilities who have limited English proficiency will be confused by two languages, or that services for their disability-related difficulties should receive priority over services for their language needs, they are likely to remove students from language programs, or they may fail to realize the importance of coordinating services across bilingual and special education settings. However, students with LEP are entitled to bilingual and ESL instruction and should receive both to ensure that goals and strategies are pedagogically appropriate for their disability, as well as their language status. Foremost in the IEP should be a language use plan that specifies the language(s) of instruction for each goal and related objectives, the person(s) responsible for instruction in the targeted language(s), and the type of language intervention recommended (Ortiz & Yates, 1989).

In all instances except ESL instruction, ways of providing native language or bilingual instruction to these students should be explored, even if such services are not readily available. Alternatives may include the use of bilingual paraprofessionals, parent and community tutors in the native language(s), bilingual peer tutoring, collaboration with the student's bilingual/ESL teacher, and any other resources available in the district. Even when students do not qualify for bilingual education and ESL programs or have recently exited from these programs, some may still need language support to succeed in academic tasks that demand greater English proficiency than they possess. Unless teachers understand that the English performance of students from language minority backgrounds may reflect language status rather than cognitive ability, instruction may be geared to the former rather than the latter. These students need instruction that accommodated their language level while teaching concepts that are at the appropriate cognitive level. The learning environment should support the language of instruction in a variety of contextualized, nonverbal, multisensory ways.

The Influence of Cultural Factors

In the most general sense, culture provides a world view that influences our ways of perceiving the world around us. It defines desirable attitudes, values, and behaviors, and influences how we evaluate our needs. As a result, the culture and subcultures of the school are likely to have an impact on what and how children should be taught, as well as when and how successfully it is taught (Lynch, 1992). These culturally conditioned influences on educational programs and curriculum development are more difficult to perceive if educators do not have adequate cultural self-awareness and an understanding of other cultures. In order to truly understand how culture mediates school experiences, it is important to go beyond the "tourist" curriculum that focuses on external characteristics such as food, music, holidays, and dress (Derman-Sparks, 1989). An awareness of the internal (values, thoughts, cognitive orientations) and hidden (unspoken rules, norms) aspects of culture is also needed. For instance, it is helpful to understand the influence of culture on the size and structure of the family; standards for acceptable behavior (decorum and discipline); language and communication patterns

(including rules for adult, adult-child, child-child communication); religious influences on roles, expectations, and/or diet; and traditions and history (for example, reason for immigration, contact with homeland) (Saville-Troike, 1978).

Influences on Child-rearing Practices

Enculturation is the part of the socialization process through which children acquire the language and characteristics of their culture (Gollnick & Chinn, 1986). For example, the community's values and orientation toward dependence-independence-interdependence will influence parents' goals for their son or daughter from infancy through adulthood. How the roles and status of children in the family and community are defined influences acceptance or rejection of specific behavior in a range of situations, including child-child, child-adult, family-school, and family community interactions. In the case of students with disabilities, it is also helpful to know how parents' expectations and goals for their child have been influenced by cultural values, beliefs, and expectations for individuals with disabilities. Cultures vary in their definition of *family*; consequently, "the term . . . must be defined in a way that is relevant to the targeted cultural groups; otherwise, a very important resource for classroom learning and motivation may be overlooked" (Briscoe, 1991, p. 17). Failure to do this can lead to false assumptions about the role of parents in the care and education of their children and the extent to which parents or other primary caregivers should be involved in formal schooling activities, as well as the beliefs of school personnel that minority parents do not value education.

Finally, how children acquire strategies for learning and which patterns of thinking and learning are reinforced by the family have also been shown to vary across cultural contexts (Phillips, 1983; Ramirez & Castañeda, 1974). When the culture of the classroom values behaviors such as independent seat work, self-directions, and completion, or when success is defined primarily in academic terms, students whose families value interdependent behavior, or those for whom family well-being supersedes individual success, may have difficulty in school and are at risk of being mislabeled as "overly dependent," seeking "excessive" adult approval, or lacking the ability to become independent learners.

Influences on Communication Styles

Effective cross-cultural communication requires a knowledge of the cultural referents as well as individual and situational factors that influence how students use language in conversational and academic contexts. Examples include pragmatic variables such as turn-taking behavior, greeting conventions, proximity, and rules of conversations—including unspoken rules (Cheng, 1987). In addition, cultural values and orientations are influential in defining the norms, rules, roles, and communication networks that govern interpersonal and intercultural communication. How students process information (their cognitive style); how they deal with conflict; and which strategies they prefer during negotiation, persuasion, or other types of communication may be influenced by the cultural context in which they are raised. Their self-concept and social identity (the influence of group membership on self-concept) are also affected by their membership in a particular cultural community (Gudykunst & Ting-Toomey, 1988). Given the "hidden" nature of many of these rules, norms, roles, and expectations, our awareness of their existence may develop only when they are violated and we attempt to identify the source of the misunderstanding.

Variations in communication styles also exist as a function of gender, socioeconomic status, and/or ethnicity (see Heath, 1986; Hecht, Collier, & Ribeau, 1993), and they are present in any language, including native English-speaking communities. For example, African-American students, Appalachian children, or individuals from rural or low-income environments whose language does not reflect the language and language uses

valued at school may experience some of the same difficulties as speakers of other languages if they are not accustomed to the way language is used by teachers and in textbooks and other materials. In fact, class differences may negatively influence teacher responses, even when teachers and students are members of the same ethnic community. In such instances, teachers using an inclusive approach would acknowledge and respect the language a child brings to school while focusing on building and broadening the child's repertory of language varieties to include Standard English.

Instructional goals and strategies should be instrumental in helping students experience academic success, provide opportunities for them to try new learning situations, and increase the range of learning environments in which they can be successful. When parents' goals and expectations for their child are not consistent with the school's definition of success, attempts to "reeducate" the family should be avoided in favor of working collaboratively to determine mutually acceptable goals and helping parents in the decision-making process by sharing pertinent information.

Selection of Appropriate Instructional Strategies

Given the high frequency with which IEPs focus on instructional goals related to reading and language arts, this section addresses language and literacy development. However, many of the principles of effective literacy instruction are appropriate for use in other subject areas. In general, teaching and learning strategies and materials should be selected that facilitate high levels of academic content. Recent literature examining the instructional processes that foster literacy for students with disabilities (Cummins, 1984; Englert & Palincsar, 1991: García, Ortiz, & Bergman, 1990; Goldman & Rueda, 1988; Graves, 1985; Ruiz, 1989; Willig & Ortiz, 1991) emphasize the role of interactive learning environments. A critical assumption is that culture determines how literacy is defined, instructed, and evaluated. From this perspective, literacy is developed in environments that engage students and teachers in meaningful dialogue through activities that are authentic, holistic, and relevant (Cummins, 1984; Englert & Palincsar, 1991). Specifically:

1. Language and dialogue are essential to learning because they scaffold cognitive growth and mediate new learning for students.
2. Instructional goals should focus on student ownership of the literacy process to the extent that students can transform what they have learned into authentic writing activities.
3. Instruction cannot be transmitted or totally scripted by teachers, because learning occurs through student-teacher dialogue and classroom interactions that connect what students need to know to their current knowledge and experiences.
4. Teachers must view errors as a source of information regarding the emergence of new literacy skills rather than as student deficits or undesired behaviors.
5. Student difficulties should be interpreted as areas in which teachers need to provide greater mediation rather than problems that reside in the student.

Table 1 summarizes key variables to be considered when selecting instructional strategies for students with disabilities who are also culturally and/or linguistically different. It also suggests approaches that are more likely to be responsive to issues of student diversity.

Table 1: Cultural and Linguistic Considerations Related to IEP Development

SELECTION OF IEP GOALS AND OBJECTIVES	
Consideration for IEP Development	**Classroom Implications**
IEP goals and objectives accommodate the student's current level of performance.	• At the student's instructional level • Instructional level based on student's cognitive level, not language proficiency level • Focus on development of higher level cognitive skills as well as basic skills
Goals and objectives are responsive to cultural and linguistic variables.	• Accommodates goals and expectations of the family • Is sensitive to culturally based response to the disability • Includes a language use plan • Assesses language development and ESL needs
SELECTION OF INSTRUCTIONAL STRATEGIES	
Considerations for IEP Development	**Classroom Implications**
Interventions provide adequate exposure to curriculum.	• Instruction in student's dominant language • Responsiveness to learning and communication styles • Sufficient practice to achieve mastery
IEP provides for curricular/instructional accommodation of learning styles and locus of control.	• Accommodates perceptual style differences (e.g., visual vs. auditory) • Accommodates cognitive style differences (e.g., inductive vs. deductive) • Accommodates preferred style of participation (e.g., teacher- vs. student-directed, small vs. large group) • Reduces feelings of learned helplessness
Selected strategies are likely to be effective for language minority students.	• Native language and ESL instruction • Teacher as facilitator of learning (vs. transmission) • Genuine dialogue with students • Contextualized instruction • Collaborative learning • Self-regulated learning • Learning-to-learn strategies
English as a Second Language (ESL) strategies are used.	• Modifications to address the student's disability • Use of current ESL approaches • Focus on meaningful communication
Strategies for literacy are included.	• Holistic approaches to literacy development • Language teaching that is integrated across the curriculum • Thematic literature units • Language experience approach • Journals

Creating Supportive Learning Environments

Achievement of IEP goals and objectives depends on the context in which teaching and learning occur. A supportive classroom culture is part of the larger "psychological environment" of the school, and it can increase student motivation and attitudes toward learning (Maehr, 1990). Three ways in which the learning environment can be enhanced are by careful selection and evaluation of instructional materials, incorporation of students' language and culture, and involvement of parents and community.

Selecting and Evaluating Instructional Materials

Careful selection of instructional materials that promote high interest, motivation, and relevance to their sociocultural, linguistic, and experiential backgrounds increases the likelihood that students will respond to them positively. Materials published after the early 1970s are more likely to give attention to issues of diversity (Derman-Sparks, 1989). When using older instructional materials, teachers should develop and use relevant guidelines to determine whether they can be adapted and will be useful in increasing students' awareness of issues such as stereotyping, prejudice, and discrimination or it would be better to replace them. This is not meant to imply that classical literature that reflects gender or racial bias, for example, should be totally eliminated from the curriculum. Rather, in addition to appreciating the literary value of these materials, students can develop a better understanding of the historical contexts in which oppression occurs and can learn to identify ways in which discrimination against people, including individuals with disabilities, can be reduced or eliminated. Table 2 lists guidelines to assist special educators in developing their own criteria for evaluating materials they currently have available.

Table 2: Checklist for Selecting and Evaluating Materials

☐	Are the perspectives and contributions of people from diverse cultural and linguistic groups—both men and women, as well as people with disabilities—included in the curriculum?
☐	Are there activities in the curriculum that will assist students in analyzing the various forms of the mass media for ethnocentrism, sexism, "handicapism," and stereotyping?
☐	Are men and women, diverse cultural/racial groups, and people with varying abilities shown in both active and passive roles?
☐	Are men and women, diverse cultural/racial groups, and people with disabilities shown in positions of power (i.e., the materials do not rely on the mainstream culture's character to achieve goals)?
☐	Do the materials identify strengths possessed by so-called "underachieving" diverse populations? Do they diminish the attention given to deficits, to reinforce positive behaviors that are desired and valued?
☐	Are members of diverse racial/cultural groups, men and women, and people with disabilities shown engaged in a broad range of social and professional activities?
☐	Are members of a particular culture or group depicted as having a range of physical features (e.g., hair color, hair texture, variations in facial characteristics and body build)?
☐	Do the materials represent historical events from the perspectives of the various groups involved or solely from the male, middle class, and/or Western European perspective?
☐	Are the materials free of ethnocentric or sexist language patterns that may make implications about persons or groups based solely on their culture, race, gender, or disability?
☐	Will students from different ethnic and cultural backgrounds find the materials personally meaningful to their life experiences?
☐	Are a wide variety of culturally different examples, situations, scenarios, and anecdotes used throughout the curriculum design to illustrate major intellectual concepts and principles?
☐	Are culturally diverse content, examples, and experiences comparable in kind, significance, magnitude, and function to those selected from mainstream culture?

Incorporating Students' Language and Culture

Bilingual education programs are designed not only to provide native language instruction and ESL development, but also to enhance cognitive and affective development and provide cultural enrichment (Baca and Cervantes, 1989). Even in schools and communities where bilingual programs are not available and in situations where educators do not speak the students' language, it is possible to communicate a positive attitude toward students' backgrounds and heritage (Cummins, 1989).

The following strategies are examples of ways in which classrooms and materials can reflect the diversity of backgrounds that is present in many schools and in the larger society (Cummins, 1989; Derman-Sparks, 1989).

1. Students are encouraged to use their first language around the school in various ways, even when they are not receiving native language instruction. For example, books are provided in several languages in each classroom and in the library for use by students and parents; bulletin boards, signs, and greetings employ various languages; and students are encouraged to use their native language to provide peer tutoring support.
2. Pictures and other visual displays show people from various backgrounds and communities, including individuals with varying abilities, elderly people, and men and women in blue-collar and white-collar roles. Images accurately depict people's contemporary daily lives—at work as well as in recreational activities.
3. Units developed for reading and language arts include literature from a variety of linguistic and cultural backgrounds and reflect the diversity in United States society across race, religion, language, class, gender, and ability. In addition to making children aware of a range of lifestyles, values, and characteristics of diverse groups, literature can reflect their struggles, achievements, and other experiences. Reflecting on such accounts, fictional as well as biographical, may also help some students understand and deal with their own struggles and difficulties.
4. Teachers and other school personnel understand that their interactions and behaviors, even if inadvertent and unintentional, may teach their students gender, racial, and other biases. This is reflected in educators' attention to their own verbal and nonverbal behaviors; avoidance of sexist or ethnocentric language; and parallel expectations for academic performance for girls, students with varying abilities, children from low-income environments, and so on.
5. The seating arrangement and organization of the classroom reflect consideration of learning style differences and encourage students to try new ways of interacting and learning.

Involving Parents and Families

As diversity in the student population increases, alternative models of parent involvement will have to be developed (Harry, 1992). Historically, many parents from language minority groups have had to overcome barriers to their effective participation in the regular and special education process, including educators' perceptions about these parents and their communities; their values regarding educational, linguistic, and cultural differences; and socioeconomic factors. Rather than being part of the problem, parents from culturally and linguistically diverse backgrounds can be effective advocates for their children. They represent a largely untapped resource to assist educators in responding effectively to multicultural issues (Briscoe, 1991).

Implementing Multicultural Special Education

Developing Intercultural Competence

Intercultural competence is an essential ingredient in teachers' ability to implement multicultural special education. Educators who possess such competence can feel comfortable and effective in their interactions with people from a variety of cultures, and they can help students and families feel comfortable as well. Finally, these skills are necessary for accomplishing IEP goals. Acquisition of these skills is a gradual process, progressing through several stages.

The following elements are helpful in this process (Lynch, 1992):

1. Developing an understanding and appreciation of one's own culture. This process of self-awareness and introspection allows us to examine our own assumptions and values, particularly those that may have been taken for granted because they are so much a part of our own family and community systems.
2. Gathering information about the other target cultures and analysis of this information with respect to individual students and families who reside within the community. Through our interactions with each family, we can determine the extent to which the family and its individual members share the cultural characteristics of their ethnic group. (Ethnic identity is determined by the individual and should not be assigned by others based on their observation of external traits.)
3. Discovering the parent's (or other primary caregiver's) orientation to childrearing issues, values, and orientations, including the family's goals and aspirations for their child with special needs.
4. Applying this knowledge to the development of cross-cultural skills. This results in interventions and interactions that are successful with students from diverse cultures.

Strategies for Enhancing Intercultural Understanding

The following questions may arise as special educators explore implications of multicultural education for their own programs.

While it sounds good, how can I, as one teacher, respond to so many diverse characteristics without being overwhelmed? How long will it take? Where do I start? Focusing on the cultures included at your school and within your community can be a good start, because this allows you to identify materials and strategies that are inclusive of the students you teach on a regular basis. It is a good idea to review your needs periodically—perhaps once at the beginning of each school year—to make sure that the information is updated. Which cultures are represented among your students? Does the information include any new families recently arrived in the community? Once a profile has been developed, you can reflect on your own knowledge of these cultural groups. How much do you know about each one? Which one is the most familiar? The least? This information will be useful as you evaluate what you feel comfortable about and identify areas in which you want to learn more.

How accurate is my current knowledge? What were my sources? Think about what you already know. How did you acquire this information? How extensive is your contact with the communities this knowledge presents? Is this information based on the students' country of origin, or does it encompass the experiences of the group in the United States (e.g., Mexican vs. Mexican-American)? Is it based on traditional or contemporary life-styles? Pitfalls to avoid include information that is stereotypic; sources that fail to acknowledge within-group differences that are limited to a "tourist curriculum" (music, food, dress, holidays, etc.),

which fail to highlight aspects of culture such as historical experiences related to the group's arrival in the United States, reasons for migration, accomplishments in various fields, values and belief systems, and communication patterns.

Where can I get more information? There are many ways of learning more about cultures, including formal study, reading, workshops, travel, and audiovisual materials. In addition, activities that allow students to share their experiences and that encourage the participation of parents and other community members in the school (e.g., speaking to the class about their language, culture, or religion) will make this information a part of the ongoing routine of school activities, and it will be acquired in a natural context. The following are some strategies to consider:

- As you prepare the demographic profile of your own classroom, school, or community, ask parents whether they would be willing to speak to the students about their cultural heritage, their own accomplishments, and any barriers they have overcome. Develop a resource directory that can support other curriculum development and planning efforts as well.
- Identify community organizations and groups that can provide access to audiovisual materials and other resources for personal study as well as instructional use.
- Identify print materials, journals, and other professional publications that highlight model programs, instructional strategies and curricula, and resources for multicultural education.

What if my classes do not reflect much cultural or linguistic diversity? Even in schools where students from diverse cultural and linguistic backgrounds are represented in very small numbers, or in predominantly middle-class communities, the larger culture is made up of subcultures from different religious, gender, and geographic backgrounds. White students also represent diverse ethnic backgrounds, and even when they may perceive their identity as "American," several cultures are represented in their ethnic heritage (Boutte & McCormick, 1992). Family histories and other activities can offer opportunities for them to explore and appreciate their unique characteristics. Finally, it is important to examine the influence of gender on teacher expectations, career counseling, and referral to special education.

A related, and equally important, issue for all students, regardless of color, gender, religion, or other differences, is the development of cross-cultural competence. As the diversity in United States society continues to increase, students must be prepared to become members of a workforce that is much more heterogeneous. Multicultural education can help *all* students increase their appreciation of diversity; develop positive self-concepts; respect individuals' civil and human rights; understand the historical context in which prejudice, oppression, and stereotyping occur; and ultimately fulfill their own potential while resisting and challenging stereotyping and barriers to success that exist in the society (Sleeter, 1992).

Conclusion

Efforts to implement multicultural special education services are more likely to succeed when teachers' individual efforts are supported by a school-or district-wide orientation toward improving academic achievement for all students from culturally and linguistically diverse backgrounds. Ensuring that all educators possess the necessary knowledge and skills is a long-term process. Ongoing staff development efforts must supplement preservice teacher preparation programs. In addition, effective instruction in multicultural special education requires greater collaboration between special educators and general educators, including bilingual educators, ESL specialists, migrant educators, Chapter 1 teachers, and other

individuals who serve CLD students with disabilities.

The school's multicultural resources can be considerably enhanced when collaborative efforts also involve parents and the community in meaningful ways. Effective services for a multicultural student population in general and special education require a comprehensive, multidimensional approach that is capable of accommodating the diverse needs of students. We must develop a more effective interface with the programs that have traditionally served these children.

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MEETING THE NEEDS OF CULTURALLY AND LINGUISTICALLY DIVERSE EXCEPTIONAL LEARNERS: PREREFERRAL TO MAINSTREAMING

John J. Hoover and Catherine Collier

ABSTRACT: This article discusses three issues critical to meeting the individual needs of students from culturally and linguistically diverse backgrounds. These issues include prereferral interventions, mainstreaming, and appropriate education for all culturally and linguistically diverse exceptional (CLDE) learners. The article presents one approach for addressing prereferral intervention at the district or school building level and emphasizes the need to expand training to meet the needs of minority non-Hispanic students in special and mainstream classes. Each of these issues represents a recurring or emerging concern that requires continued emphasis in teacher training programs to meet the future needs of all students. The article concludes with a discussion of implications of these issues for teacher preparation.

Several unique challenges that reflect various trends in the overall education of students with special learning and behavior needs are evident when specifically addressing the education of culturally and linguistically diverse exceptional (CLDE) learners. In particular, issues related to the assessment of these students are still of great concern to educators, as are issues associated with appropriate education in the least restrictive environment. Within these broad areas a variety of issues can be identified as requiring continued emphasis and consideration. Three important issues for people preparing to work with CLDE learners are (1) prereferral interventions, (2) education of all students from culturally and linguistically diverse backgrounds, and (3) mainstreaming. Specifically, this list includes issues associated with the need for teacher assistance teams as part of prereferral intervention, the increasing number of students from non-Hispanic language and culture backgrounds, and the complexities of mainstreaming these diverse populations. Each of these three areas is discussed, along with implications for teacher preparation.

Prereferral Intervention

There is a consensus among bilingual special educators (Collier, 1987; Ortiz & García, 1988) that the time between initial teacher referral and staffing should be used for intervention strategies that would facilitate more appropriate diagnosis of the student's needs. The practice of prereferral intervention provides an opportunity to gather preliminary information while simultaneously attempting initial interventions to address problem areas. Limited English proficient students may experience learning or behavior problems as a result of various factors, including (a) language or cultural differences, (b) a handicapping condition, or (c) a combination of these two factors. One major purpose of prereferral interventions for CLDE learners is to attempt to sort out sociocultural factors from problems associated with suspected handicapping conditions. For example, one crucial sociocultural factor, language-related needs, is rarely addressed during the prereferral or formal assessment process for CLDE students (Wilkinson & Ortiz, 1986).

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Sociocultural information compiled during prereferral interventions provides additional insight into whether sociocultural factors are primary contributors to the student's suspected learning or behavior problems or whether other factors more specific to a disability are evident. Effects of prereferral interventions related to suspected problems should be documented and considered in the interpretation of all the assessment data.

Prereferral interventions may be accomplished by reallocating time and resources and can be expanded through greater access to multidisciplinary personnel. Various ways to structure prereferral interventions exist and have been discussed in the literature (Chalfant & Pysh, 1981; Fields, 1988; Ortiz and García, 1986; Ortiz and Maldonado-Colon, 1986). One example of a way to structure prereferral interventions is through a Teacher Assistance Child Intervention Team (TACIT) (Collier, 1988; Hoover & Collier, 1988). TACIT, which reflects information from the sources described above, can easily be created by expanding an existing child study team or another group of professionals at the building or district level. TACIT can provide assistance to teachers who work with culturally and linguistically different students with concomitant learning and behavior problems.

Intervention strategies that address the culturally and linguistically different student's language acquisition, language development, and acculturation needs enable the TACIT to sort out with greater confidence the learning and behavior problems resulting from a handicapping condition and acculturation, experience, or language needs. By documenting the student's performance and response to the prereferral interventions, preliminary diagnostic judgments can be made about the student's need for further intervention or formal evaluation.

The team not only reviews specific concerns about the student, but also makes suggestions for modifying the learning environment for the student within the classroom and provides guidance, training, and assistance in implementing the intervention suggestions. The TACIT can assure compliance with legal guidelines, relieve the staffing team of some time in separating cultural, linguistic, and acculturation variables from special educational variables that affect the assessment and alleviate the staffing process at the prereferral level. It may also more effectively use district instructional and assessment personnel and improve the district's ability to provide the most appropriate education available to culturally and linguistically different students.

The TACIT should be composed of a variety of people, including the student's teacher, the student's parents or advocate, and professionals who are knowledgeable about a variety of educational techniques and strategies, as well as the acculturation process and cross-cultural instructional strategies, the cultural and language background of the student, and bilingual/ESL resources and instructional strategies. Teachers, school psychologists, support staff, principles, and social workers who are bilingual or familiar with diverse cultures are all potential TACIT members. The TACIT can include a multicultural population with members who serve only when referred students belong to their particular cultural or linguistic groups.

Another element to consider when establishing a TACIT is the availability of personnel to serve on specific teams. Educators in ESL, bilingual, special, and general education programs provide an initial place to begin selection of TACIT members. Other district personnel familiar with and knowledgeable about culturally and linguistically different learners as well as district guidelines and curriculum should also be considered for TACIT involvement. The composition of the TACIT must be flexible, and include community members when appropriate. In districts with limited staff and resources and low incidence of culturally and linguistics different learners, additional staff training

may be required to ensure appropriate education for all students.

As the practice of prereferral interventions increases within school districts, TACITs (in various forms) may also increase. The following steps summarize a recommended procedure for establishing TACITs. These may be modified to meet individual district needs; however, they capture the necessary elements to develop an effective TACIT:

1. Develop awareness of the need for prereferral interventions and the potential use of a TACIT.
2. Secure administrative support to establish and use a TACIT.
3. Identify potential TACIT members.
4. Complete the selection of TACIT members.
5. Establish regular TACIT meeting times.
6. Outline the process for using the school TACIT and for bringing a student to the attention of the TACIT.
7. Provide inservice training to the entire school, explaining the process and function of the TACIT.
8. Periodically evaluate the TACIT activities and adjust procedures as necessary.

This general process for identifying and developing a TACIT allows districts to establish and maintain assistance and intervention programs as integral components of the overall assessment and education process for culturally and linguistically diverse learners at any grade level. Prereferral interventions should be an integral component of each CLD student's program once a learning or behavior problem is initially suspected. Although increasing in importance, prereferral interventions in general education programs are rare (Figueroa, Fradd, & Correa, 1989) and typically do not provide support for the primary language of CLD students. A program such as TACIT facilitates more appropriate prereferral interventions in both scope and content.

Meeting Needs of All CLDE Learners

With the passage of the Bilingual Education Act of 1968 and subsequent provisions for preparing and training educators for implementing the various bilingual and ESL programs funded under this act, an increasing number of minority teachers have entered the profession and more teachers are prepared to work with minority students. As the major group of culturally and linguistically different students in the school system is Hispanic (Fradd, Figueroa, & Correa, 1989), much of this effort has been directed at the needs of Spanish-speaking students. Although still evolving, some improvements in the areas of assessment and instruction for Hispanics have occurred over the past 20 years. The number of Spanish-speaking teachers, school psychologists, superintendents, and other education personnel has also increased. However, progress at the university level and in school districts has been slow to improve programs to meet the needs of the rapidly growing minority Asian and other non-Hispanic populations (Baca & Amato, 1989).

According to the National Clearinghouse for Bilingual Education, the non-Hispanic refugee population in the United States by the year 2000 will be approximately 100,000, with 82,000 of those Indochinese (Baca & Cervantes, 1989). This number does not include the "regular" immigrants from numerous countries, who steadily increase the minority non-Hispanic population. These refugees and immigrants are people from countries such as Vietnam, Laos, Cambodia, Hungary, Romania, Bulgaria, China, Japan, India, and the Soviet Union. This trend has resulted in an increase in the variety of languages spoken by students in our schools. For example, there are 10 different languages represented among Indochinese refugees alone. In addition, there remain substantial numbers of Native Americans who do not speak English well enough to participate fully in the educational and social systems of the United States. Within education, there is

a need for additional professionals proficient in the languages of these non-Hispanic populations (Baca, Fradd, & Collier, in press).

The usual mode of instruction for non-Hispanic learners who are limited English proficient is to include them in some form of ESL program or tutoring service while using aides or tutors to assist occasionally in the general education classroom. Educators who are fluent in one particular language or familiar with one or two different cultures may work well with students from those cultures and speak their language (e.g., Spanish); however, these educators are often not prepared to work effectively with a mixed group of minority students (e.g., Spanish, Hmong, Laotian, Navajo). Educators trained for work with culturally and linguistically different students, no matter which culture might be emphasized, will often be more sensitive than lay people to various culturally and linguistically diverse groups. However, these trained educators must try to become familiar with the individual cultures represented by their students. Specifically, consideration of handicaps and special learning needs, and of how these are regarded by various cultures, is necessary.

In reference to special learning needs and minority students, Baca and Cervantes (1989) have estimated that approximately 1,000,000 United States children are both linguistically different and handicapped. Given that approximately 75% of these students who are Hispanic, this still leaves a sizable number of non-Hispanic students from culturally and linguistically diverse backgrounds who may also be handicapped who require special education. Training in cross-cultural communication skills, in addition to cultural sensitivity and the development of multicultural instructional environments, for non-Hispanic populations is crucial to the effective education of these CLDE students. It would be ideal to have school personnel who speak the native languages of the students or to have access to other individuals who are fluent in those languages. However, this is not always possible. The current dearth of multilingual and multicultural professionals in our schools, along with the relatively few teacher training programs designed to specifically address non-Hispanic CLDE populations, are clearly concerns that must be addressed if we are to meet needs of all minority students who have special learning and behavior needs.

Mainstreaming

Mainstreaming remains a problem for students with special learning needs, regardless of their cultural and linguistic background. Teachers often lack sufficient preparation to deal with a variety of special learning needs (Hoover, 1984, 1986, 1987) or to work with culturally and linguistically different students (Baca et al., in press). Indeed, many minority students are referred for special education services because teachers cannot help them and may find their presence disruptive in the classroom (Collier & Hoover, 1987; Hoover & Collier, 1985). Although teacher training is one way to address the problem, cross-cultural education is not yet an institutionalized component of teacher preparation programs (Banks, 1986). Many colleges and universities have been slow to integrate this specialized training into their teacher training programs. School districts have also been slow in developing integrated delivery procedures that could accommodate, within the general education program, the special needs of these students. As we attempt to meet individual needs of minority students with learning and behavior problems, mainstreaming issues will continue to confront educators at all levels of our educational system. Efforts to address their needs must begin with teacher preparation at both the preservice and inservice levels and is the responsibility of K-12 and postsecondary levels of education.

Teacher preparation for the successful mainstreaming of CLDE learners should address

several critical needs of minority students with learning and behavior problems (Baca et al., in press; Collier, 1989). These needs include (a) nondiscriminatory assessment practices, (b) cross-cultural sensitization of special education, (c) language disorder and difference diagnosis, (d) cross-cultural counseling, (e) parent involvement, (f) curriculum adaptation, and (g) school and community services that may assist minority students who have learning and behavior problems.

In addition to specific needs of CLDE learners to address in teacher training, various teacher responsibilities must be emphasized to ensure effective mainstreaming. Several of these coincide directly with the above areas of need. They include:

1. conducting nonbiased assessment of specific learning and behavior needs of minority students, including (a) level of competence in second and native language, (b) degree of acculturation and cultural identity, (c) special learning needs, (d) present achievement levels, (e) socioemotional maturity, and (f) parental concerns and desires,
2. making decisions concerning the education of minority students who have learning or behavior problems and who are placed in mainstream settings,
3. individualizing instruction and selecting and using appropriate teaching and behavior management techniques to meet cultural and linguistic needs in mainstream classes,
4. collaborating with other educators and parents to ensure that cultural and linguistic needs are regularly being met in mainstream classes, and
5. supporting the training of parents of minority students concerning the education of their children.

These needs and associated teacher responsibilities must be addressed by elementary and secondary general and special education teachers in order to meet the mainstreaming needs of minority students. Knowledge of these and similar teacher training areas, associated responsibilities, and specific cultural and linguistic issues provides educators with a solid knowledge base from which to make crucial decisions related to the current and future mainstreaming needs of CLDE students.

Implications for Teacher Preparation

The growing or continued emphasis placed upon prereferral interventions, mainstreaming, and the appropriate education for all students from a variety of culturally and linguistically diverse backgrounds has direct implications for teacher preparation. As training programs prepare educators for work with CLDE learners, various roles and responsibilities in prereferral activities should be emphasized. Programs such as TACIT provide a structure for providing ongoing assistance to teachers and students as specific forms of intervention are attempted within the overall assessment process. Programs or processes addressing prereferral interventions may be easily incorporated into coursework or experiences specifically addressing assessment or teaching strategies for CLDE learners. As program collaboration issues are addressed, various roles and responsibilities of members of prereferral teams can be explored in detail.

The growing number of minority non-Hispanic students to be educated in our schools necessitates teacher preparation to address cross-cultural concerns related to many diverse cultures. Although a general knowledge base can be acquired through preparation for work with any minority student, familiarity with a wide variety of cultures will become increasingly important. This includes knowledge about different cultural views towards handicaps and special learning needs. However, at present there are only 16 bilingual special education teacher preparation programs nationwide (Baca & Amato, 1989). In addition, as discussed previously, progress at the university

level to emphasize training for work with non-Hispanic populations has been slow to evolve. Although some progress for work with Hispanic students has been seen, similar efforts must also be applied to preparation for work with non-Hispanic students who have learning or behavior problems.

In addition, the continued emphasis placed upon mainstreaming of CLDE learners has far-reaching implications for teacher preparation. General and special educators must have a sufficient knowledge base to meet the growing demands associated with mainstreaming of students from diverse cultures, including information related to the development of (a) sensitivity towards language and culture of diverse populations, (b) ability to accurately interpret assessment data and apply it to the instructional environment, and (c) ability to work with parents and other educators through program collaboration (Baca & Amato, 1989). The ultimate goal of successful teacher preparation for work with CLDE learners cannot be fully realized unless training for mainstreaming is specifically emphasized, along with the other critical topics of prereferral intervention and efforts to educate all students from a variety of cultural and linguistic backgrounds.

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BILINGUAL SPECIAL EDUCATION

Leonard M. Baca and Hermes T. Cervantes

How Many Students Are Both Disabled and Bilingual?

Based on the 1980 Census and on Immigration and Naturalization Services records, it is estimated that there are 79 million school-age, language-minority children in the United States. This bilingual population is distributed throughout the United States, with heavier concentrations in the southwest and northeast. The highest concentration is in the large urban areas.

Considering the overall size of the population in the United States with limited English proficiency (LEP), a critical question for bilingual special educators is how many of these students also have disabilities. According to the United States Office of Special Education, an estimated 948,000 children may be linguistically different and have disabilities—a substantial population that could benefit from bilingual special education.

Although overrepresention is an issue in some school districts, underrepresentation has also emerged in some areas (Ovando and Collier, 1985) because many LEP students with disabilities are being placed in bilingual education as an alternative to placement in special education (Baca and Cervantes, 1989).

How Can Special Education and Bilingual Education Be Combined?

Developers of bilingual special education programs need to weigh three factors for each student: degree of disability, level of language proficiency in both English and the primary language, and intellectual capacity. The student's placement on each of these three continuums will determine the nature of instruction (program design) and the educational placement (Baca and Payon, 1989). For example, a student of average intelligence, who has a high level of language proficiency in Spanish, a minimal level of ability in English, and limited visual acuity will require curricular services and placement different from those of a student who is linguistically limited in both languages, exhibits lower intellectual performance, and is severely language delayed.

What Variables Should Influence Placement Decisions?

Program placement aims at the best fit between the student's needs and the available resources. Placement decisions for the bilingual exceptional student should reflect the type and nature of instruction to be provided, the language of instruction, the conveyor of instruction, the duration of instruction, and the student's learning needs and style. The following special education variables and bilingual factors should be addressed in identifying placements (Baca and Payon, 1989, 96):

- student's age
- type and degree of impairment or disability
- age at which disability occurred
- level of language involvement because of the disability
- level of academic achievement
- entry level language skills (upon entering school)
- measured intellectual ability
- method and language used in measuring

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academic achievement and intellectual ability

- level of adaptive behavior
- time spent in United States
- current cultural home setting
- social maturity
- level of language proficiency in English and other language
- amount and type of language input received in the home environment
- speech and language capabilities in both languages
- presence of multiple handicaps
- ambulation or mobility
- success in past and present placements
- wishes of students and their parents and caregivers

What Is Needed to Get Started?

Making bilingual special education work requires the creation of an instructional system that teaches cognitive skills while developing language skills and focusing on the acquisition of English. All instruction should accommodate the student's exceptionality and remediate his or her limitations in English proficiency. Further instruction must be provided within a relevant cultural context so that expectations can be understood by the student. Because language is the primary conveyor of instruction, instruction should occur in the student's stronger language.

Bilingual special education is based on the assumption that students learn best in their preferred language, and is designed to operate at each local level with each individual student in mind. The goal is to provide for all students educational experiences that develop lifelong learning skills (Baca & Payon, 1989).

What Are the Basic Elements of an Individualized Education Program (IEP) for These Students?

IEPs for exceptional bilingual students should include the following elements (Collier, 1989, 272-273):

- the child's current educational status, including all service programs the student is receiving
- goals, including adaptation to acculturation and growth in both the first and second language. The goals must be realistic in regard to the time necessary; years could be involved
- the sequence of short-term instructional objectives leading up to each goal
- a list of instructional and service requirements, including a balance between the first and second language, as well as delineation of who will assist with acculturation needs
- an indication of how much and what aspects of the program will be in the mainstream
- the program's duration
- realistic criteria and a schedule for evaluation of the IEP's effectiveness.
- a statement of the role of the parents and caregivers
- specification of changes to be made in the physical, social, and instructional realms including the first and second languages and cross-cultural adaptation.

What Are the Steps in Developing a Comprehensive Curriculum?

The four major partners in bilingual special education curriculum development are the parents and caregivers, the mainstream teacher, the bilingual teacher, and the special education teacher. The following steps (Collier and Kalk, 1989, 207) should be undertaken by this team:

- Meet as a team to begin the planning process. Outline planning steps.
- Become familiar with the culture and language background of the child.
- Become familiar with the special learning style and education needs of the child.
- Prepare an individual instructional plan with short- and long-term goals (in some cases this may be an IEP).
- Develop individualized lessons and materials appropriate to the child's exceptionality.
- Modify individualized lessons and materials using a "cultural screen" and sensitivity.
- Refer to resource people for assistance and cooperation in instruction; coordinate services.
- Evaluate the child's ongoing progress and develop a new individual plan (IEP), materials, and so fourth, as needed.
- Start the cycle over.

What Should Be Considered in Selecting Materials for Bilingual Exceptional Students?

The following guidelines (Hoover & Collier, 1989, 253) represent some of the many considerations teachers should bear in mind when evaluating, selecting, adapting, or developing materials:

- Know the specific language abilities of each student.
- Include appropriate cultural experiences in material adapted or developed.
- Ensure that the material progresses at a rate commensurate with student needs and abilities.
- Document the success of selected materials.
- Adapt only specific materials: do not attempt to change too much at one time.
- Try out different materials and adaptations until an appropriate strategy for each student is achieved.
- Strategically implement material adaptations to ensure smooth transitions into new materials.
- Follow some consistent format or guide when evaluating materials.
- Be knowledgeable about particular cultures and heritages and their compatibility with selected materials.
- Follow a well-developed process for evaluating the success of adapted or developed materials for the individual student while addressing language and cultural needs of students.

How Can Materials Be Adapted?

Several guidelines for adapting commercial materials or developing teacher-made materials are discussed in the literature (Harris and Schultz, 1986; Lewis and Doorlag, 1987; Mandell and Gold, 1984). The following list (Hoover and Collier, 1989, 253) is not designed to be all inclusive; variations may be required in order to meet individual needs.

- Adjust the method of presentation or content.
- Develop supplemental material.
- Provide alternatives for responding to questions.
- Rewrite brief sections to lower the reading level.
- Outline the material for the student before having him or her read the selection.
- Reduce the number of pages or items on a page to be completed by the student.
- Break up tasks into subtasks.
- Provide additional practice to ensure mastery.
- Substitute a similar, less complex task for a particular assignment.

- Develop simple study guides to complement required materials.

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ESL IN SPECIAL EDUCATION

Nancy Cloud

The presence of limited English proficient (LEP) students in special education settings has raised a number of questions about the special needs of these students and about effective ways to meet these needs. Just as special education students require specialized instructional programming to respond to identified disabilities, mainstream LEP students require tailored educational services that respond to their second language status. It is, therefore, reasonable to posit that exceptional LEP students require highly specialized programs formulated on a well-articulated, integrated knowledge base drawn from both special education and bilingual and ESL education.

Specific Needs of Special Education Students

Special Education is instruction designed for students who require some degree of modification in their educational programs because of intellectual, emotional, sensory, or physical impairments (Glass, Christiansen and Christiansen, 1982). Modifications may include special curricular materials, specialized teaching strategies or behavior management techniques, and specially-designed equipment or facilities. Students with mild disabilities can succeed with modifications in mainstream classrooms. Other students whose disabilities range from moderate to severe in nature require placement in special settings. All special students, regardless of the type or degree of disability, share certain rights and needs, including:

1. the right to a free and appropriate public education;
2. the right to an Individualized Educational Program (IEP) specifying the student's unique needs and the special education and related services the student is to receive;
3. the need to have cognitive, linguistic, academic, social and emotional characteristics considered and appropriate environmental modifications or adaptations made.

Effective IEPs for exceptional LEP students would account for all of the student's basic educational needs, including the need for English as a second language (ESL) instruction. LEP students enrolled in special education require what is most appropriately labeled Special Education-ESL (SE-ESL), which indicates that the services to be provided account for both a particular student's disability needs and the student's second language status.

Whether SE-ESL services are provided by an ESL specialist or by a special educator, the service provider must draw from both fields to bring coordinated services to the student.

Degree of Disability and Its Effect on Programming

Recognizing a distinction between students with mild disabilities and those with moderate to severe disabilities creates both the program focus and the need for a specialized knowledge in delivering appropriate instruction and in modifying the instructional environment.

ERIC Clearinghouse on Languages and Linguistics, December 1988.

Mildly Disabled

SE-ESL programs for mildly disabled students parallel mainstream ESL programs and focus on both oral language development and literacy development in English. The instructor modifies instruction to account for the student's disability by employing specialized teaching strategies, by applying positive reinforcement and behavior management techniques, by providing more practice, or by attending to self-concept concerns.

Moderately or Severely Disabled

SE-ESL programs for moderately or severely disabled students may be designed developmentally for younger students, in an attempt to establish basic or self-help communication skills in the second language, for example, requesting assistance, giving personal information, and interacting with friends. For older students, these programs may have a life-skill focus, concentrating on the functional communication skills needed by the individual at home, in the workplace, and in the community (for example, shopping, using public transportation, getting along with neighbors). An example of such a daily living skills ESL program is *Day By Day in English: An ESL-SEDAC Daily Living Skills Resource Activities Guide* (Division of Special Education, New York City Board of Education, 1984).

While the need for knowledge of specialized teaching techniques, adaptive equipment, or prostheses exists for both groups of SE-ESL students, the need for such knowledge increases incrementally with the degree of disability.

Designing Responsive SE-ESL Programs

Spolsky (1988) provides an excellent discussion of the theoretical considerations in planning a second language program for all types of LEP students, including students with disabilities. A responsive SE-ESL program will take into account both the learner attributes critical to second language learning (aptitude, attitude, motivation, personality, learning style, and learning strategies) (Oxford-Carpenter, 1986) and those to be considered in designing any special education program (cognition, motivation, strategic behavior, learning style preferences, etc.). Essential learner attributes to consider in designing an SE-ESL program include:

- the learner's disability(ies);
- the learner's current stage of second language acquisition (both oral and literacy levels); and
- the particular skills of the learner by area (strengths and weaknesses in listening, speaking, reading, and writing).

Other factors to consider for enhancing program success include:

- the learner's age, personality, and interests;
- the learner's communication needs in the second language;
- the degree to which the learner is integrated into the target language community; and
- language learning style.

In general, the more factors accounted for and responded to in planning second language instruction, the more successful the SE-ESL program will be for a particular individual (Oxford-Carpenter, 1986; Spolsky, 1988).

Future Challenges

Preventing Inappropriate Referral to Special Education

Concern about the current overreferral of LEP students to special education (National Coalition of Advocates for Students, 1988) has prompted a focus on prereferral strategies that can prevent such a problem (Benavides, 1987; Ortiz and Maldonado-Colon, 1986). LEP students, because of their cultural and linguistic background, have special instructional needs. These needs

should not be confused with disability, nor should they serve as a basis for referral to a special education program (Ortiz and Maldonado-Colon, 1986). If a teacher refers an LEP student to the special education program, the LEP student should undergo psychological testing conducted by qualified bilingual and bicultural evaluators familiar with the influence of second language status on the assessment process (Nuttal, Landurand and Goldman, 1984).

In order to eliminate inappropriate referrals to special eduation, more flexibility is needed in mainstream ESL programs. These programs should meet the needs of special populations of LEP children present in the schools in the United States today.

Training Special Educators and ESL Educators

Special educators and ESL educators need crossover training to deliver integrated services that account for children's second language and disability characteristics. Currently, a paucity of TESOL (Teachers of English to Speakers of Other Languages) programs provide crossover training in special education, and few special education programs encourage specializations in TESOL. Professionals are left to find their own training opportunities at conferences and workshops, and from these haphazard events, to piece together the elements that formulate appropriate practice. Responsive Special Education TESOL teacher training programs would create a well-formulated and comprehensive sequence of new course offerings that cover both the theoretical and practical issues in serving LEP students with disabilities.

Developing Materials

ESL materials must be developed for both mildly and moderately to severely handicapped students. Some efforts have been made by individual practitioners and school districts (Division of Special Education, New York City Board of Education, 1985; Duran, 1985; Fairfax County Schools, 1986), but commercial publishers have been remiss in addressing this special need. Diverse materials must be developed, teaching approaches and instructional activities recommended, and feedback and reinforcement programs suggested. Materials for oral language development and literacy development are needed as well as materials that focus on the needs of the LEP hearing impaired, visually impaired, learning disabled, mentally retarded, and emotionally disturbed child. Trained personnel and appropriate materials are essential in unlocking the potential of exceptional children for whom English is a second language, and for insuring their fullest participation in society. Such participation is the child's civil right, but cannot become a reality without effective educational supports. Only the combined talents of ESL and special educators currently charged with serving these special children will attain this goal.

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How Disability Can Affect Language Acquisition

Patricia Medeiros Landurand and Nancy Cloud

Disability Effects on the Language Acquisition Process

Most of the literature on the second language acquisition process ignores the effects of any disability or exceptionality the learner may exhibit in the second language acquisition process.

This brief review is to remind special educators that knowledge of each disability must be integrated into our thinking regarding the second language acquisition process for learners with identified disabilities.

If students have sensorial deficits, this will directly affect their ability to obtain the required, undistorted input for acquisition.

If students are cognitively limited or have memory limitation, their ability to construct and retain essential connections between conceptual and linguistic representations will be impaired.

Students with speech and language difficulties in their first language will exhibit similar difficulties in the second language. The inability to process or construct meaning through language would severely impede the second language acquisition process.

Students with behavior disorders may find it hard to engage in second language acquisition activities or function effectively in second language environments long enough to get sufficient input. Their isolation in or rejection of the linguistic environment would impede their development in the target language.

Likewise, students with neurological or motor disorders may not have the necessary control to coordinate the production of the target language.

Each disability will have to be fully analyzed to understand how it is posing a potential barrier to acquisition and what can be done to remove it instructionally in order to ensure that acquisition can occur.

Climate for Acquisition

Steven Krashen (1982) speaks of the conditions necessary for successful acquisition to occur. These include

1. *Self-esteem,* whereby learners feel they are competent to undertake the learning process and all the risks to their self-confidence inherent in that undertaking.
2. *Motivation,* whereby learners feel positive toward the second language and its speakers and see advantages for them in acquiring the language.
3. *Low anxiety,* whereby learners lose their self-consciousness at their beginning production, are "off the defensive"; and concentrate on the interactions so much they "forget" they are acquiring the new language.
4. *Meaningful input,* whereby the focus is on the message and the content is important, interesting, and relevant to the learners' needs.

ERIC Clearinghouse on Disabilities and Gifted Education, May 1991.

5. *Opportunity for learning,* whereby the learner is integrated into the second language environment, can use the target language, and has access to second language models and appropriate instruction.

Surface Proficiency Versus Deep Structure

Recent educators have become aware of the importance of distinguishing among two types of language proficiency acquired by second language learners in their new school environment. One type of proficiency is *surface proficiency.* This is a fuctional, contextual based proficiency that allows the speaker to interact with others on personal or everyday topics. Jim Cummins (1981) refers to this communicative proficiency as Basic Interpersonal Communication Skills (BICS). Learners usually acquire this proficiency at age-appropriate levels in about 2 years, often sooner.

A second type of proficiency takes much longer to acquire and is referred to as *deep structure.* This type of proficiency is related to cognitively demanding or academic language; in plain terms, the language of teachers, textbooks, and tests. Cummins (1981) refers to this as Cognitive Academic Language Proficiency (CALP) and suggests that unless students have fully developed academic proficiencies in their native language, which supports more rapid development in the second language of this type of proficiency, that we should expect average children to take from 5 to 7 years to acquire this type of proficiency fully.

Cummins cautions that mistakes in the educational treatment of CLD children can be made if we assume that students are fully proficient when we see the communicative level of proficiency developed and then attribute poor performance in handling lectures, textbooks, and tests to "underlying learning problems" rather than to a continuing lack of proficiency in academic English. Therefore, it is extremely important to recognize that different levels of proficiency will require different types of support and time frames for acquisition to be complete.

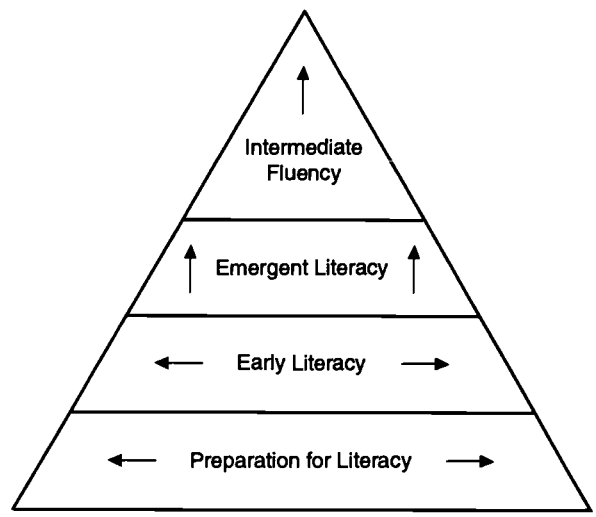
Literacy Development in a Second Language

Just as with oral language, second language learners progress through a predictable sequence of developmental stages in their acquisition of reading, writing, and spelling abilities in the target language.

Stages of Literacy Development

The chart shown in Figure 1 represents four stages learners pass through as they acquire age-appropriate literacy abilities in their second language.

Figure 1. Stages of Literacy Development



As an example, let's trace this development in writing:

1. At the *preparation for writing** stage, learners would engage in symbolic production such as the production of pictures, drawings, and reproductive verbal behavior (copying known words, tracing).
2. At the *early performance** stage, learners would generate single words and phrases with a good deal of cross-lingual pro-

duction evident ("filling-in," borrowing from the native language).

3. At the *emergent writing stage*, more organization would be evident, language use would improve, and the mechanics and conventions of the target language would begin to appear.
4. At the *intermediate stage*, the learner would show the need to refine production skills and learn more about the variety of outlets for his or her growing writing abilities (narrative and expository texts; prose and poetry).

Note: These stages only occur in second language writing development if no writing skills have been developed in any language (young child; older learner from oral cultural tradition).

Skills Development Across Stages

Various skills in writing are being acquired as the learner progresses through the stages of development outlined. These skills fall into the general areas of organization, vocabulary usage, grammatical construction or language use, and mechanics (punctuation, capitalization, and spelling). Skills in reading might include decoding ability (sight word knowledge and phonetic analysis), vocabulary comprehension, prediction, text-sampling skills, fluency or reading rate, as well as extent of background knowledge and experience the reader brings to the text.

By assessing skills development, the teacher can address the particular needs of students who are at the same *stage* of development overall.

Disability Effects

As with the previous section on oral language development, participants are reminded that most of what has been written on second language literacy acquisition concerns nondisabled individuals. As a result, it is important to consider the effects sensory, memory, cognitive, neurological, motor, attention, and behavior deficits will have on the acquisition of reading, writing, and spelling in a second language.

Conducive Environments for Second Language Literacy Acquisition

Optimal development in reading and writing will occur when the following conditions are met:

- The focus of instruction is on meaning and the purposeful exchange of meaning between reader and writer.
- The content of instruction is relevant to the learner's needs in and out of school.
- The focus is on integrative approaches (whole text comprehension and production) rather than on synthetic approaches (isolated subskill development).
- Interlanguage forms are accepted at early stages.
- Appropriate feedback is given both in terms of the amount of feedback the learner can handle and the manner in which it is delivered.
- Plentiful opportunities are provided to engage in literacy activities in the second language.
- Encouragement is provided by peers and adults to sustain the learner's efforts.

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Source: Multisystem: Systematic Instructional Planning for Exceptional Bilingual Students. *(Reston, VA: Department of Professional Development, The Council for Exceptional Children, 1989), pp 32-38. Contact CEC for information on the Academy Training Program for Exceptional Bilingual Students, 703/264-9447.*

SPECIAL VOICES

Virginia Gonzalez

The present reality is that bilingual students are misdiagnosed and misplaced in bilingual special education classes due to: (a) lack of valid and reliable assessment models and instruments; (b) lack of a prereferral procedure for solving teaming problems created by the external educational environment at the mainstream education level; and (c) the need for advocates who are aware of the theoretical, practical, and legal problems that we face today when conducting an evaluation and when participating in diagnostic and placement committees. The special voice of NABE's Special Interest Group (SIG) on Bilingual Special Education says that at the core of this problem is the need to become aware of the influence of the attitudes of school personnel involved in the assessment and placement process of bilingual students.

The mission of NABE members interested in Bilingual Special Education is to raise the level of awareness of our responsibility to nurture school personnel serving bilingual students so that we can become advocates for our children. A key factor in becoming an advocate is to reflect on our own attitudes toward culturally and linguistically diverse students. It is important to nurture school personnel involved in the evaluation of bilingual students because we are facing a paradigm shift from standardized instruments derived from the medical model to qualitative methods of assessment derived from developmental and multicultural approaches. As a result, school personnel involved in the evaluation of bilingual students are facing two opposite perspectives producing contradictory diagnoses. This is the reason why having a supporting professional group can assist the evaluator to reflect critically on his or her cultural attitudes and to become a committed advocate for our bilingual students.

Currently, given the state of the assessment models and instruments that are being used with bilingual students, evaluators can come to opposite conclusions depending upon which philosophies, attitudes, beliefs, and theories they think are more appropriate for bilingual students. As a result, we cannot claim anymore that the complex decision making process of reaching a differential diagnosis between genuine handicapping conditions or disabilities and the normal process of learning English as a second language is an objective process.

Consequently, the notion that one can use standardized instruments to reach "objective" diagnostic decisions is a fallacy. The process of constructing instruments begins with the selection of models or theories underlying the operational definitions of the constructs that we want to measure "objectively." Then, one can claim that this process probably shows the "subjective agreement of experts" and, thus, results in a "collection of objective intersubjectivities."

Another important point in the psychometric characteristics of standardized tests is that any given instrument is normed only for the particular characteristics of the sample that participated in the norming process. In a different linguistic and cultural context this standardization process is meaningless and, therefore, any interpretations and the information derived from these standardized tests for diagnostic decisions is based due to a lack of validity and reliability. Another major point is that these standardized instruments lack construct validity; that is, the theories or

NABE NEWS, May 1993: 23 & 26.

conceptual understanding of how intelligence and language develop have major differences when monolinguals are compared with bilinguals. We cannot assume that translations of standardized instruments developed for monolingual mainstream students are meaningful and harmless for culturally and linguistically diverse children. What needs to be done is to reconstruct the standardized instrument from the beginning by first redefining what we think about the cognitive and language development of a language-minority child living in the United States.

The former psychometric problems of current standardized tests that lack validity and reliability when used with language-minority children are just some examples of the many myths that need to be broken in our professional field of bilingual special education. The change needed to dispel these myths is primarily an attitudinal one on the part of the school personnel conducting the evaluation of bilingual students. This attitudinal change is difficult to achieve because these myths lead to the creation of internal barriers that prevent individuals from being aware of their personal responsibility. Thus, an attitudinal change is needed because we have to remember that our personality is the major tool for assessment that includes, just to name a few areas, our own (a) ethnic-cultural-linguistic identity; (b) personal and professional commitments to specific schools of thought that defend different assessment models and instruments; (c) beliefs and theories about how bilingual children learn and develop; and (d) personal backgrounds and experiences with language-minority students. This attitudinal change in our professional field of bilingual special education will only happen with the necessary peer support for becoming advocates for bilingual children.

We think that it is our own responsibility as NABE members to be the leaders in this movement for assuming advocacy roles and for dispelling the professional myths of helplessness. As NABE members we can also lead a movement for joining efforts among other professional associations, such as the Council for Exceptional Children (CEC), the American Psychological Association (APA), the American Educational Research Association (AERA), and American Speech and Hearing Association (ASHA). This effort would lead us to join multidisciplinary professional fields for helping our bilingual students.

There are several effects that result from the myths we currently face in the area of the assessment of bilingual students. For instance, we assume that when a minority child is proficient in English, according to standardized language assessment scales, we can then accurately diagnose this child using standardized tests in other developmental areas (for example, intelligence). This is a misconception for several reasons, including: (a) standardized language scales mostly reflect functional but not academic language proficiency; and (b) being "proficient" in English according to the standardized scales does not mean that the child has the same educational experiences and prior cultural knowledge in comparison to a mainstream child. Another popular myth or misconception among school personnel is that dual-language proficiency levels reflect intellectual development in a bilingual child. This popular belief is far from the true potential of the language-minority child, as has been demonstrated by González (in press). She found that non-verbal cognitive development of kindergarten and first grade bilingual Spanish/English children was above normal levels when assessed with qualitative methods. In contrast, language and intelligence standardized tests, even nonverbal intelligence tests, underestimated the true verbal and nonverbal potentials of bilingual children.

In sum, the differential diagnosis between genuine handicapping conditions and disabilities (for example, learning disabilities, language disorders, mental retardation) and the normal developmental process in

bilingual children learning English as a second language is a very complex problem that, given our current theories and assessment instruments, is far from being an "objective process." We need to become aware of the subjectivity involved in a diagnostic decision and placement of a bilingual child in a regular bilingual or a bilingual special education classroom. The current problem of the over-representation of bilingual students in special education classes and their under-representation in gifted classes is just a reflection of the subjectivity involved in the diagnostic process. Our voices are yelling for gaining professional awareness of the importance of reflecting on our own attitudes and levels of commitment for becoming advocates for our bilingual students. We need to remember that our special voices come from our bilingual hearts and brains and cultural and linguistic identities; that is our own bilingual subjectivity. Our own special voices come from our unique and enriched bilingual personalities, the result of the interface between our bilingual and special professional identities, which are our most important instrument for evaluating bilingual students. This special voice can be illustrated through the "special" adaptation of a saying in Spanish: "Dime quien eres y te diré cual es tu diagnóstico." ("Tell me who you are and I will tell you what is your diagnosis.")

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THE LANGUAGE-MINORITY STUDENT AND SPECIAL EDUCATION: ISSUES, TRENDS, AND PARADOXES

Russell Gersten and John Woodward

ABSTRACT: Because of immigration pressures, the classrooms of many teachers include students from language-minority groups; these teachers often turn to special education for assistance. This article examines key issues and tensions in the areas of re-ferral and special education instruction for these students. Potential solutions derive from two sources: first, the increasing consensus regarding effective approaches to bilingual education; second, the growing belief that these students need both systematic instruction in academic skills and a more "natural" approach to language to promote comprehension and use of English. The article discusses the collaborations needed in the fields of learning disabilities, bilingual education, and special education.

The current wave of immigrants to the United States is the largest in history (United States Bureau of the Census, 1990). Mexican immigrants over the past 10 years constitute the largest population migration from a single country in United States history, doubling in number from 1980 to 1990; currently there are 4.3 million. The total number of Hispanic immigrants (from Mexico and other parts of Latin America) in the United States grew by 2.5 million over the past decade, a 17% increase (De La Rosa & Maw, 1990). In 1982, only 1 in 10 children in United States schools were Hispanic, but this ratio will be approximately 1 in 4 by the year 2020 (Palas, Natriello, & McDill, 1989).

The educational plight of immigrant Hispanic students is a national concern (Suro, 1990). Their rate of grade retention, for example, is extremely high. One in four Hispanic eighth graders, significantly above the national average, has repeated one grade. More importantly 15.2% of the Hispanic eighth graders sampled by De La Rosa and Maw (1990) had been retained at least twice during their school careers—even though researchers have shown that grade retention is a particularly ineffective means of dealing with learning or motivational problems (Allington & McGill-Franzen, 1989). Hispanics have the highest dropout rate of any ethnic group in the United States. Only 51% of Hispanics age 21 and over possess a high school diploma, compared with 63% of African-Americans and 77% of whites (De La Rosa & Maw, 1990).

Some recent immigrants—from Mexico, Central America, and Cambodia and other parts of Southeast Asia—have had very little formal school experience (Foster, 1980; Kleinman & Daniel, 1981; Maingot, 1981; Marx, 1981). In many cases, their parents have also had minimal schooling and students' home exposure to print materials may be quite limited. A substantial proportion of these children will likely perform poorly in school unless school programs are enhanced to meet their needs (Goldenberg & Calliimore, 1991; Reyes, 1992; Teale, 1986). This finding appears to be supported by data from the 1988 National Assessment of Educational Progress (NAEP). Of the Hispanic eighth graders in the lowest quartile on the NAEP reading test, almost half had parents who had not completed high school (De La Rosa & Maw, 1990).

This combination of educational and demographic factors places tremendous demands

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on schools in such states as California, New York, Texas, and Florida, and large cities like Chicago and Phoenix, which have large numbers of students from language-minority groups. Many smaller communities that have increasing numbers of students from language-minority groups are experiencing similar pressure ("Percentage of Foreigners," 1992). Experts project that these demographic trends will accelerate in the next 10 years (Pallas et al., 1989).

In response to these phenomena, many classroom teachers—particularly in cities and states with large numbers of recent immigrants—have become, often by default, teachers of students for whom English is a second language. Recently, we interviewed educators—special education directors, bilingual education coordinators, principals, and classroom teachers in a large, urban district with a substantial proportion of students from language-minority groups—about perceived problems and policy issues (Gersten, 1991). These educators emphasized the seriousness of the many problems facing classroom teachers, severe personnel shortages, and the uncertain and unclear role of special education in providing solutions. The interview verified published reports (Baca & Almanza, 1991; Gold, 1992) of severe shortages of adequately trained personnel in both special and general education.

Many teachers, confronted with a struggling student from a language-minority group, are baffled by the student's seemingly unpredictable rate of academic progress (Gersten, Woodward, & Morvant, 1992). Often these teachers turn to special education for assistance because they are unsure of which level of conventional English-language curriculum to use and how to adapt this curriculum to meet the student's needs. They are also uncertain about how to determine whether bilingual students are experiencing prob lems due to learning disabilities or due to their limited comprehension of the English language.

Yet it is unclear how useful special education can be, because very few special educators are bilingual and have not been trained in second-language instructional techniques. Wilkinson and Ortiz (1986) documented that few students from language-minority groups in special education made significant academic progress over a 2-year period. On the average, they showed no growth in reading and actually showed a significant drop in test scores on other cognitive and academic measures.

Rarely is meaningful assistance provided to special education teachers faced with providing second-language instruction (Baca and Cervantes, 1989). Figueroa, Fradd, and Correa (1989) concluded that there is not

> a substantive body of empirical data on actual, well-controlled interventions. Bilingual special education does not yet have this body of knowledge (on improving the academic abilities of students with learning disabilities from language-minority groups). (p. 17)

Often, the services offered are ad hoc, such as providing an untrained tutor who knows the native language but has no teaching experience to solve the problem. As Ruiz (1989) noted: "The wrongs done to . . . language minority students in special education are exceptionally severe: misindentification, misplacement, misuse of tests, and poor academic performance within special education" (p. 139).

This article discusses some of the central tensions in referral and instruction in bilingual education and special education that engender such severe commentary. First, we discuss some of the inadequacies in the assessment and placement of students from language-minority groups (Figueroa, 1989; Ortiz, 1988; Ruiz, 1989; Wilkinson & Ortiz, 1986) that have led, paradoxically, to the existence in some communities of over-representation of students from language-minority groups in special education, and underrepresentation in others.

Second, we address the growing awareness that research must go beyond establishing valid assessment and placement procedures and move toward the development of effective and viable instructional strategies for this unique group of students. To generate such a knowledge base, educators must confront an array of these complex issues, not only in the field of special education, but also in second-language instruction. Clearly, we need to consider more fully the differing approaches to bilingual education and their implications for special education services. In addition, we need to explore the implications of relevant issues from the field of special education, particularly the tension between the skills-based/behavioral/direct instruction models of instruction and more process-oriented approaches (Cazden, 1992; Goldberg & Gallimore, 1991; Palinesar & Klenk, 1992; Reyes, 1992).

Third, we explore some potential solutions, based on a synthesis of the work of several prominent researchers in the field (Arrega-Mayer, 1992; Chang, 1992; Moll, Estrada, Diaz, & Lopes, 1980; Rueda, 1990; Ruiz, 1989) and on the preliminary findings from our own observational research (Campbell, Gersten, & Kolar, 1993; Gersten, 1991; Gersten & Jiménez, in press; Gersten & Woodward, 1993). Our recent research (Campbell et al., 1993; Gersten & Jiménez, in press; Gersten & Woodward, 1993) involved more than 200 hours of classroom observations in five elementary schools serving students from language-minority groups in two states. The research, conducted over a two-year period, focused on students considered at risk for school failure or in need of special education services. We supplemented observations with interviews of teachers, students, parents, and administrators.

We titled this article "The Language-Minority Student *and* Special Education" because little interface exists between the special education community and professionals involved with teaching students from language-minority groups. (Several marked exceptions include the work of Baca & Cervantes, 1989; Figueroa, 1989; Fradd, 1987; Miramontes, 1991; Rueda, 1990; and Yates & Ortiz, 1991.) We need to merge these two bodies of professional knowledge and research. This article is an attempt to begin this process.

Coexistence of Overrepresentation and Underrepresentation

The related issues of misidentification and misplacement of students from language-minority groups into special education has received the most attention in the research literature. Research documenting recurring severe problems (Chang, 1992; Figueroa, 1989; Mehan, Hertweck, & Meihls, 1986; Mercer, 1973; Moecher, 1992) has led to a focus on the accurate assessment of students form language-minority groups to distinguish those who are truly in need of special education services form students who are not successful in school due primarily to limited English-language capacity (Figueroa et al., 1989; Mercer & Rueda, 1991; Ortiz, 1988).

Currently, a paradoxical condition exists in the field—overreferral *as well as* underreferral. The complex evolution of the problem of overreferral and underreferral stems from research documenting, over a 20-year period, a tendency to inappropriately refer large numbers of students from language-minority groups for special education (Mercer, 1973; Mercer & Rueda, 1991). Many of these students, though weak in English-language ability, were not students with learning disabilities. Their improper classification was deemed a function of testing conducted exclusively in English, or the failure of students with limited English proficiency to benefit from traditional classroom instruction in a language they were just beginning to learn.

More recently, researchers have also discovered a new phenomenon—the underreferral of students from language-minority groups for special education. They have noted students who truly need specialized assistance, but who languish in general education classrooms, benefiting little from conventional

instruction (Campbell et al., 1993; Gersten, Woodward, Morvant, 1992; Ovando & Collier, 1985).

Overrepresentation of Students from Language-Minority Groups in Special Education

In her seminal research on minority in special education, Mercer (1973) found that Hispanic students were often erroneously diagnosed students with learning disabilities or mental retardation and were improperly placed in special education classes. Gearhart and Weishahn (1980) later called this practice a convenient way for administrators to "do something" without truly understanding the students' language needs or dealing with systemic problems.

After conducting an ethnographic study of two elementary schools, Richardson, Casanova, Placier, and Guilfoyle (1989) concluded that classroom teachers often refer students for special education or compensatory education services when they believe that the students are not benefiting from classroom instruction and when the teachers are unsure how to deal with the problem. Richardson et al. concluded that referral often is more a reflection of teacher stress, than a result of carefully diagnosed student learning deficits.

In 1986, Mehan et al. reached a similar conclusion in their study of teachers' decisions to refer students into special education. They noted that "the teacher's decision to refer students is only *partially* grounded in the students' behavior" (p. 86). The major determinant is a given teacher's belief that she or he is unable to provide adequate instruction to the child. Moecker (1992) recently examined the decision-making processes of three special education placement teams in reference to two groups of students—those who spoke English as a native language and those from language-minority groups. He found that, in over half the decisions, the *learning disabilities* diagnosis was based on only two pieces of data: scores on standardized achievement and intelligence tests *administered in English*. In these cases, Moecker stated, "There was no discussion about the reliability (or validity) of referral information in any of the meetings" (p. 5). If a parent asked why students were not tested in Spanish or brought up other issues related to second-language acquisition, discussions were typically truncated. Finally Moecker noted frequent reference by professionals such as counselors or school psychologists "to 'retesting' students until they qualified for specialized programs" (p. 6). Transcripts revealed a hidden agenda, a belief that removing the student from the general education classroom would always be in the student's best educational interest. Yet this is a dubious assumption.

Underrepresentation/Underuse of Support Services for Students From Language-Minority Groups with Academic Needs

One outcome of Mercer's (1973) early research was a series of significant court decisions that resulted in the institution of legal and procedural safeguards to address the inappropriate special education referrals of students from minority groups. Conse quently, some districts are reluctant to place students with limited English proficiency in special education because of potential charges of discrimination or misassessment, as well as the fear of lawsuits.

On a national level, there is continuing evidence of overreferral of students with limited English proficiency into special education (Figueroa, 1989; Mercer & Rueda, 1991; Ortiz, 1988). In certain urban districts, however, a fear of legal action, as well as the realization that assessment procedures for these students are of weak validity, has led to a tendency toward *underreferral* of these students for special support services. In at least one large urban district, the problem has been raised by parents and advocacy groups. In this district, the percentage of special education students who are Hispanic is significantly lower than the overall percentage of Hispanic students in the district.

This phenomena appears to be increasingly widespread for students with limited English proficiency (Fradd, personal communication, January 1993).

A recent series of interviews in three inner-city schools indicated that few support services were available for students from language-minority groups who were experiencing extreme academic difficulties, until they reached a reasonable level of proficiency in English and until the special education personnel felt comfortable assessing and teaching them (Campbell et al., 1993). Further, because most of the special education teachers did not speak Spanish (much less Lao or Hmong), classroom teachers saw no need to consider referring a child for services that were unavailable. Despite job searches extending as far as Madrid, Spain, shortages of qualified bilingual personnel persist (Gold, 1992).

As a result, there is a group of students with learning disabilities or other academic problems, who are limited in their use of English and who are not receiving the kind of assistance they need. Based on our research and interviews with urban administrators, we envision this as a growing problem.

In no way is increaseing referral rates into pullout special education programs a remedy. However, we are concerned about the large number of students from language-minority groups who are "falling through the cracks." Observational research (Arreaga-Mayer, in press; Campbell et al., 1993; Chang, 1992) is increasingly documenting the dire plight of low-achieving students from language-minority groups in general education classrooms when no support is provided.

Differing Theories and Models of Second-Language Instruction

Whether or not low-achieving students from language-minority groups receive special support services, there are serious questions about the present capacity of special education services to offer valid instructional interventions. One reason for this, however, arises from a controversy within bilingual education itself.

Bilingual educators and researchers have long debated the optimal instructional model for providing transitions for students from language-minority groups into the second language of English (Crawford, 1989; Wong-Fillmore & Fillmore & Valdez, 1986). The goal of building competence in English without unduly frustrating students requires a complex balance between the use of the native language and the language to be acquired. Contemporary models differ greatly in the ratio of primary (or native) to English-language instruction provided, particularly during the first five years of school. Two issues underlying the controversy are: (a) how quickly students from language-minority groups should be placed in classrooms where English is the sole means of instructional communication; and (b) whether Spanish (or another native language) is merely a bridge to help students learn English as quickly as possible, or whether the goal is for students to become fluent and academically competent in both languages.

In reality, many differing models of bilingual education exist (Ramirez, 1992). For the purposes of this discussion, however, we briefly describe the two major approaches advocated for educating students from language-minority groups and the underlying rationales of these models.

By far, the most commonly advocated model of bilingual education is one with a strong native-language component (Cummins, 1989; Moll & Diaz, 1987; Wong-Fillmore & Valdez, 1986). Although some call this approach "maintenance" or "late exit," we will use the term *native language emphasis*.

Within the range of programs with a native-language emphasis, some teachers aim for a rapid transition into all-English instruction as early as the 3rd grade; other teachers continue some native-language instruction throughout the entire elementary school

years (in some cases, even through the 8th grade). These programmatic emphases are described more fully in the following sections.

Native Language Emphasis

Wong-Fillmore and Valdez (1986) cogently presented the conceptual framework for native-language emphasis:

> By reading, we refer here to the act of reconstructing the meaning information that is encoded . . . Reading is unquestionably a language-dependent skill. It is not possible to read in a language one does not know, if reading involves the act of making intelligible to oneself written texts of any complexity beyond that of street signs. A prerequisite for true reading, it would appear, is a fairly high level of knowledge of the language in which the text is written. (pp. 660-661)

In other words, until students obtain a reasonably good knowledge of English—particularly in such conceptually complex areas such as reading, language arts, and social studies—instruction should be in the native language. Thus, students are not deprived of the experience of learning the core concepts in the normal school curriculum during the years when they are learning English. According to this viewpoint, English-language instruction in complex subjects such as social studies would be nearly incomprehensible, and of little benefit to the student. Premature introduction of students to English-language academic material can be harmful (Krashen, 1982; Moll & Diaz, 1987)

Many contemporary theorists, such as Cummins (1989) or Krashen (1982), believe that once students succeed in complex academic material in their native language, they will transfer this knowledge to the same subjects taught in English. Therefore, it would seem more sensible to teach complex academic content to students in their native language first so that students can understand and discuss challenging material without added demand of constantly translating or expressing ideas in a second language.

As such, most bilingual approaches typically emphasize academic instruction in the students' primary language and suspend English-language academic instruction until students demonstrate an adequate grasp of English and exhibit competence in academic areas in their native language (Cummins, 1989; Krashen, 1982)

Advocates of native-language emphasis, such as Cummins (1989) and Moll and Diaz (1987), have noted that another problem with prematurely placing students in academic classes taught in English is that the academic material will be simplified or "watered down" to meet the perceived level of student competence. "A common reaction to the less-than-fluent English of a student is to teach content from a lower grade level and to expect only lower-level cognitive skills, such as simple recall" (Chamot & O'Malley, 1989, 114). The predominant use of simplified materials can lead to unnecessary constraints on students' cognitive growth.

Thus there is a widely held belief that native-language instruction in content areas, such as reading, social studies, and language arts, is essential (Goldenberg & Gallimore, 1991; Reyes, 1992). Yet there remains great diversity in opinion and practice regarding how rapidly and in which content areas students should be introduced to English-language instruction, and how long native-language instruction should be maintained (Chamot & O'Malley, 1989; Crawford, 1989; Ramirez, 1992).

Sheltered-English/Structured Immersion

Another approach to the education of students from language-minority groups is sheltered English (Northcutt & Watson, 1986) or structured immersion (Baker & de Kanter, 1983; Ramirez, 1992). This approach was developed and successfully implemented with English-speaking students in Quebec, Canada. The success of that experiment—

documented by significant growth in academic achievement on standardized tests—played a large role in the popularization of sheltered-English/structured immersion approaches in the United States (Genesee, 1984). This approach is currently used most frequently with Southeast Asian students in the elementary grades, and it is increasingly being used with both Hispanic and Southeast Asian students at the secondary level (Chamot & O'Malley, 1989). Researchers have also reported some examples of its use with elementary-age Hispanic students in the United States (Gersten & Woodward, in press; Ramirez et al., 1992).

Sheltered English assumes that an understanding of English can be obtained through well-designed content-area instruction where English is used, *but at a level that is constantly modulated or negotiated* (Chamot & O'Malley, 1989; Long, 1983). Sheltered-English teachers attempt to control their classroom vocabulary, to use concrete objects and gestures to enhance understanding, and to use a wide range of instructional strategies so that students understand the academic material. In some cases, students experience native-language instruction for periods of 30-90 minutes a day at school. However, English is used for the majority of the teaching day. The goal of sheltered English is for students to learn English while they are developing basic academic abilities and skills and to develop English-language competence while building abilities in the areas of comprehension and problem solving.

In short, during the first few years of elementary school, a student in a sheltered-English program will experience most of his or her day in English, whereas if the student were in a bilingual education program with a strong native-language emphasis, much of his or her day would be in the native language.

Comparing Models of Bilingual Education

To date, research contrasting the effectiveness of structured immersion versus bilingual approaches with more of an emphasis on native-language content-area instruction has produced equivocal findings (Baker & de Kanter, 1983; Cziko, 1992; Danoff, Coles, McLaughlin, & Reynolds, 1977-78; Willig, 1985). Most longitudinal studies have shown little or no difference in achievement between students taught with a native-language-emphasis approach and those taught with a more sheltered-English or structure immersion model.

In a large recent study, Ramirez (1992) also found no significant differences in achievement or levels of academic engagement among students taught with three different bilingual approaches: structured immersion, a native-language-emphasis bilingual approach, and an "early-exit" bilingual approach (where students had only 2 years of native-language instruction). Their longitudinal evaluation, conducted over 7 years, included a wide range of measures (e.g., academic assessments in both English and Spanish, classroom observations of language used for instruction, and observations of instructional strategies utilized in each type of classroom). The academic progress of over 500 students from language-minority groups was tracked from kindergarten to 4th grade. Over three fourths of the students were from low-income families; most were children of Mexican immigrants.

A possible cause for the consistent lack of significant differences in the various evaluation studies was elucidated by the observational research of Tikunoff (1985). His findings revealed wide variation in *what actually transpires* in bilingual education classrooms, regardless of how the approach is labeled. He observed that, on the average, English

was used 60% of the time; and Spanish was used most of the remaining 40%. However, there were large variations from teacher to teacher and school to school. Wong-Fillmore and Valdez (1986) also noted huge variations in practice, and many researchers have found bilingual rooms to be bilingual in name only; in reality, they closely resemble traditional English-language classrooms.

Nine years ago, we noted that "bilingual education . . . (is) relatively easy to write about, yet difficult to implement sensitively on a day-to-day basis" (Gersten & Woodward, 1985, 78). As different as the various bilingual models may appear in theory, some of the finer distinctions fade in practice (Tikunoff, 1985). Practical matters, such as high costs and teacher training requirements, are likely to contribute to the considerable variation in practice.

As Cziko (1992) concluded, "It may well be unlikely that this question (of which is the best approach for teaching students from language-minority groups in the United States) will ever be satisfactorily answered regardless of the quantity and quality of additional evaluative research" (p. 15).

A serious issue common to all approaches is the "double demands" required of students from language-minority groups. Specifically, these students need to acquire a second language, as well as master traditional subject matter in the amount of time most students are asked to learn these subjects in just one language. Overall, it appears that the type of bilingual model selected is less important than the quality of instruction provided (Gersten, 1991; Reyes, 1992; Tikunoff, 1985).

Relevance and Implications for Special Education

For many students from language-minority groups, and for those who teach them, the task of simultaneously learning a new language and mastering the core academic curriculum in this new language is daunting. It is likely that teachers who are unable to cope with many of the demands associated with students from language-minority groups will often look to special education for assistance (Mercer & Rueda, 1991).

The need for special education services also arises from the way teachers provide transitions for students from an almost-all-Spanish to an almost-all-English instructional program. Abrupt transitions almost always have disastrous effects on student achievement and self-concept (Ramirez, 1992). Yet research has shown that this is exactly what schools tend to do with students from language-minority groups (Gersten, 1991; Ramirez, 1992).

Too often, teachers label students caught in these transitions as "at-risk" for special education or school failure. This "policy" is one significant reason for the disproportionate number of inappropriate special education referrals, in the upper elementary grades, of students from language-minority groups.

Another major problem with implications for special education is the variation in models that exists throughout the United States. These variations may exist between neighboring school districts or even within the *same* district. The high mobility of families from language-minority groups increases the likelihood that a child will have been taught with very different approaches at different times in his or her school life. The confusion this can create for a student has been evident in our own observational research (Campbell et al., 1993; Gersten, 1993). The educational history of one of the students (referred to here as Jorge) from the case studies of Campbell et al. (1993) provides a brief illustration.

> Jorge was one of 12 "at-risk language-minority" students observed by the research team over a 3-year period in a large, racially mixed school district with a sizable low-income population. Jorge spent his first 3 school years in a native-language-emphasis bilingual education program. Virtually all instruction was in

Spanish, save for 1 hour of English as a second language. When his family moved to an area served by another school, he entered a sheltered-English program. This meant that Jorge went from a full day in Spanish, where he was learning reading, spelling, and mathematics in his native language, to a classroom where English was the primary language of instruction. Even though the teacher controlled her vocabulary and academic materials, Jorge was well behind his new peers, most of whom were in their third year of English-language instruction. Moreover, his reading was a strange hybrid of the two. He subsequently was referred for special education placement and placed in a room where the teacher spoke only English. Both the special education staff at the school and the school administration were unsure where to begin.

Jorge's case study illustrates an important point. The diversity of viewpoints on second-language programs manifests itself in odd, distressing ways for students from families with high rates of mobility. The stress this diversity of programs puts on students with weak academic abilities is particularly severe.

Whole/Natural Language Versus Skills Emphasis: A False Dichotomy?

In a recent synthesis of findings from research conducted by the Handicapped Minority Research Institutes in the late 1980s, Figueroa et al. (1989) concluded that one of the major flaws in current special education services to students from language-minority groups is the lack of integration between the remedial programs provided by special educators and the students' instructional program in the regular classroom. This problem is hardly unique for this population; Zigmond, Vallecorsa, and Leinhart (1980) and Allington and McGill-Franzen (1989) have noted similar discrepancies for English-speaking students with learning disabilities. In both instances, the researchers found that remedial, pullout settings tend to emphasize mastery of discrete skills in a nonintegrated fashion.

A major concern among bilingual educators is that the task-analytic, skill-building approach used in many special education programs is both functionally and philosophically incompatible with the natural-language (often called "whole language") approach increasingly used in mainstream classrooms serving students from language-minority groups (Au & Scheu, 1989; Cummins, 1989). Many bilingual special educators (Cummins, 1984; Yates & Ortiz, 1991) believe that the conventional, skill-building approach used in special education is insufficient for meeting the needs of students from language-minority groups because language development will be stifled.

Tharp and Gallimore (1988) voiced severe criticism of a systematic, skills-oriented approach for meeting the needs of students from language-minority groups. They noted that the attempt to improve reading performance by controlling both oral and written vocabulary and using highly structured phonic progressions—a cornerstone of many special education programs found to be effective for English-speaking students with learning disabilities—may actually impede language acquisition for students with limited English proficiency. Similarly, Speidel's (1987) research demonstrated that systematic instruction in English-language grammar, syntax, and definitions did not produce generalizable effects in English-language production among second-language learners.

Many second-language programs, therefore, have begun to move toward the increased use of natural language (Cummins, 1989; Saville-Troike, 1982). Both Cummins (1989) and Tharp and Gallimore (1988) have eloquently pled for the conscious integration of natural-language usage and genuine dialogue into classroom instruction. These researchers have concluded that conventional emphases—on correct oral reading, proper pronunciation in English, systematic instruction involving vocabulary lists, and English-

language grammar and literal comprehension—not only inhibit the language development of students but also hinder their overall cognitive development, by taking most of the meaning and enjoyment out of learning.

When many teachers work with students from language-minority groups, particularly those with learning problems or disabilities, there is a tendency to simplify language in a unnatural way. Regarding the language that teachers often use for special education students from language-minority groups, Fradd (1987) noted that teachers' communication

> is organized and presented in much the same way as . . . (in) foreign language instruction. Often communication consists of brief utterances such as "What is this?" or "What color is that?" Students learn to reply in like form, in one- or two-word utterances. Little curriculum content or social expectation is communicated in this type of verbal exchange. Sometimes, instead of promoting the intellectual and social aspects important in learning English, the students' progress is impaired by the repetitive practice and meaningless drill. (p. 146)

In classroom observations of students from language-minority groups, Ramirez (1992) noted the same phenomenon.

Moll and Diaz's (1987) ethnographic research of reading instruction for students from language-minority groups and in the "low ability" group raised a host of important issues. Their observations of these students in conventional English-language classrooms highlighted some of the problems that arise when teachers attempt to apply traditional principles of instruction to low-performing students from language-minority groups. The observed teachers tended to correct pronunciation errors (e.g. *seyd* for "said") or interrupted with attempts to define simple English words— "surprise," "guess"—thereby breaking the flow of the story. Moll and Diaz noted "the deliberate, slow pace of lessons with students in the low reading groups" (p. 305), and the lack of intellectual challenge and conceptual development provided them.

This focus on the details of accurate English-language production makes the students appear less competent and able than they really are. When Moll and Diaz followed the same students into a Spanish reading lesson, they observed that these same "low ability" students were able to answer comprehension questions correctly and to develop and expand on ideas in the stories.

Yates and Ortiz (1991) also highlighted the disparity and tensions between conventional special education practice and the emerging model for appropriate instruction of students from language-minority groups and with learning disabilities. They emphasized the importance of *comprehensible* input:

> It is difficult for LEP (Limited English Proficient) students to respond appropriately when discussions revolve around leprechauns, blarney stones and the joys of eating corned beef and cabbage if they have no prior experience with these topics. The principle of comprehensible input . . . is violated when teachers use topics, materials and tasks that are linguistically, experientially and culturally unrelated to students' backgrounds . . . *Teachers should add sufficient context rather than attempting to simplify tasks by breaking them down into what they consider to be smaller, less complex units.* (pp. 15-16. emphasis added)

A more natural, fluid learning environment is necessary for language development. People use language to obtain what they want or to express their thoughts, feelings, and ideas (Fradd 1987). Therefore, it is particularly important that second-language instruction be relevant rather than only a series of drills on grammar and usage.

A consistent theme in observational research (Chang, 1992; Gersten, 1993; Gersten & Woodward, 1993) is that constricted language seems to be a logical extension of the training that many special education teachers receive.

In certain special education classrooms, the teacher's attempt to strictly control curriculums and language demands does not afford the student opportunities for language development. Ramirez (1992) noted that this problem persists in the education of students from language-minority groups, regardless of whether the teacher is bilingual and whether instruction is in Spanish or English.

An Effective Balance

Clearly, we need some reconceptualization of how to teach students from language-minority groups (including those in special education). We need to draw on the developing consensus among bilingual education researchers, while integrating principles of effective instruction and newer cognitive approaches from special education. As recently as 1991, Yates and Ortiz concluded: "The field of bilingual special education is so new that a body of effective practices has yet to be established" (p. 14). Nonetheless, a body of research is emerging form these three areas that suggests practices likely to be effective.

First, research suggests that children must be given interesting reading material that makes sense to them; and the material must explicitly provide links between students' prior knowledge and concepts in the story. Based on extensive work with students from language-minority groups, Barrera (1984) noted how English-language reading can be an excellent medium for the development of English-language competence.

> The beginning of second-language reading can be a natural . . . learner-controlled occurrence when children approach reading as a desirable, useful, and meaningful activity. . . . Second-language reading can commence soon after native-language reading begins, or develop virtually alongside it, as long as the learner is making sense of the written language he or she encounters. (Barrera, 1984, p. 170)

Elley and Mangubhai's (1983) work further supports this position. When students were given an abundance of high-interest story books in English, their progress in reading and listening comprehension increased at almost twice the normal rate. Both Tharp's (1982) experimental research on the Kamehameha Early Education Program and Goldenberg and Gallimore's (1991) research with urban Hispanic students have clearly indicated that reading programs that emphasize comprehension increase students' comprehension. Thus, the use of comprehensible, highly motivating books can be an effective medium for rapid acquisition of English (Allen, 1989).

Second, an emerging view of effective instruction for students from language-minority groups builds on the concepts of comprehensible input (Krashen, 1982), and "negotiated" interaction (Long, 1983). Ensuring that students understand the concepts that the teacher attempts to convey involves intentional use of redundancy, more frequent use of simple or declarative sentences, frequent checks for student comprehension, and the use of physical gestures and visual cues. Teachers should try to explain ideas or concepts several times using slight variations in terminology and examples.

Fradd (1987) cautions that making material comprehensible should not entail a "watering down" of concepts. It requires the same type of sophisticated modulation of instruction found in the instructional research of such individuals as Graham and Harris (1989) and Palinesar and Klenk (1992).

This approach to teaching, with its balance of systematic strategy and skill development and the use of instructional conversations to promote comprehension, is extremely difficult for teachers to implement (Gersten, 1993; Goldenberg & Gallimore, 1991; Reyes, 1992). To a large extent, this difficulty results from the time it takes for teachers to master and personalize these techniques. Teachers need to be sensitive to growth in both students' cognitive and English-language development over longer time periods (e.g., weeks or months). Furthermore, the

teacher must work toward some sense of mastery, while pushing students slightly beyond their current level of knowledge and achievement. This combination requires a high level of expertise and a series of sophisticated judgments.

Third, students from language-minority groups must be pushed to move from learning and producing limited word translations and fragmented concepts, to using longer sentences and expressing more complex ideas and feelings (Barrera, 1984; Gersten, 1993). Special educators often have a relatively easy time breaking complex concepts into small steps, frequently assessing whether students understand the concept taught, and using redundant language and physical gestures as prompts. However, the task of encouraging students to express their ideas in a new language, and in increasingly complex forms, presents a challenge for many special educators.

This emerging sense of effective approaches in bilingual special education suggests that special educators grounded in more task-analytic or behavioral schools of instructional practice can bring their skills to bear in useful ways to meet the needs of students from language-minority groups with academic problems, including those with mild disabilities. However, to fully meet the needs of these students, special education must also increasingly draw on the cognitive tradition, on use of relevant curricular materials, and on the creation of learning environments where students feel comfortable expressing their ideas in a new language.

Conclusion

Rueda (1990) has noted that many issues confronting special education for Hispanic students "are simply manifestations of more fundamental problems that affect the entire field" (p. 126). Among these are the questions from the field of bilingual education of how soon to introduce English-language content instruction and how to handle the complex task of both teaching a second language and developing academic abilities in a relatively short time frame. Similarly, it is essential to have a grasp of the many unresolved issues in the field of special education, such as the advantages and disadvantages of pullout programs, problems in curriculum integration, the proper balance between skills and strategy instruction, and accurate methods of identification and ongoing assessment. An appreciation for the root controversies in both fields is crucial to understanding the dilemmas facing those designing and studying effective programs for students from language-minority groups and students with disabilities or those experiencing difficulty in school.

As we have discussed, emerging research strongly suggests that all students from language-minority groups—including those with disabilities—can profit from some balance of second-language instruction based on contemporary whole-language/process approaches to teaching literacy. This is not to say that such methods provide a complete solution, or that there is no place for some version of systematic instruction with adequate review and practice of targeted skills and strategies. Rather, the issue is one of how to combine these skills and strategies into a viable approach to meet the needs of students with limited English proficiency and with learning disabilities, as well as those not profiting form conventional instruction.

It is easier to critique current practice than to begin building guidelines for special educators to collaborate effectively with classroom teachers on issues related to more effective instruction for these students. The problem is also complicated by a dearth of bilingual special educators. However, with relevant professional development activities, monolingual teachers can also effectively teach these students, an observation supported in recent research on the sheltered-English approach to bilingual education (Allen, 1989; Chamot & O'Malley, 1989; Gersten, 1993).

The task is not easy. Earlier research has detailed problems and argued for more valid,

culturally sensitive procedures for assessment and classification. Research has also documented the improper placement of students from language-minority groups into special education, where watered-down curriculums, constricted use of language, and lower teacher expectations have had a detrimental effect on students.

Newer research has shown that, in some areas, the tide is turning; and students with limited English proficiency are referred for special services at a lower rate. However, research has also shown that too many lower performing students from language-minority groups often do not receive adequate instructional assistance from their classroom teachers. Whether students from language-minority groups are underrepresented or overrepresented statistically in special education, it is important that none is undeserved and that all receive quality instruction.

We are hopeful that the current decade will witness a convergence of findings and a growing synergy among researchers and practitioners in the fields of learning disabilities, bilingual education, and special education. There have been calls for collaboration among special education, bilingual education, and general education (Harris, 1991; Yates & Ortiz, 1991). Clearly these collaborative efforts are necessary. In this article, we have tried to explicate the complex instructional issues facing those developing effective instructional approaches fro students from language-minority groups—including those with learning disabilities—and those who are not succeeding with traditional classroom instruction.

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TEACHING CULTURALLY AND LINGUISTICALLY DIVERSE EXCEPTIONAL STUDENTS

Effective Instruction for Language Minority Children with Mild Disabilities

Nadeen T. Ruiz

This digest describes the Optimal Learning Environment (OLE) Curriculum—a Resource for Teachers of Spanish Speaking Children in Learning Handicapped Programs, a model curriculum was developed to suggest ways of teaching language arts to such students and to suggest specific classroom activities that are compatible with the research on effective instruction. This bilingual special education class model looks for the upper range of the bilingual child's academic, linguistic, and social skills (Ruiz, 1988). The following principles govern the OLE curriculum:

Take into account the student's sociocultural background and its effect on oral language, reading and writing, and second language learning.

The following four areas have been identified as important to children from language minority groups: oral language uses, knowledge about print, background knowledge, and sense of story (Anderson & Gipe, 1983; Barnitz, 1986; Hudelson, 1984, 1987; Steffensen & Calken, 1982).

Oral Language Uses. Some children arrive at school already familiar with the use of language in a decontextualized manner, that is, dissociated from shared experience and dependent on precise linguistic formulations (Cummins, 1981; Olson & Nickerson, 1978; Wells, 1981). For example, they may come from homes where books were introduced and discussed at an early age; their parents may have modeled, scaffolded, and elicited their narratives about real and fictional events. Children from families with few outside links may not have sufficient experience with specific, precise, topic centered language to function effectively in a typical language arts curriculum (Au & Jordon, 1981). Educators should not categorize these children as having language disabilities; rather, they should recognize that a sociocultural factor has influenced the children's verbal performance and has pinpointed the area that must be addressed by oral language instruction in the classroom.

Knowledge about Print. Another area of sociocultural influence is the knowledge about print that children bring to school literacy tasks. Children begin learning to read and write before they start school and begin to learn letter-sound-correspondences. Very early on, they may learn why Dad writes a list before he does the grocery shopping (functions of print); where Mama looks to start to read the storybook (book conventions); and how to read "McDonald's" or "K Mart" from commercial signs (environmental print). Research has shown that knowledge in these and similar areas related to print is a precursor to conventional reading.

Background Knowledge. A third aspect of literacy instruction that is directly influenced by sociocultural differences is background knowledge. Studies with second language learners show that when they read tests congruent with their background knowledge (for example, when Indian students read about a wedding in India rather than a wedding in the United States), they read it faster, recall both the gist and the details better, and summarize or retell it better (Barnitz, 1986;

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Steffensen, Joag-dev, & Anderson, 1979). Another study shows that second language learners with limited English proficiency can do as well as more proficient students on reading comprehension tasks when they do prereading activities that activate and extend the background knowledge pertinent to the tasks.

Sense of Story. The final sociocultural influence on reading and writing involves the development of a sense of story or narrative schema, that is, an internal sense of the usual components of a story: setting, main character(s), problem, attempts to resolve the problem, character reactions to the attempts, and resolution (Stein & Nezworki, 1978). An optimal learning environment would have children reading (and listening to) a variety of well-formed stories.

Take into account the student's learning handicaps and how they may affect oral language, reading, writing, and second language learning.

In an OLE classroom, the teacher would not stop involving the children in prereading activities to access and develop their background knowledge. The teacher would explain the importance of knowing as much as possible about a text before reading it; demonstrate a strategy such as the survey text method (Aukerman, 1972), which students can use to prepare themselves before they read a text; and provide opportunities for the students to practice the strategy.

Follow developmental processes in literacy acquisition.

The OLE Curriculum Guide calls for language arts instruction that acknowledges the importance of developmental phases of literacy acquisition in a number of ways. First, teachers should give students the time they need to develop their knowledge about reading and writing in highly interactive literacy events. Second, student errors in their reading and writing attempts should not automatically be viewed as "bad habits" (Flores, Rueda, & Porter, 1986). Instead, teachers should examine the errors for evidence of what children *can* do, as evidence of their progress through development phases. Finally, teachers should realize that a curriculum that does not provide the rich language and literacy environment described here is an impoverished curriculum that will promote impoverished learners.

Locate curriculum in a meaningful context where the communicative purpose is clear and authentic.

One important way to encourage "meaning making" among children is to engage them in reading and writing whole texts instead of text fragments removed from context (Altweger, Edelsky, & Flores, 1987). The OLE Curriculum Guide recommends that, in reading lessons, students be encouraged to interact with whole books, poems, and other forms of written language as a way to facilitate meaning making. For writing, teachers should use the Writing Workshop approach described by Atwell (1987). Here, students have control over intentions, topic and audience as they write and publish their own books. Classmates should meet frequently for peer conferences on their pieces, simultaneously stimulating their need to be clear and interesting writers and providing alternative oral language opportunities.

Connect curriculum with the students' personal experiences.

Many students show greater progress or increased investment when reading and writing tasks give them the opportunity to interject their personal experiences (Au & Jordan, 1981; Flores et al., 1986; Willig & Swedo, 1987). The OLE Curriculum Guide gives specific suggestions on how to connect students' personal topics to the language arts curriculum by using, for example, the Writing Workshop and the ETR method.

Incorporate children's literature into reading, writing, and ESL lessons.

Using actual examples of literature can extend students' knowledge about print (including the more sophisticated aspects of this knowledge, such as text structure or style), increase areas of their background knowledge, and facilitate the construction of meaning through whole texts. Literature, even more than expository writing, is decontextualized; that is, its clues to meaning are more implicit than explicit. Second language learners working through literary works must negotiate the meaning, not only between themselves and the text, but also with others. These negotiating moves (e.g., checks for understanding, requests for clarification) have been linked to better English-language gains.

Involve parents as active partners in the instruction of their children.

The OLE Curriculum Guide details various ways to promote equitable parent-school partnerships. One is Project TOT (Training of Trainers), in which parents from language minority groups who are knowledgeable about the inner workings of schools join with families who do not use the available special education services. The families participate in small-group seminars to acquire information and skills related to obtaining those services, as well as forming ongoing support groups.

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FUNCTIONAL LANGUAGE INSTRUCTION FOR LINGUISTICALLY DIFFERENT STUDENTS WITH MODERATE TO SEVERE DISABILITIES

Elva Duran

This digest explains how functional language instruction can be made useful for persons with moderate to severe disabilities who are also culturally and linguistically different. It further explains how vocabulary and cultural information of the Spanish-speaking student can be included in functional language instruction for students who are from different cultural groups.

What Is Functional Language Instruction?

In functional language instruction, the student is taught material that he or she can use in everyday life. In order for the material to be functional it must be useful to the student in many different environments (Brown et al., 1984). Thus, the words students learn at school must be useful at home and in other settings. One way to discover useful words is by using an ecological inventory.

Using an Ecological Inventory to Determine Language Needs

Brown and colleagues (1984) noted that an ecological inventory can determine the words children need to know for more effective functioning at home, at school, and in the community. An ecological inventory is a detailed listing by parents or caregivers of activities the student enjoys participating in. The ecological inventory will reveal the vocabulary that the teacher and parents should include in instructional activities. By getting information regularly from the home environment, the teacher can better decide what to emphasize in the classroom. Too often parents are left out of the student's instruction because teachers and other caregivers do not take the time to ask them what they feel their children need to learn.

The ecological inventory should include a section that seeks information about important cultural events that the family enjoys together. Often children who come to school from culturally and linguistically different families do not participate as fully as they might because the families have not been encouraged to explain what matters to them and their children culturally. Parents can be asked to share traditional legends, stories, and songs that are enjoyed by their children. These materials can then be incorporated into the language instruction program. In addition, parents may be invited to come to school to share in a wide variety of cultural events.

A Classroom Example

Songs can provide functional language activities for students in a variety of settings. If students have some verbal skills, they can sing some of the words or phrases from songs. If they are nonverbal, they can participate by pointing to photographs or pictures of some of the key words as they listen to other children sing. Students can also be helped to follow what is being said by learning to "sign" the important concepts or vocabulary from stories and songs. Another example might be a class discussion of holidays in which each child brings an item

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pertaining to a personally important holiday or event. A section of the room might be set aside for a holiday "museum," with each item labeled in English and the home language.

It is important to share what is being done in the classroom with parents so that they can carry over the activities at home. If this is not done, students will not learn to generalize information from one setting to another and language acquisition will be slower. Generalization training in language instruction is crucial if information taught in one environment is to be used functionally (Sailor & Guess, 1983).

Choosing Vocabulary for Functional Language Instruction

When determining what particular vocabulary should be taught to students who are from culturally or linguistically different groups, it is important to ask parents and other caregivers what words the student needs to know. Vocabulary related to particular foods, celebrations, or other culturally unique events are particularly good choices. The ecological inventory can be used to list appropriate vocabulary to incorporate into individualized language instruction programs. For example, in many Hispanic homes the student may eat "tortillas," "fajitas," and "enchiladas." These vocabulary words can be added to a list containing English words for other familiar foods such as chicken and bananas. Matching vocabulary to actual foods or pictures of food can be an effective way of helping children learn words that are familiar to their experience. Cueing can be done in both English and the home language. It is most effective to use both languages with students whose home language is different from the primary language of instruction used at school (Duran & Heiry, 1986).

Continuing Parent-School Communication

It is desirable to ask parents for additional vocabulary to add to the language program periodically. Regularly scheduled parent conferences provide ideal occasions for gathering this input. It is important to add new vocabulary that is timely and relevant to the student's day-to-day activities.

Effectiveness of Functional Language Instruction

Children who receive functional and context-embedded language instruction are more likely to have a positive attitude about learning and a heightened self-concept. There is a positive correlation between self-concept and academic achievement (Gay, 1966; Lumpkin, 1959). Furthermore, by using elements of students' cultures to teach language, practitioners assist students in valuing and preserving their family heritage.

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BEHAVIORAL DIVERSITY: THE "WIN-WIN" MODEL

Edith Maureen Fisher

There is a growing need to develop positive environments where all persons are viewed and valued for their personal assets and strengths and are able to achieve their fullest potential. The behavioral diversity "win-win" model teaches individuals to discover powerful insights about themselves and others. This model provides a clearer understanding of the unique characteristics individuals bring to situations. It also provides a basis for comprehending the behavior of others, thereby enabling people to achieve positive outcomes for interactions with those who are different.

Dimensions of Diversity

There are two essential dimensions of diversity: "core identity" and "behavioral identity." Our thoughts, feelings, and behavior—as well as what we see and experience throughout our lives—are inextricably linked to the six interdependent factors that form a person's "core identity." The six factors—race/ethnicity, culture, gender, sexual/affectional orientation, age, and physical abilities—have significant impact on our individual and group identity and behavior in social and workplace encounters. These factors inform us about ourselves in relation to others and to our environment, and they are the most salient elements of our identity as individuals. Our world view or global perspective is built on these six factors, and our life experiences are filtered through them.

The second dimension of diversity, "behavioral identity," explains what motivates us to behave the way we do. Four interrelated factors influence our "behavioral identity": norms, attitudes, values, and needs.

- Norms: Accepted and expected behaviors, stated or un stated, established by our groups, organizations, and culture; composites of both values and needs-driven expectations.
- Attitudes: Positive or negative personal evaluations by us and others of experiences and events; arise as a function of our values and needs.
- Values: What we expect of ourselves or what others expect of us; the "should do's" of life.
- Needs: What is most natural for us to do; the "would do's" of life.

The behavioral diversity "win-win" model represents those two components that are fundamental in norms and attitudes: values and needs-driven behavior. These two components are profiled in "characteristic distinctions" for each of four different values systems and behavioral styles (O'Conner and Merwin, 1992; Alessandra and O'Conner, 1990).

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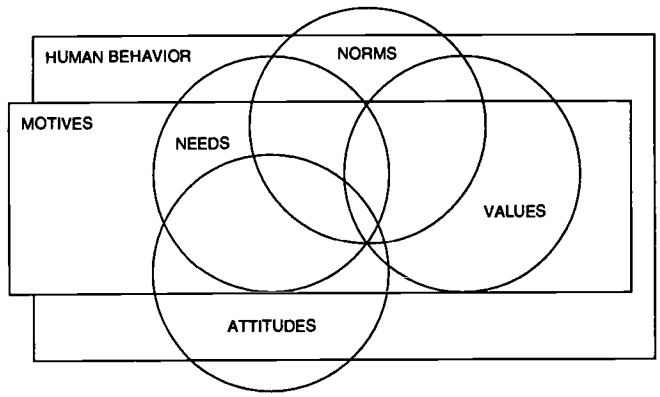
Figure 1*



Values Systems

The result of some twenty years of research, the Values Profile System developed by Dr. M. Massey and M. O'Connor represents four different values systems known as the "TICS" model of behavior (O'Conner, 1985; 1986). Each of the four values systems have distinct characteristics for core or central value principle, motivation, basic fear, work/life styles, and acceptance of others. These concepts can be introduced and experienced in interactive personal learning seminars and presentations or by using self-study and development resources (Carlson a).

Each values system has its own unique strengths and growth potential, and no values system is inherently better than another. The core or central value principles for each of the four values systems are "loyalty" (referring to the Traditionalist values system), "equality" (the In-Betweener value system), "freedom" (the Challenger values system), and "justice" (the Synthesizer values system). Traditionalist values system individuals are motivated by a goal of responsible living, and they fear loss of social respect. In-Betweener values system individuals are motivated by a goal of self-assertion and happiness, and they fear inner conflict. Challenger values system individuals are motivated by a goal of self-preservation and satisfaction, and they fear loss of personal well-being. Synthesizer values system individuals are motivated by a goal of self-integration with others, and they fear a lack of personal congruence.

Predictable conflicts can arise between individuals with different values systems and work-/life-styles. Once understood, however, these conflicts can become a basis for growth and development, as well as mutual understanding of behavior. Individuals with insights into behavioral motivations better understand and appreciate their own uniqueness and strengths, and they can recognize, respect, and value the differences in others. From positions of "Our way!" (as expressed in the Traditionalist values system), "Which way?" (the In-Betweener values system), "My way!" (the Challenger values system), and "This way!" (the Synthesizer values system), individuals can develop plans to improve their effectiveness and create environments where everyone is viewed and valued for their personal assets and strengths. Individuals can become more effective by developing flexibility and collaboration (a Traditionalist values system), developing objectivity and realistic idealism (an In-Betweener values system), developing commitment and tolerance (a Challenger values system), or developing greater selectivity and self-tolerance (a Synthesizer values system). An individual's values system interacts with, and arises out of, their needs-driven behavior, another essential

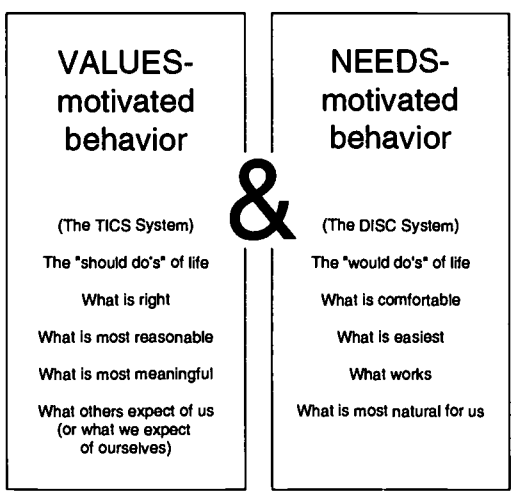
* Behavioral Models and HRD Product Line

component in the behavioral diversity "win-win" model.

Behavioral Styles

Both values systems and needs-driven behaviors should be understood to be truly effective in comprehending the "whole person." Based on theory and developmental research by Drs. W. Maston and J. Geier, the Personal Profile System represents four different behavioral styles known as the "DISC" model of behavior (O'Connor, 1987; Kaplan and Kaplan, 1983; Lange, 1992). In a format similar to that of the values systems, each of the four behavioral styles expresses characteristic ways of thinking, feeling, and acting. Understanding these "behavioral patterns" increases personal effectiveness in a number of life/work situations. Behavioral styles can be presented using innovative computerized reports, or, like values systems, they can be introduced and experienced in results-oriented personal learning seminars or other personal development resources (Carlson b).

Figure 2*



Each of the four behavioral styles represents what an individual would *naturally* do, while values systems describe the basis for motivations that are *consciously chosen*. Dominance behavioral style is characterized by an emphasis on shaping the environment by overcoming opposition to accomplish results. Influencing behavioral style emphasizes shaping the environment by bringing others into alliance to accomplish results. Steadiness behavioral style emphasizes cooperating with others to carry out the task. Cautious behavioral style emphasizes working with existing circumstances to promote quality in products or services. Dominance behavioral style individuals need others who weigh the pros and cons and calculate risk. Influencing individuals need others who concentrate on the task and seek facts. Steadiness individuals need others who react quickly to unexpected change and stretch toward the challenges of an accepted task, whereas Cautious individuals need others who want to expand authority and delegate important tasks.

Dominance behavioral style individuals fear being taken advantage of by others. Influencing individuals fear loss of influence with others. The basic fear of Steadiness individuals is loss of stability, such as predictable conditions, actions, and relationships in their environment. Criticism of their efforts or actions by others is the basic fear of Cautious individuals.

To be more effective, individuals with a Dominance behavioral style need difficult assignments as well an understanding that they need people. Those with an Influencing behavioral style are more effective with control of time and objectivity in decision making. Conditioning prior to change, and validation of self-worth, are required for effectiveness by people with the Steadiness behavioral style. Developing tolerance for conflict, and opportunity for careful planning, are required for effectiveness by individuals with a Cautious behavioral style.

* (Modified based on diagram appearing in *Perfomax "DISC" Profiles . . . Manual.* Minneapolis, MN: Life Associates, Inc., 1982: 24.)

Such insights about oneself and others prove empowering in individuals' lives, as well as providing a positive impact for them in society and the workplace.

Conclusion

The behavioral diversity "win-win" model clarifies fundamental elements of behavior needed to understand oneself and others. This understanding can enhance the ability to relate more effectively to differences in race/ethni-city, culture, gender, sexual/affectional orientation, age, and physical abilities/qualities. The model also represents characteristic distinctions of behavior and focuses on developmental action planning to improve individual and group effectiveness.

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Carlson Learning Company. (b) The following Behavioral Styles (DiSC) learning resources are produced: "Personal Profile System," "Personal Style Survey," "Personal Development Profile," "Living with Style" seminar, "Getting What You Need . . . with Style" seminar, "Getting What You Need. . . with Style!" audio cassette program, and the computerized "Personal Profile Software System (PPSS)."

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EMPOWERING CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS WITH LEARNING PROBLEMS

Jim Cummins

A positive attitude and a positive self-concept are necessary ingredients for achieving maximum learning potential. A program that accepts and respects the language and culture of its students empowers them to feel confident enough to risk getting involved in the learning process, which includes making mistakes. This digest describes ways in which professionals who work with culturally and linguistically diverse students with disabilities can create such an educational climate.

Incorporate minority students' language and culture into the school program.

The extent to which their language and culture are incorporated into the school program is significantly related to students' academic success (Campos & Keatinge, 1988; Cummins, 1984, 1989; Willig, 1985). In programs in which minority students' first-language skills are strongly reinforced, the students tend to be more successful. Students' English skills do not suffer as a result of less English instruction because there is considerable transfer of cognitive and academic skills across the languages. Thus, students who have learned to read in Spanish in a bilingual program do not have to learn to read all over again when instruction begins in English (Ada, 1988). Educators who see their role as adding a second language and cultural affiliation to students' repertoires are likely to empower them more than those who see their role as replacing or subtracting students' primary language and culture in the process of fostering their assimilation into the dominant culture.

The following is a list of ways schools can create a climate that is welcoming to minority families and, at the same time, promote childrens' pride in their linguistic talents (New Zealand Department of Education, 1988, p. 14):

- Reflect the various cultural groups in the school district by providing signs in the main office and elsewhere that welcome people in the different languages of the community.
- Encourage students to use their first language around the school.
- Provide opportunities for students from the same ethnic group to communicate with one another in their first language where possible (e.g., in cooperative learning groups on at least some occasions).
- Recruit people who can tutor students in their first language.
- Provide books written in the various languages in classrooms and the school library.
- Incorporate greetings and information in the various languages in newsletters and other official school communications.
- Provide bilingual and/or multilingual signs.
- Display pictures and objects of the various cultures represented at the school.

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- Create units of work that incorporate other languages in addition to the school language.
- Encourage parents to help in the classroom, library, playground, and in clubs.
- Invite students to use their first language during assemblies, prize givings, and other official functions.
- Invite people from minority groups to act as resource people and to speak to students in both formal and informal settings.

Encourage minority community participation as an integral component of children's education.

When educators involve parents from minority groups as partners in their children's education, the parents appear to develop a sense of efficacy that communicates itself to their children and has positive academic consequences. Most parents of children from minority groups have high academic aspirations for their children and want to be involved in promoting their academic progress (Wong Fillmore, 1983). However, they often do not know how to help their children academically, and they are excluded from participation by the school. Dramatic changes in children's school progress can be realized when educators take the initiative to change this exclusionary pattern to one of collaboration. A collaborative orientation may require a willingness on the part of the teacher to work closely with teachers or aides proficient in the mother tongue in order to communicate effectively and in a non-condescending way with parents from minority groups (Ada, 1988).

Allow students to become active generators of their own knowledge.

There are two major orientations in pedagogy: the transmission model and the interactive/experiential model. These differ in the extent to which the teacher retains exclusive control over classroom interaction as opposed to sharing some of this control with students. The basic premise of the transmission model is that the teacher's task is to impart knowledge or skills to students who do not yet have these skills. This implies that the teacher initiates and controls the interaction, constantly orienting it toward the achievement of instructional objectives.

A central tenet of the interactive/experiential model is that "talking and writing are means to learning" (Bullock Report, 1975, 50). Its major characteristics, as compared to a transmission model, are as follows:

- Genuine dialogue between student and teacher in both oral and written modalities.
- Guidance and facilitation rather than control of student learning by the teacher.
- Encouragement of student-student talk in a collaborative learning context.
- Encouragement of meaningful language use by students rather than correctness of surface forms.
- Conscious integration of language use and development with all curricular content rather than teaching language and other content as isolated subjects.
- A focus on developing higher level cognitive skills rather than factual recall.
- Task presentation that generates intrinsic rather than extrinsic motivation.
- Student involvement in curriculum planning, teaching students to understand learning styles.

In short, pedagogical approaches that empower students encourage them to assume greater control over setting their own learning goals and collaborate actively with each other in achieving these goals. The instruction is automatically "culture-fair" in that all students are actively involved in expressing, sharing, and amplifying their experiences within the classroom. Recent research on

effective teaching strategies for bilingual students with disabilities supports the adoption of interactive/experiential models of pedagogy (Swedo, 1987; Willig, Swedo, & Ortiz, 1987).

Use an advocacy orientation in the assessment process.

Recent studies suggest that despite the appearance of change brought about by legislation such as Public Law 94-142, the Education for All Handicapped Children Act of 1975, psychologists continue to test children until they "find" the disability that could be invoked to "explain" the student's apparent academic difficulties (Mehan, Hertweck, & Meihls, 1986). What is required to reverse the so-called legitimizing function of assessment can be termed an *advocacy* orientation. To challenge the labeling of students from minority groups as disabled, assessment must focus on (a) the extent to which children's language and culture are incorporated into the school program, (b) the extent to which educators collaborate with parents in a shared enterprise, and (c) the extent to which children are encouraged to use both their first and second languages actively in the classroom to amplify their experiences in interaction with other children and adults. It is essential that assessment go beyond psychoeducational considerations and take into account the child's entire learning environment.

In summary, an advocacy approach to assessment of children from minority groups involves identifying the pathology that exists in the power relations between dominant and dominated groups in society, in the reflection of these power relations, in the interactions of schools and communities, and in the mental and cultural disabling of students from minority groups that takes place in the classrooms.

The major goal of the intervention model discussed here is to *prevent* academic casualties among students from minority groups. The principles of empowerment pedagogy are equally applicable to all programs for students from minority groups, regardless of whether they are designated bilingual education, bilingual special education, or some other form of program. In fact, students from minority groups who are experiencing learning difficulties and have been referred for special education have a particular need for empowerment pedagogy and can benefit considerably from such approaches. (Swedo, 1987).

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ESL APPROACHES AND STRATEGIES

MYTHS AND MISCONCEPTIONS ABOUT SECOND LANGUAGE LEARNING

National Center for Research on Cultural Diversity and Second Language Learning

As the school-aged population changes, teachers all over the country are challenged with instructing more children with limited English skills. Thus, all teachers need to know something about how children learn a second language (L2). Intuitive assumptions are often mistaken, and children can be harmed if teachers have unrealistic expectations of the process of L2 learning and its relationship to the acquisition of other academic skills and knowledge.

As any adult who has tried to learn another language can verify, second language learning can be a frustrating experience. This is no less the case for children, although there is a widespread belief that children are facile second language learners. This digest discusses commonly held myths and misconceptions about children and second language learning and the implications for classroom teachers.

Myth 1: Children learn second languages quickly and easily.

Typically, people who assert the superiority of child learners claim that children's brains are more flexible (see Lenneberg, 1967). Current research challenges this biological imperative, arguing that different rates of L2 acquisition may reflect psychological and social factors that favor child learners (Newport, 1990). Research comparing children to adults has consistently demonstrated that adolescents and adults perform better than young children under controlled conditions (see Snow & Hoefnagel-Hoehle, 1978). One exception is pronunciation, although even here some studies show better results for older learners.

Nonetheless, people continue to believe that children learn languages faster than adults. Is this superiority illusory? Let us consider the criteria of language proficiency for a child and an adult. A child does not have to learn as much as an adult to achieve communicative competence. A child's constructions are shorter and simpler, and vocabulary is smaller. Hence, although it appears that the child learns more quickly than the adult, research results typically indicate that adult and adolescent learners perform better.

Teachers should not expect miraculous results from children learning English as a second language (ESL) in the classroom. At the very least, they should anticipate that learning a second language is as difficult for a child as it is for an adult. It may be difficult, since young children do not have access to the memory techniques and other strategies that more experienced learners use in acquiring vocabulary and in learning grammatical rules.

Nor should it be assumed that children have fewer inhibitions than adults when they make mistakes in an L2. Children are more likely to be shy and embarrassed around peers than are adults. Children from some cultural backgrounds are extremely anxious when singled out to perform in a language they are in the process of learning. Teachers should not assume that, because children supposedly learn second languages quickly, such discomfort will readily pass.

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Myth 2: The younger the child, the more skilled in acquiring an L2.

Some researchers argue that the earlier children begin to learn a second language, the better (see Krashen, Long, & Scarcella, 1979). However, research does not support this conclusion in school settings. For example, a study of British children learning French in a school context concluded that, after 5 years of exposure, older children were better L2 learners (Stern, Burstall, & Harley, 1975). Similar results have been found in other European studies (see Florander & Jansen, 1968).

These findings may reflect the mode of language instruction used in Europe, where emphasis has traditionally been placed on formal grammatical analysis. Older children are more skilled in dealing with this approach and hence might do better. However, this argument does not explain findings from studies of French immersion programs in Canada, where little emphasis is placed on the formal aspects of grammar. On tests of French language proficiency, Canadian English-speaking children in late immersion programs (where the L2 is introduced in Grade 7 or 8) have performed as well or better than children who began immersion in kindergarten or Grade 1 (Genesee, 1987).

Pronunciation is one area where the younger-is-better assumption may have validity. Research (see Oyama, 1976) has found that the earlier a learner begins a second language, the more native-like the accent he or she develops.

The research cited above does not suggest, however, that early exposure to an L2 is detrimental. An early start for foreign language learners, for example, makes a long sequence of instruction leading to potential communicative proficiency possible and enables children to view second language learning and related cultural insights as normal and integral. Nonetheless, ESL instruction in the United States is different from foreign language instruction. Language minority children in United States schools need to master English as quickly as possible while learning subject-matter content. This suggests that early exposure to English is called for. However, because L2 acquisition takes time, children continue to need the support of their first language, where this is possible, to avoid falling behind in content area learning.

Teachers should have realistic expectations of their ESL learners. Research suggests that older students will show quicker gains, though younger children may have an advantage in pronunciation. Certainly, beginning language instruction in Grade 1 gives children more exposure to the language than beginning in Grade 6, but exposure in itself does not predict language acquisition.

Myth 3: The more time students spend in a second language context, the quicker they learn the language.

Many educators believe children from non-English speaking backgrounds will learn English best through structured immersion, where they have ESL classes and content-based instruction in English. These programs provide more time on task in English than bilingual classes.

Research, however, indicates that this increased exposure to English does not necessarily speed the acquisition of English. Over the length of the program, children in bilingual classes, with exposure to the home language and to English, acquire English language skills equivalent to those acquired by children who have been in English-only programs (Cummins, 1981; Ramirez, Yuen, & Ramey, 1991). This would not be expected if time on task were the most important factor in language learning.

Researchers also caution against withdrawing home language support too soon and suggest that although oral communication skills in a second language may be acquired within 2 or 3 years, it may take 4 to 6 years to acquire the level of proficiency needed for

understanding the language in its academic uses (Collier, 1989; Cummins, 1981).

Teachers should be aware that giving language minority children support in the home language is beneficial. The use of the home language in bilingual classroom enables children to maintain grade-level school work, reinforces the bond between the home and the school, and allows them to participate more effectively in school activities. Furthermore, if the children acquire literacy skills in the first language, as adults they may be functionally bilingual, with an advantage in technical or professional careers.

Myth 4: Children have acquired an L2 once they can speak it.

Some teachers assume that children who can converse comfortably in English are in full control of the language. Yet for school-aged children, proficiency in face-to-face communication does not imply proficiency in the more complex academic language needed to engage in many classroom activities. Cummins (1980) cites evidence from a study of 1,210 immigrant children in Canada who required much longer (approximately 5 to 7 years) to master the disembedded cognitive language required for the regular English curriculum than to master oral communicative skills.

Educators need to be cautious in exiting children from programs where they have the support of their home language. If children who are not ready for the all-English classroom are mainstreamed, their academic success may be hindered. Teachers should realize that mainstreaming children on the basis of oral language assessment is inappropriate.

All teachers need to be aware that children who are learning in a second language may have language problems in reading and writing that are not apparent if their oral abilities are used to gauge their English proficiency. These problems in academic reading and writing at the middle and high school levels may stem from limitations in vocabulary and synaptic knowledge. Even children who are skilled orally can have such gaps.

Myth 5: All children learn an L2 in the same way.

Most teachers would probably not admit that they think all children learn an L2 in the same way or at the same rate. Yet, this assumption seems to underlie a great deal of practice. Cultural anthropologists have shown that mainstream families in the United States and families from minority cultural backgrounds have different ways of talking (Heath, 1983). Mainstream children are accustomed to a deductive, analytic style of talking, whereas many culturally diverse children are accustomed to an inductive style. Schools in the United States emphasize language functions and styles that predominate in mainstream families. Language is used to communicate meaning, convey information, control social behavior, and solve problems, and children are rewarded for clear and logical thinking. Children who use language in a different manner often experience frustration.

Social class also influences learning styles. In urban, literate, and technologically advanced societies, middle-class parents teach their children through language. Traditionally, most teaching in less technologically advanced, non-urbanized cultures is carried out nonverbally, through observations, supervised participation, and self-initiated repetition (Rogoff, 1990). There is none of the information testing through questions that characterized the teaching-learning process in urban and suburban middle-class homes.

In addition, some children are more accustomed to learning from peers than from adults. Cared for and taught by older siblings or cousins, they learn to be quiet in the presence of adults and have little interaction with them. In school, they are likely to pay more attention to what their peers are doing than to what the teacher is saying.

Individual children also react to school and learn differently within groups. Some children are outgoing and sociable and learn the second language quickly. They do not worry about mistakes, but use limited resources to generate input from native speakers. Other children are shy and quiet. They learn by listening and watching. They say little, for fear of making a mistake. Nonetheless, research shows that both types of learners can be successful second language learners.

In a school environment, behaviors such as paying attention and persisting at tasks are valued. Because of cultural differences, some children may find the interpersonal setting of the school culture difficult. If the teacher is unaware of such cultural differences, their expectations and interactions with these children may be influenced.

Effective instruction for children from culturally diverse backgrounds requires varied instructional activities that consider the children's diversity of experience. Many important educational innovations in current practice have resulted from teachers adapting instruction for children from culturally diverse backgrounds. Teachers need to recognize that experiences in the home and home culture affect children's values, patterns of language use, and interpersonal style. Children are likely to be more responsive to a teacher who affirms the values of the home culture.

Conclusion

Research on second language learning has shown that many misconceptions exist about how children learn languages. Teachers need to be aware of these misconceptions and realize that quick and easy solutions are not appropriate for complex problems. Second language learning by school-aged children takes longer, is harder, and involves more effort than many teachers realize.

We should focus on the opportunity that cultural and linguistic diversity provides. Diverse children enrich our schools and our understanding of education in general. In fact, although the research of the National Center for Research on Cultural Diversity and Second Language Learning has been directed at children from culturally and linguistically diverse backgrounds, much of it applies equally well to mainstream students.

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COOPERATIVE LEARNING FOR STUDENTS FROM DIVERSE LANGUAGE BACKGROUNDS

In cooperative learning, students work together in small groups on tasks that require cooperation and interdependence among all individuals in each group. Students help each other to complete learning tasks and are rewarded for providing that help (Jacob & Mattson, 1987). Cooperative learning reward structures place students "in a situation where the task-related efforts of any individual helps others to be rewarded" (Slavin, 1983).

When the originators of cooperative learning emphasized the importance of heterogeneity, it is doubtful that they envisioned a classroom where non-English speakers and native English speakers were members of the same group. Today, a classroom with students from diverse language backgrounds is quite common, especially in states such as California, where three categories of students can be found: (1) English-only students who have learned English as their primary language; (2) English language learning (ELL) students who have a primary language other than English and are in the process of acquiring English; and (3) fluent English proficient students who have a primary language other than English, but are fully proficient in English. When students from such diverse language backgrounds are placed in the same classroom, their linguistic and cultural diversity creates challenges for teachers (Holt, forthcoming).

Why use cooperative learning with students from diverse linguistic and cultural backgrounds?

Effective responses to student diversity include strategies that link the students in mutually supportive ways and provide them with multiple, varied, and equal opportunities to acquire content and language. Learning cooperatively in teams where "all work for one" and "one works for all" gives students the emotional and academic support that helps them persevere against the many obstacles they face in school. Not only does cooperative teamwork give students additional motivation to stay in school and improve academically, it also helps them learn the skills they will need for the increasingly interactive workplaces of the future. Cooperative learning is a key strategy for ELL students because of its potential to enhance interactions among students, as well as dramatically improve their academic achievement (Kagan, 1986).

What is the structural approach to cooperative learning?

The structural approach to cooperative learning is based on the creation, analysis, and systematic application of structures or content-free ways of organizing social interaction in the classroom. Structures usually involve a series of steps, with prescribed behavior at each step (Kagan, forthcoming). For example, in one four-step structure, *Numbered Heads Together*, a team of students works together cooperatively to answer a question. Students who know the answer share it with those who do not because they want their team to do well; students who do not know the answer listen carefully because it may be they who are called on to answer the question.

An important cornerstone of the approach is the distinction between "structures" and "activities." To illustrate, teachers can design many excellent cooperative activities, such as making a team mural or a quilt. Such

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activities almost always have a specific content-bound objective and, thus, cannot be used to deliver a range of academic content. In contrast, structures may be used repeatedly with almost any subject matter, at a wide range of grade levels, and at various points in a lesson plan. Structures can be combined to form "multistructural lessons in which each structure or building block provides a learning experience upon which subsequent structures expand, leading toward predetermined academic, cognitive, and social objectives (Kagan, forthcoming).

Why use different structures?

Because each structure has distinct domains of usefulness and can more efficiently reach some but not other cognitive, academic, and social goals, the efficient design of lessons involves using a variety of structures, each chosen for the goals it best accomplishes. Reliance on any one structure limits the cognitive and social learning of students. Different structures are useful for distinct objectives such as teambuilding (getting students acquainted and building mutual support within teams), classbuilding (creating a positive classroom climate), communication building (learning how to communicate effectively), mastery (acquiring basic skills), and concept development (acquiring higher order thinking skills) (Kagan, 1990). For example, *Group Discussion* is the structure of choice for brainstorming and for reaching group consensus, while *Three-Step Interview* is better for developing language and listening skills and promoting equal participation (Kagan, forthcoming).

Overview of Selected Cooperative Learning Structures*

STRUCTURE AND BRIEF DESCRIPTION	FUNCTIONS (ACADEMIC & SOCIAL)
Team Building	
Round Robin. Each student in turn shares some kind of information with his or her teammates.	Expressing ideas and opinions, creating stories. Equal participation, getting acquainted with teammates.
Class Building	
Corners. Each student moves to a corner of the room representing a teacher-determined alternative. Students discuss within corners, then listen to and paraphrase ideas from other corners.	Seeing alternative hypotheses, values, problem-solving approaches. Knowing and respecting different points of view, meeting classmates.
Communication Building	
Paraphrase Passport. Students correctly paraphrase the ideas of the person who has just spoken and then contribute their own ideas.	Checking comprehension. Giving feedback. Sharing ideas.
Spend-a-Buck. Each student is given four quarters (or four votes) and must make a decision about what to "spend" them on or use them for in a particular situation. The team tallies the results to determine its decision.	Decision making. Consensus building. Conflict resolution.
Group Processing. Students evaluate their ability to work together as a group and each member's participation, with an aim to improving how the group works together.	Communication skills. Role-taking ability.

* Prepared by Lorraine Valdez Pierce (1992). See Holt, D., B. Chips, & D. Wallace. (Valdez Pierce, L., Editor) (1992).

STRUCTURE AND BRIEF DESCRIPTION	FUNCTIONS (ACADEMIC & SOCIAL)
Mastery	
Numbered Heads Together. The teacher asks a comprehension question; students consult to make sure everyone knows the answer.	Review, checking for knowledge.
Send-a-Problem. Each student writes a review problem on a flash card and asks teammates to answer or solve it. Review questions are passed to another group.	Review, checking for comprehension.
Cooperative Review. Students engage in a variety of games to review the week's material.	
Concept Development	
Three-Step Interview. Students interview each other in pairs, first one way, then the other. Students share with the group information they learned in the interview.	Sharing personal information such as hypotheses, reactions to a poem, conclusions from a unit. Participation, listening.
Brainstorming. Students encourage each other to generate ideas regarding a particular topic or problem and build upon each other's ideas.	Generating and relating ideas. Participation, involvement.
Group Discussion. The teacher asks a low-consensus question. Students talk it over in groups and share their ideas.	Sharing ideas. Reaching group consensus.
Multifunctional	
Roundtable. Students pass a paper and pencil around the group. The paper may contain several choices for ways of doing something (e.g., different research strategies). Each student in turn writes his name by his preferred strategy. Teams then agree on which strategies to use.	Assessing prior knowledge, practicing skills, recalling information, creating cooperative art. Team building, participation for all.
Partners. Students work in pairs to create or master content. They consult with partners from other teams. They then share their products or understanding with the other partner pair in their team.	Mastery and presentation of new material, concept development. Presentation and communication skills.
Co-Op Co-Op. Students work in groups to produce a particular group product to share with the whole class; each student makes a particular contribution to the group.	Learning and sharing complex material, often with multiple sources. Evaluation, application, analysis, synthesis. Conflict resolution, presentation skills. Planning, group decision making.
Group Investigation. Students identify a topic and organize into research groups to plan learning tasks or subtopics for investigation. Individual students gather and evaluate data and synthesize findings in a group report.	Application, analysis, inference, synthesis, evaluation. Planning, group decision making, analysis, synthesis. Conflict resolution, presentation skills.

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PORTFOLIO ASSESSMENT: USING PORTFOLIO AND ALTERNATIVE ASSESSMENT WITH LEP STUDENTS

J. Michael O'Malley and Lorraine Valdez Pierce

The Georgetown University Evaluation Assistance Center (EAC) - East has received increasing numbers of requests over the past few years for workshops and information on alternative assessment and portfolio development. Teachers and administrators working with language minority students have asserted for years that exclusive reliance on standardized tests is inappropriate for students who are acquiring English. The tests fail to provide an accurate measure of student knowledge and skills because they often require language, cultural knowledge, and test-taking skills that the students may not have learned.

One way to increase high school graduation and subject-area achievement rates is to improve the quality of the assessments used to determine growth. In light of the national education goals, it is important to look at the viability of using alternative and portfolio assessments in order to obtain the diagnostic information needed for closely monitoring student progress. When multiple measures are used regularly, student strengths and weaknesses in language, content areas, and learning strategies can be promptly identified and corresponding changes in instruction made.

Alternative assessments reflect student performance on instructional tasks and rely on teacher judgment in the design of the assessment and in the interpretation of student responses. One of the advantages of alternative assessment is that it can be conducted in the student's native language. While alternative assessments vary in format, they typically call upon the student to respond in ways that require integrated language use. In one format, a teacher might observe students performing authentic classroom tasks and rate their ability to apply language or thinking skills using a checklist or direct description of student performance. Alternative assessment techniques also include cloze test, writing samples, and student self-ratings. In performance assessment, a student completes an assignment alone or with other students, often in a content area, and prepares a summary or interpretation of the activity, which is then presented in either and oral or written report. The teacher's scoring of the oral or written product is often holistic, focusing on content knowledge and skills and the use of language functions such as explaining, informing, and justifying. Alternative assessments that require teacher judgment should be planned carefully, preferably with other teachers, to ensure that the scoring procedures produce reliable results (Navarrete, Wilde, Nelson, Martinez & Hargett, 1990; Valencia, 1990a).

Portfolio assessment is a systematic approach for focusing the information from both alternative and standardized assessments in order to make specific instructional decisions. Teachers determine what decisions they need to make (e.g., program placement, the extent of student progress, and grading) or which specific instructional objectives need to be assessed. They then collect information in the portfolio that will assist in making these decisions or in evaluating these objectives. Teachers organize the information and decide on procedures for analyzing and interpreting the different sources of data. Portfolio assessment is often a collaborative

NCRE The National Clearinghouse for Bilingual Education, November 1991, XV(1): 1-2.

process because more than one teacher, and possibly the student, will reach mutual decisions on what information is to be selected and maintained in the portfolio and how this information will be interpreted (Moya & O'Malley, 1990; Valencia, 1990b).

Alternative measures and portfolios are useful in assessing academic language skills because they allow teachers to observe a student's ability to integrate language and content. Teachers should use a variety of information sources, such as cloze tests, writing samples, and observations, rather than rely on a single measure. They can also interpret the results of standardized tests in light of these other sources of information. With language minority students who have intermediate level skills in English, the vocabulary section from a reading achievement test may be one indicator of the student's ability to profit from instructions exclusively in English, a point Saville-Troike (1991) makes in a recent NCBE monograph. However, multiple measures and alternative assessment procedures should always be used with LEP students, even those with intermediate level skills in English, in order to increase the validity of student assessments.

Individuals interested in receiving more information on alternative assessment or portfolio development can contact the EAC-East at 202-994-7117, or the EAC-West at 800-247-4269.

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PERFORMANCE AND PORTFOLIO ASSESSMENT FOR LANGUAGE MINORITY STUDENTS

Lorraine Valdez Pierce and J. Michael O'Malley

Portfolio Assessment

Portfolios present a practical approach to assembling student work, interpreting evidence of student performance, and assessing student performance relative to instructional objectives. The concept of portfolios has been adopted from the arts where students maintain evidence of their best work to illustrate their accomplishments (Jongsma, 1989). In classroom instruction, portfolios are used in a similar manner, but the contents of the portfolio may represent work in progress, formal products, and ratings or other evidence of student knowledge relative to specific objectives or purposes (Valencia, 1990).

There is no "right" way to design portfolios. Each classroom, school district, and state will reflect a unique approach to authentic assessment, and in this sense, each student's collection of documents will differ somewhat, depending on the purpose of the assessment (Tierney, Carter, & Desai, 1991). Creating and maintaining student portfolios require that a variety of teacher and staff decisions be made concerning the instructional goals or objectives to be assessed, who will be involved in the portfolio design and interpretation, what instruments will be selected and how student performance will be demonstrated, how portfolio information will be used, and how the results will be conveyed to others. Because the entire portfolio process can be complex, systematic review and evaluation of the process should be conducted on a periodic basis.

Steps to portfolio development should include designing the portfolio, planning for and collecting the necessary data, analyzing the portfolio contents, and using the results (Moya & O' Malley, in press). Each of these points will be described in the following sections.

Designing Portfolios

For the purposes of assessment, the material in a student portfolio is most useful when each piece collected reflects progress toward particular learning goals. To this end, that portfolios can be designed following a multistep process that involves

- setting the purpose of the portfolio;
- focusing on specific learning goals;
- identifying performance tasks and/or selecting appropriate instruments;
- setting criteria;
- selecting students to be assessed;
- collaborating with other teachers and staff;
- conducting staff development; and
- involving students and parents in the portfolio development process.

Each of the steps is discussed below.

Purpose

Before collecting any samples of student work, the first step in planning a portfolio is to determine the purpose for conducting the assessment, and how the results will be used (Moya & O'Malley, in press; Navarrete et al., 1990). Will the results be used for making decisions related to classroom instruction? Will they be used to determine whether a

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student is ready to be out of special English language support program, such as ESL, ESL-content, or bilingual education? Will they used to aid in assigning a student grade? Specifying how the results of the portfolio assessment are to be used will assist in determining the goals to be assessed and the samples of student work to be collected.

Specific Focus

The second step in portfolio design is focusing the portfolio on specific learning goals. Each portfolio should have a specific focus determined by school staff. The focus may be on oral or written language skills or on content area skills such as those required in mathematics, science, or social studies. Objectives may also be selected from goals contained in local curriculum frameworks, state guidelines, program objectives, or consensus among ESL/bilingual and mainstream teachers concerning important goals for learning. While it may be possible to collect student work for all content areas as well as for English language skills in a single student folder, attempting to do this for purposes of assessment could prove to be rather unwieldy. Providing a focus, on the other hand, avoids having to go through an overwhelming amount of information in each portfolio.

Performance Task/Instrument Selection

Once learning goals and performance objectives have been identified, portfolio designers need to identify performance tasks and instruments to be used to measure whether learning goals are being attained. School staff should strive to combine traditional and performance assessment measures in order to get multiple indicators of a student's ability level. Standardized tests are often required for district accountability needs. Using results obtained on standardized achievement tests together with anecdotal records, rating scales, teacher observation checklists, and writing samples to assess literacy skills provides much more information than standardized test results alone. Furthermore, having multiple indicators of student performance enables teachers to cross-check one type of information against another.

Each portfolio should also contain items which are required to assess progress on particular instructional goals and others which are optional. *Required* items might include those which are necessary to communicate a student's progress to other teachers or to administrators and can include a student's "best work," while *optional* items could be drafts of work in progress, ongoing ratings of performance, and occasional pieces selected by the student (Valencia, 1990). The use of required items introduces an element of consistency in the evaluation of student portfolios.

By making certain items obligatory and other optional, teachers get the information they need for making instructional decisions while also encouraging students to participate actively in portfolio design and use.

Setting Criteria

Teachers or school staff should determine criteria (performance standards) for interpreting portfolio contents before collecting any student data. Performance criteria must be established in order to determine the degree to which a student has attained the objectives each task/instrument is designed to assess. Teachers need to identify and establish a minimum number of specific objectives that illustrate attainment of the instructional goals. One way to set criteria is to require students to perform tasks either independently or with assistance. Another possibility is to define expected student performance in narrative or anecdotal form. The narrative can specify what the students should be able to do to meet the criterion for performance or growth over time.

Staff Collaboration

In portfolio assessment is to be undertaken by a school-based team, it will be essential to identify school staff willing to participate in the assessment process. Ideally, a cross-section of teachers, staff, and administrators at each school who serve the same student(s) could become members of a portfolio assessment team. For example, a team at the upper elementary level might consist of an ESL or bilingual education teacher, the grade level classroom teacher, a reading specialist, and the school principal. At the middle school level, the team might consist of a student's ESL or bilingual education teacher, content area teachers, and perhaps the school counselor.

If portfolio assessment is a totally new experience for school staff, it is probably a good idea to pilot test the approach with a small number of staff and students before using it on a school-wide or district-wide basis.

Staff Development

All staff involved in the portfolio process should receive information and training on how to plan, implement, and interpret portfolios, especially when portfolio assessment is to be conducted at the school-building or district-wide level. Staff preparation not only enables staff to collaborate with and support each other, it also builds critical support for the portfolio process itself. Staff should receive training on how to design portfolios, how to target specific learning objectives and select students (if portfolios are limited to only a part of the student population), and how to set criteria for each portfolio. Staff development will also be essential to planning individual portfolio contents and to designing, administering, and scoring holistic, performance-based measures such as oral interviews, teacher observation checklists, rating scales, and writing samples. Performance and portfolio assessment hold great promise for improving assessment, but they can only reach their potential when teachers master their use (Stiggins, 1990).

Student Selection

Portfolio teams or individual teachers need to consider several factors when deciding whether to implement portfolio assessment with one or more students. If the classroom teacher is acting on his/her own to gather the information (without any support from other school staff), initially it may be advisable to limit the number of portfolios to only a few students. This can prevent teachers from being overwhelmed by the data collection and analysis effort and giving up before experiencing the benefits of portfolio assessment. On the other hand, if portfolio assessment is to be a school- or district-wide initiative, and if more than a few teachers are going to be involved and provide staff development in its systematic implementation, then many or all students can be included in the procedure.

Student/Parent Involvement

The teacher and/or portfolio assessment team should encourage the active involvement of both student and parents in the assessment process. A key element in portfolio assessment is student self-evaluation. Students are asked to reflect on their progress toward learning goals and encouraged to select samples of their work which they believe illustrate progress toward these goals (Baron, 1992a; Palmer Wolf et al., 1992; Tierney, Carter, & Desai, 1991). Teacher/student/parent conferences can be scheduled at times convenient for the parents so that they can be informed of their child's progress. Portfolio contents provide much more information to parents about their child's progress. Portfolio content provides much more information to parents about their child's learning than the percentiles represented on standardized achievement tests. Furthermore, parents appreciate being given an opportunity to respond to examples of student work, particularly items that show progress and substantiate grades given to the student.

Planning for and Collecting the Data

Data collection for portfolio assessment consists of identifying information to be entered into the portfolio, determining the frequency of data collection, creating a system to record and monitor the frequency of data collection, and setting guidelines for the removal and updating of portfolio material. These guidelines may vary depending on the purpose of the portfolio.

At the elementary and middle school levels, portfolios can be updated on a semester basis or at each grading period. Some schools are experimenting with portfolios which present increasingly comprehensive information on students by beginning with an initial portfolio every nine weeks, a semester portfolio drawn from these, and a year-end portfolio (Palmer Wolf et al., 1992). However, if the purpose is to closely monitor student progress, assessments should take place approximately every four to six weeks. Occasional items can be placed in the portfolio on a more frequent basis and removed when they have been superseded by more recent work or have become redundant. The decision to remove or maintain portfolio materials is a collaborative one to be made between the student and the teacher.

Analyzing Portfolio Contents

To determine whether a portfolio's contents reflect a student's progress toward learning goals, the teacher or portfolio assessment team can match contents to specific learning goals and objectives on a cover sheet, as illustrated in the Sample Portfolio Analysis Form (below) (adapted by Pierce from Moya and O'Malley, in press). Note that student objectives are placed in the left-most column of Form (below), followed by illustrations of student progress, and a specific citation or page reference to materials that support each objective. When additional evidence of student progress for each objective is entered or found in the portfolio, relevant page citations can be added.

Summary comments, interpretations, and recommendations can be added at the bottom of the Portfolio Analysis Form. These anecdotal notes help interpret and integrate the results of student performance across various measures or skill areas. Forms such as these offer several advantages: teachers can indicate the relationship between each item in the portfolio and the objectives being assessed; they can make specific suggestions for instructional adaptations to student needs; and they can sift through portfolio contents periodically to remove materials that, although interesting, have no use in evaluating student progress.

To determine how students acquiring English as their second language are progressing in comparison to other students, performance assessments can be administered to native or proficient English-speaking grade-level peers in mainstream classes and average ratings calculated for these students as well as for the English language learners. Administering any of the performance assessments described in this publication to a locally select, "average" group of English-speaking peers will provide most meaningful basis for comparison. This will inform the teacher regarding both the English learner's progress and his/her preparation for functioning at an independent/average level in a typical mainstream classroom.

Using Portfolio Results

There are a variety of ways in which portfolio results can be used. The Sample Portfolio Analysis Form shown above is an essential component in many of these uses:

- *diagnosis and placement*—student strengths and needs are examined with regard to major curriculum objectives;
- *monitoring student progress*—growth in learning over the course of the semester or school year can be monitored;

Sample Portfolio Analysis Form

Student: Marisel A. Date: 5/1/92

Teacher: Jones Grade: 4

Educational Goal: Student demonstrates ability on a variety of writing tasks

Performance Task	Contents Illustrating Student Progress	Date
• Demonstrates interest and ability in a variety of writing	Literacy Development Checklist	3/20/92
• Writes a short story	Writing Sample: Dog Story	4/22/92
• Writes to communicate with others	Letter Dialog Journal	4/10/92 3/3/92
• Expresses writing preferences	Self-Assessment of Writing	4/24/92
• Shares writing with others	Anecdotal Record	4/6/92
Summary Comments:		

- *feedback on the effectiveness of instruction*—if individual students are not progressing, the instructional approach should be re-evaluated and appropriate adaptations made to meet each student's needs. One possible conclusion is that a student needs instructional support beyond the services provided by the classroom(s) in which the portfolio has been maintained;
- *communication with other teachers*—this includes other members of the portfolio team and those at other schools to which students may transfer;
- *student feedback*—portfolios enable students to comment and reflect on their progress and plan what they would like to do to maintain or change; and
- *communication with parents*—portfolios provide parents with concrete evidence which supports instructional decisions.

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INVITING CHILDREN TO MAKE CONNECTIONS BETWEEN READING AND WRITING

Katherine Davies Samway and Dorothy Taylor

Not long ago, Homa an eighth grader, explained in her reading dialogue journal how reading and writing can influence each other:

> I . . . don't think that it matters if a book is a mystery or not for the author to make you ask questions from yourself. I think most of the books I've read make me ask questions from myself in the beginning and I have written stories that make the readers of them ask questions and I can start another one that way too!!!

Homa's remark reveals the way in which she was conscious of how writers craft their stories—and how her reading influenced her writing. Professional writers often talk about how their writing is influenced by what they read; Homa's comments show that children who are developing readers and writers and second language learners like herself can make and express connections between their reading and writing.

Sometimes we are fortunate to be in the right place at the right time to hear children spontaneously share insights into their literacy process. As teachers, we have made inferences about how children's reading has influenced what or how they wrote (e.g., "I saw her reading *Tuck Everlasting* [Babbit, 1975] last week, and this story of hers reminds me of it. I bet she modeled it after *Tuck Everlasting*.") We realized, however, that we cannot rely solely on our hunches. We need to talk directly with students about these issues in order to better understand them as learners. We have, therefore, interviewed students to find out how their reading influences their writing. Some of these interviews were face-to-face interviews with Taylor, and others were telephoned interviews with Samway.

The Children and Their ESOL Classes

We will describe some connections that three nonnative-English-speaking middle school children related when asked to comment on how their reading influenced their writing. Eduardo (sixth grade), Homa (eighth grade), and Shanti (eighth grade, special education placement) live in a suburban neighborhood in Massachusetts. Their native languages are Spanish, Farsi, and Hindi respectively. They attend an ESOL pull-out class two to three times a week, each class lasting for approximately 50 minutes. In these classes, they write on self-selected topics and confer with their peers and teacher about their writing.

They correspond with Taylor, their ESOL teacher, in a reading dialogue journal in which they reflect upon the books they are reading out of class. They also correspond with Samway in letters about their writing processes. In other words, the students have multiple opportunities to be thoughtful readers and writers. As teachers, we are interested in what we can do to enhance this kind of reflectiveness. That is, we believe that it is important to explore classroom learning events that are conducive to thoughtful learning. In the final section of this paper, we will discuss in more detail how the events in their ESOL classes contributed to the children's ability to see and

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talk about connections between their reading and writing.

Connections the Children Made

When the children talked about how books they read had influenced their writing, we learned a great deal about them. Sometimes our hunches were confirmed, but more often we were given access to new information about the writing processes of these young writers. They talked about how the content of their stories, the vocabulary and the mechanical features they used had often been influenced by what they had read. But mostly, they talked about how particular literary features that they had encountered in the books they read—genre, leads, and plausibility—had influenced their writing. In doing so, they demonstrated an analytical awareness of what one can do or cannot do as a writer.

Genre

Most of the children's writing consisted of personal narrative or third-person fictionalized prose. However, they experimented within their chosen genre. For example, Eduardo had read and been very impressed by O. Henry stories with their twists at the end. When Taylor asked him what he liked about the stories, Eduardo responded:

> It was interesting . . . because you always think, in the end, the opposite thing you think is going to happen happens. It's always weird.

After writing a story about a soccer tournament, Eduardo commented that he deliberately tried to have an unexpected ending. The story describes how his team was winning 3-0 at half-time; in the second half it started to rain, the score was tied, mothers came to collect their children, and the narrator's mother also picked him up before the end of the game and was very angry that he got so wet, exposing himself to the possibility of sickness. He did get sick, and when he was well again, he returned to his team. Eduardo ended his story in this way:

> When I was okay I went to practice with my team. I asked them, "Who won?" They answered, "They did—ten to three. You are out of the team for a season for not staying the whole game." "Come on", I said, but they told me, "Get out of here, and never ask if you can come to practice, or be on the team. WIMP!!!"
>
> I waited a whole year so I could play again with the team. Now they aren't angry with me anymore.

Although the ending seemed a bit implausible at first reading, it was unexpected.

Eduardo impressed us with the way in which he built up the suspense. He commented on how he enjoyed stories with surprise endings, and went on to reflect on how O. Henry stories had influenced him as a writer:

Eduardo: Like, when I write a story from O. Henry.

Teacher: Are you thinking specifically of "A Soccer Tournament"? That O. Henry has influenced your writing in "A Soccer Tournament"?

Eduardo: Yeah, because we were playing super okay and then it started to rain and we lost.

Teacher: Okay, so you started out with one idea and you put some kind of twist on it?

Eduardo: I tried to.

Eduardo had been inspired by O. Henry stories to try something he had encountered in them—an unexpected ending.

The children read fairy tales and sometimes used this genre as a model. For example, after reading Cinderella stories, Shanti wrote a story about how two of her favorite singers married.

The children often talked about their readings and themes with their peers and ESOL teacher, and in these discussions, they explored special, interesting elements of the genre. Later, they sometimes incorporated those elements into their own writing. In

this way, they often transformed personal narratives into fictionalized stories utilizing genre features that appealed to them.

Leads

Through reading, Homa learned how essential it is for authors to begin their stories with a powerful, captivating lead. She was acutely aware of the difficulties for a reader if the beginning is labored and tedious, and she was determined not to do this in her own writing. In her reading dialogue journal, Homa Wrote:

> I think there would be a way for the author of the book to describe the characters of the book without making the book boring. Sometimes in some books the author doesn't even have to describe what the characters are like because the reader will find out what they're like by the things the character does in the book. Do you know what I mean!! In the short stories I write I don't really describe what the people are like in it because I think maybe that's for the reader to decide . . . . In the beginning of the books I pay attention to what kind of writing that is . . . sometimes I try to use that kind of writing.

When she read and wrote, Homa critically analyzed the craft of writing. She was aware of how other authors write and used that knowledge to enhance her own writing.

For example, she commented that she had noticed that beginning a story with a dialogue can be a very effective way of capturing one's audience and began one her stories, *Bad News*, in the same way:

> "You know who just called?" Mom asked. "I don't know. Who?" I answered. "Just take a wild guess," Mom replied. "I don't know. Did Grandma call or something?" I asked, not too interested. "No but you say you were at the library doing your homework after school?" Mom questioned.

This story was about an occasion when the narrator deceived her mother and her mother found out. Later in the story, she was caught up in self-pity and was called to her parents' room because they had bad news for her. She was sure that the bad news concerned her punishment, but instead discovered that her great grandfather had died. It is a very poignant story, one in which dialogue in the form of telephone calls built up suspense, a skillful device for developing the plot.

Authors do not have long to capture their audiences. Through their reading, these young authors became acutely aware of the need for strategies to "hook" readers and spontaneously experimented with devices such as dialogues for accomplishing that.

Plausibility

The children read a lot of fiction and were constantly confronted by issues of plausibility, in the books they read and in the stories that they wrote. For example, Eduardo read and enjoyed *Aesop's Fables*. Later, he wrote his own fables, including this one:

> **The Bat and the Rabbits**
>
> "Help, help!" exclaimed a rabbit. When his mother was talking to another rabbit. "Oh, someone is kidnapping my son, if I wouldn't have left him there all alone." cried the rabbits mother.
>
> The other day all the rabbits knew what had happened. The next day the ugly bat kidnapper asked for 1,000,000 carrots. But the parents of the rabbit didn't have that much of carrots so they asked for them to another rabbits. Finally the rabbit's family got that amount of carrots and they left it where the bat told them to. The bat didn't give the rabbit back, but he said he will give it back at night. "It is almost night, we will get him back," said the mother.
>
> At night when the rabbit was supposed to be home, someone put something between the two leaves in front of the burrow.
>
> The mother took the leaves out very carefully and she fainted because it was her son ear.

> The bat did this many times but when the tigers caught him they killed the ugly bat.
>
> IF YOU KILL WITHOUT ANY REASON YOU HAVE TO FEEL WHAT DYE IS LIKE.

In an earlier draft, the ransom had involved money. Eduardo and his ESOL teacher had talked about whether this was plausible, even in a fable, and he returned to the fables he had read to explore the issue further. Later, he said:

> You told me that I used to put too many characteristics of persons in the animals. Now I put some, but not as much as . . . like they go bowling or have money . . . I said instead of money, one million carrots.

Eduardo's writing and comments reflected his understanding that authors have considerable license, but that there are bounds.

Learning to Make Connections

Talking about one's own literacy processes and development is not an easy task, particularly if one has not had many opportunities to practice the skill. This is especially true for nonnative English speakers who generally have fewer opportunities to engage in this type of reflective activity. In their ESOL class, Homa, Shanti, and Eduardo were offered many opportunities to be thoughtful readers and writers. What follows is a description of some of the ESOL classroom activities and an explanation of how they may have contributed to the children's developing powers of reflection.

Self-Selection of Reading Materials and Writing Topics

Homa loved mysteries, Eduardo admired the irony of the O. Henry twist, and Shanti preferred a happy fairy tale ending. In their interviews, each of these students connected a reading preference to a writing style that they had admired and modeled. In their ESOL class, the students were encouraged to read and write extensively on self-selected topics. Teachers and peers were sources for book and topic ideas, but the final responsibility for selection was up to the individual student. Thus, students quickly developed areas of special interest and expertise and applied this knowledge to their writing (e.g., Homa's recognition and use of dialogue as a way to make a captivating lead stemmed from her interest in suspense and mysteries).

Students learned quickly to link to one another as sources of ideas for books to read or topics to write about. Eduardo's interest in O. Henry was sparked when another student, Mikhail, excitedly pulled the collection of O. Henry stories off the shelf and exclaimed that he had read many of these stories in Russian. Eduardo waited eagerly for him to return the book to the bookshelf so that *he* could read it. Knowledge often circled the room this way in a kind of domino effect.

Peer and Teacher Writing Conferences

Students read their pieces of writing in peer and teacher conferences and were encouraged to provide thoughtful criticism. (For a more detailed description of this approach to writing instructions [writer's workshop], see Atwell, 1987; Calkins, 1986; Graves, 1983; Samway, 1992; and Urzúa, 1987.) It was during a writing conference that Eduardo talked about the issue of plausibility in his story "The Bat and the Rabbits." Eduardo immediately grasped his teacher's point about the sensitive balance between reality and imagination in fiction. After the discussion about "The Bat and the Rabbits," Eduardo was overhead saying to another student, "It's interesting, but is it believable?"

Multiple Opportunities for Written Reflection

Once or twice a week, the students and Taylor wrote to each other in a reading dialogue journal. (For a more detailed description of dialogue journals, see Atwell, 1987;

Fulwiler, 1987; and Peyton & Reed, 1990.) Although the focus of the correspondence was on books, the students and teacher often found themselves making spontaneous connections between what they were reading and their own writing (e.g., Homa's comments about the self-questioning nature of stories quoted at the beginning of the article).

The students also corresponded with Samway in letters that focused on discussions about writing and writing processes. Prior to the interview in which Shanti discussed the influence of Cinderella on her story, Shanti and Samway had a similar conversation in a letter. Shanti wrote the following:

> you asked me why my story was easier. because I read lot cinderella stories because they give lot of ideas like stepsister, stepbrother and stepfather.

Shanti and other children had multiple opportunities and more than one person with whom to reflect on their processes. As a consequence, the children developed confidence in their own insights. Shanti provides an excellent example of this phenomenon. Her reading dialogue journal entries were rather formulaic throughout the school year (i.e., listing the title, the name of the author, and her favorite part). In contrast, in her letters to Samway, she displayed a growing self-assuredness; she initiated topics and asked and answered questions. In the interview with Taylor, that self-assuredness emerged when the topic turned to the point that she and Samway had discussed earlier in their letter. For the first time in the interview, Shanti spoke without hesitation and explained and illustrated her points at length.

Eduardo also had multiple opportunities to reflect upon his literacy skills. In this case, his language arts teacher also invited students to reflect upon books and writing. When discussing the influence of his reading dialogue journal, Eduardo commented:

> In L.A. [Language Arts] I can do it quicker because I have, like, more experience with this. [Name of Language Arts teacher] is telling us, "What do you think about the book?" Now I can answer it because I'm reading maybe this book and in there—so I can say the same thing and it's easy.

Literature Studies

Although students were given a great deal of time to develop their individual taste and expertise as readers, students occasionally worked together to study a piece or pieces of literature as a group. (For more detailed description of literature studies, see Edelsky, 1988; Peterson & Eeds, 1990; and Samway, et al., 1991.) These discussions were open-ended and students were free to raise any issues suggested by the text. In many ways, literature studies serve the same purpose as writing conferences—they give students and teachers an opportunity to explore texts collaboratively. When Shanti commented that her story was easier because she had read a lot of Cinderella stories, she was referring to ESOL class discussions about a collection of Cinderella stories from around the world. Her ESOL class had just completed these discussions when she spontaneously wrote her story.

Concluding Remarks

All of the activities described above reflect the value of a collaborative language and literacy environment. When adults and children are members of a learning community, they are able to help each other generate writing topics, select books to read, refine ideas, and assume a more conscious, critical stance as a reader and writer. The young people introduced in this paper have had many opportunities to be reflective readers and writers. Like professional writers, they are conscious of how others craft stories. When they read, they are aware of what works and does not work, and often utilize

that knowledge when they write. For example, they borrow elements from other people's writing that catch their imagination and seem appropriate for their own writing. Because of the literacy experiences available to them, the children have more resources at their disposal when working on their writing, thereby enhancing their literacy development. As Shirley Brice Heath (1985) has pointed out, children must be provided with opportunities to develop such reflective powers in order for extensive literacy to emerge.

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SHELTERED ENGLISH TECHNIQUES IN THE MAINSTREAM CLASS: GUIDELINES AND TECHNIQUES FOR TEACHERS

Trish Sullivan

The 1990 census has demonstrated that which we already know: California's population has become increasingly diverse in language and cultural backgrounds. While this diversity brings exciting opportunities for a multicultural society, it can also bring frustration to the already-busy teachers who are finding themselves in classrooms with at least a few students who are learning a new language as well as new subject matter. It is of prime importance for the new LEP students to keep their first languages, but if there is no bilingual teacher or bilingual classroom available for these new students, how can the teacher best assist them?

In this article, I offer a few guidelines for teachers who are helping students acquire English language skills as they acquire knowledge of new subject matter. I also give a list of materials and resources for further guidance. All of the suggestions below are based on sound research; many of them take little or no extra planning time on the part of a busy teacher.

Guidelines

Increase wait time.

Give your LEP students time to think and process the information before you rush in with answers. A student may know the answer, but needs a little more processing time in order to say it in English.

Respond to the message.

If a student has the answer correct and you can understand it, don't correct his or her grammar. The exact word and correct grammatical response will develop with time, especially with young children. Instead, repeat his or her answer, putting it into standard English, and let the student know that you are pleased with his or her response.

Simplify your language.

Speak directly to the student, emphasizing important nouns and verbs, and using as few extra words as possible. Repetition and speaking louder doesn't help; rephrasing accompanied by body language, does.

Don't force reticent students to speak.

Instead, give the student an opportunity to demonstrate his or her comprehension and knowledge through body actions, drawing pictures, manipulating objects, or pointing.

Demonstrate; use manipulatives.

Whenever possible, accompany your messages with gestures, pictures, and objects that help get the meaning across. Use a variety of different pictures or objects for the same idea. Give an immediate context for new words.

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Make use of all senses.

Give students a chance to touch things, to listen to sounds, even to smell and taste when possible. Talk about the words that describe these senses as the student physically experiences something. Write new words as well as say them.

Pair or group LEP students with native speakers.

Much of a child's language learning comes from interacting with his or her peers. Give your students tasks to complete that require interaction of each member of the group, but arrange it so that the LEP student has linguistically easier tasks. Utilize cooperative learning techniques in a student-centered classroom.

Adapt the materials.

Don't "water down" the content. Rather, make the concepts more accessible and comprehensible by adding pictures, charts, maps, time-lines, and diagrams in addition to simplifying the language.

Increase your own knowledge.

Learn as much as you can about the language and culture of your LEP students. Go to movies, read books, look at pictures of the countries. Keep the similarities and differences in mind and then check your knowledge by asking your students whether they agree with your impressions. Learn as much of the student's language as you can, even a few words help. Widen your own world view; think of alternative ways to reach the goals you have for your class.

Build on the student's prior knowledge.

Find out as much as you can about how and what a student learned in his or her own country. Then try to make a connection between the ideas and concepts you are teaching and the student's previous knowledge or previous way of being taught. Encourage the students to point out differences and connect similarities.

Support the student's home language and culture; bring it into the classroom.

Your goal should be to encourage the students to keep their home languages as they also acquire English. Many children in this world grow up speaking more than one language: it's an advantage. Let students help bring about a multicultural perspective to the subjects you are teaching. Students might be able to bring in pictures, poems, dances, proverbs, or games. They might be able to demonstrate a new way to do math problems or bring in a map that shows a different perspective than that given in your history or geography book. Encourage students to bring these items in as a part of the subject you are teaching, not just as a separate activity. Do whatever you can to help your fluent English-speaking students see the LEP student as a knowledgeable person from a respected culture.

Help the student acquire "recess skills."

The words and activities used for playing with balls, ropes, marbles, and schoolyard equipment are essential to social adjustment. Maybe a native English-speaking student can be the "teacher" for this. Set up a playground buddy system.

ESL AND THE CONTENT AREAS

ESL THROUGH CONTENT-AREA INSTRUCTION

Tarey Reilly

ESL and Content-Area Instruction

Content-based ESL is a method that integrates English-as-a-second-language instruction with subject matter instruction. The technique focuses not only on learning a second language, but on using that language as a medium to learn mathematics, science, social studies, and other academic subjects. Although this approach has been used for many years in adult, professional, and university education programs for foreign students, content-based ESL programs at the elementary and secondary school levels are just emerging. One of the reasons for increasing interest among educators in developing content-based language instruction is the theory that language acquisition is based on input that is meaningful and understandable to the learner (Krashen, 1981, 1982). Parallels drawn between first and second language acquisition suggest that the kinds of input that children get from their caregivers should serve as a model for teachers in the input they provide to second language learners, regardless of age. Input must be comprehensible to the learner and be offered in such a way as to allow multiple opportunities to understand and use the language. If comprehensible input is provided and the student feels little anxiety, then acquisition will take place.

Krashen posits a dichotomy in language learning between acquisition and learning. Acquisition serves to initiate all language while learning serves only as a monitor or editor, activated when the learner has time and is focusing on the correctness of his or her language. In another dichotomy, Cummins (1979, 1981) has hypothesized two different kinds of language proficiency: basic interpersonal communication skills (BICS), which are language skills used in interpersonal relations or in informal situations; and cognitive academic language proficiency (CALP), which is the kind of language proficiency required to make sense of and use academic language in less contextually rich (or context-reduced) situations. Cummins suggests that BICS are relatively easy to acquire, taking only one to two years, but that CALP is much more difficult, taking five to seven years and necessitating direct teaching of the language in the academic context.

Many content-based ESL programs have been developed to provide students with an opportunity to learn CALP, as well as to provide a less abrupt transition from the ESL classroom to an all-English academic program. Content-based ESL courses—whether taught by the ESL teacher, the content-area teacher, or some combination—provide direct instruction in the special language of the subject matter, while focusing attention as much or more on the subject matter itself.

Mathematics and ESL

The language of mathematics has its own special vocabulary, syntax (sentence structure), semantic properties (truth conditions), and discourse (text) features. Math texts lack redundancy and paraphrase, are conceptually packed, are of high density, require up-and-down and left-to-right eye movements, require a slower reading rate than natural language texts, require multiple readings, use a variety of symbols such as charts and graphs, and contain a large number of technical words with precise meanings (Bye, 1975). These language features, when combined with the mathematics content of the

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written text, require the students to apply mathematics concepts, procedures, and applications they have already learned.

One needs to carefully structure the classroom environment when teaching ESL through mathematics content to ensure second language acquisition. Instructional activities should promote second language development through a natural, subconscious process by focusing not on language, but on communicating the concepts, processes, and applications of mathematics. Instructional activities in both the ESL and mathematics classroom should be built on students' real-life experiences and prior knowledge of mathematics and offer situations in which students can interact with the teacher and fellow students. Lessons that teach new concepts in mathematics should use graphics, manipulatives, and other hands-on, concrete materials that clarify and reinforce through language meanings in mathematics. Studies have shown that limited English proficient students can acquire both mathematics and English simultaneously when they are involved in interactive activities. (Wilson, DeAvila, & Intilio, 1982; DeAvila & Duncan, 1984)

Science and ESL

Science is generally defined as a set of concepts and relationships about natural phenomena developed through the processes of observation, identification, description, experimental investigation, and theoretical explanation. Through scientific inquiry, students develop learning processes inherent in observing, classifying, comparing, communicating, inferring, predicting, and identifying space and relationships. Current approaches to science and second language education based on research and classroom practice indicate a set of central notions for relating science and ESL. Science inquiry facilitates the development of ESL by providing the following:

- a "sociocognitive conflict" that spurs development of a new language system;
- a source of meaningful and relevant language input, using hands-on materials and texts with extralinguistic devices (diagrams, charts, pictures) to clarify meaning;
- positive affective conditions of high motivation and low anxiety;
- extensive opportunities for small-group interactions in which students negotiate meanings and receive comprehensible language input;
- opportunities for heterogeneous grouping with the role of peer tutor alternating among students, which arrangement contributes to input, interaction, and a positive, affective climate;
- experience with a wide range of language functions;
- extensive vocabulary development needed for school success;
- the integration of all modalities of language use: listening, speaking, reading, and writing;
- literacy-related tasks for development of cognitive and academic language proficiency; and
- the use of prior cultural and educational experiences for developing new concepts.

Science provides a rich context for genuine language use. From a language acquisition perspective, science can serve as a focal point around which oral language and literacy in ESL can develop. Specifically, science offers:

- interesting, relevant, and challenging content;
- opportunities for students to negotiate meanings;
- an abundance of appropriate language input;
- conditions for keeping students involved;
- materials for development of reading;

- activities for development of writing; and experiences with the forms and functions of English.

Social Studies and ESL

An ESL in social studies class should be concerned with more than just historical facts, geography, and terminology. It can promote the development of critical concepts of American history, thereby helping culturally different students to understand their new country, the United States, and its origins. Teachers can use language classes as a means of expanding social studies knowledge as well as use social studies content to enhance language development. Conventional instructional activities may be adapted by teachers not only to enhance LEP students' language development and knowledge of social studies, but to develop their cognitive skills as well.

Strategies include:

- Use of Manipulatives and Multimedia Materials.

  Students need visual materials to understand time periods in history; for example, photographs and prints, realia and filmstrips help students understand ways of life of the Americans living in the colonial period.

- Language Experiences.

  The teacher guides students' spontneous speech by targeting specific vocabulary structures and concepts from the stories elicited from the students. For example, in an intermediate-level ESL social studies class studying the role of the Constitutional Convention in writing the United States Constitution, the concept of making decisions by reaching compromises may be an entirely new idea. The social studies teacher needs to determine whether the students can recall aspects from their own countries' governments that might be similar. If the students do not clearly understand the topic, then the teacher must create an experience that the students can draw from later. For example, the students could role-play various scenes form colonial times, when power was concentrated in the hands of a few. They could represent different interest groups, each arguing to have certain laws passed. With the teacher as facilitator, the students will come to understand that they must give up certain wants if any progress is to be achieved. Once the students have understood the concept of compromise, the teacher can proceed with the lesson on the Constitution and how its laws were created.

- Semantic Webbing.

  Students learn how to perceive relationships and integrate information and concepts within the context of a main idea or topic (Freedman & Reynolds, 1980). Following an oral discussion or reading, students construct web strands and supports by putting key words or phrases in boxes. Boxes are connected to illustrate relationships and subheadings under the main idea, greatly aiding comprehension. For example, the students draw boxes with the events that led to the American Revolutionary War.

  Content-area teaching of English as a second language is not an end in itself but a means to an end. The strategies used for LEP students in social studies, mathematics, and science classes equip them with skills that will help them achieve success in the mainstream classroom.

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About the Monograph

ESL Through Content Area Instruction: Mathematics, Science, Social Studies *includes an introductory chapter on content-based ESL by the volume editor, JoAnn Crandall, as well as the following three subject-specific chapters:*

Mathematics—*Theresa Corasaniti Dale, Gilberto J. Cuevas*

Science—*Carolyn Kessler, Mary Ellen Quinn*

Social Studies—*Melissa King, Barbara Fagan, Terry Bratt, Rod Baer.*

This Digest is based on the ERIC/CLL Language in Education series monograph entitled ESL Through Content-Area Instruction: Mathematics, Science, Social Studies, *JoAnn Crandall, editor. It is available from Prentice-Hall/Regents for $10.67. To order, write to: Book Distribution Center, Route 59 at Brook Hill Dr., West Nyack, NY 10994 or call: 1-800-223-1360.*

TEACHING MATHEMATICS TO LIMITED ENGLISH PROFICIENT STUDENTS

Deborah J. Short and George Spanos

At an in-service workshop on content-based instruction, the facilitator presents an exercise designed to increase awareness of the difficulties encountered in learning mathematics in a second language. The participants are instructed to solve the following word problem in a language with which they have little or no familiarity (French), and to think about some questions that focus on factors involved in problem solving.

> Jean et André sont frères. Jean est L'ainé. Les deux vont au lycée qui se trouve à moins de cinq kilomètres de leur maison à Paris. Bien qu'il y ait une différence d'age de trois ans entre les deux frères, leurs niveaux scolaires ne sont séparés que par deux années. Jean est en quatrième. En quelle classe est André?

1. What are the language difficulties in this problem?
2. What are some math difficulties in this problem?
3. What are some extra-linguistic features that could cause difficulty in solving this problem.

The participants study the problem and try to answer the questions. They begin to realize the difficulties word problems may pose for nonnative-speaking students. The facilitator lists some possible language difficulties:

> difficult lexical items, such as *ainé, niveux, ait*; comparative terms or structures, such as *ainé*, and *moins de*; grammar structures with relative and subordinate clauses, such as *qui se trouve à, bien qu'il y ait.*

Before announcing the solution, the facilitator distributes an English version of the problem that simulates a student's word-for-word attempt at translating it.

> Jean and Andre are brothers. Jean is older. The two go to a school which is found less than five kilometers from their home in Paris. Although there is a difference in age of three years between the two brothers, their grade levels are only two years apart. Jean is in the fourth. What class is Andre in?

The group discovers some potential math pitfalls in the wording of the problem. There is extraneous information — unnecessary numbers (*five kilometers, three years*) - and a mixture of cardinal (*two, three*) and ordinal (*fourth*) numbers.

The facilitator then gives the answer: Andre is in the 6th grade at school. You are surprised. You had concluded that Andre was in second grade. After all, 4 - 2 = 2. In response to challenges by participants, the facilitator directs attention to question number 3 on the worksheet.

The facilitator explains that simply knowing the language of instruction and the required math skills may not be sufficient for solving problems. Cultural issues may be present as well. In this problem, one needs to know that the French educational system counts the grade levels in secondary school from 6th (youngest) to 1st (oldest). A teacher must be careful not to assume that all students have the same background knowledge.

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The Need for Language-Sensitive Content Instruction

The preceding example suggests the desirability of instruction that is sensitive to the linguistic and cultural needs of language minority students. From the language educator's point of view, it is obvious that a lack of proficiency in the language of instruction has harmful effects on a student's ability to deal with content-area texts, word problems, and lectures. Many language educators (e.g., Spanos, Rhodes, Dale and Crandall, 1988) and a growing number of mathematics and science educators (e.g., Cuevas, 1984, and Mestre, 1981) are providing arguments suggesting that the nature of math and science language imposes a heavy burden on *all* students regardless of the language of instruction. Furthermore, national organizations, such as the National Council of Teachers of Mathematics (NCTM), the Mathematical Sciences Education Board (MSB), and the American Association for the Advancement of Science (AAAS) are calling for an approach to education that emphasizes communication for all students, at all school levels.

The recently-published NCTM *Curriculum and Evaluation Standards for School Mathematics* (1989) lists *learning to communicate mathematically* (p. 8) as one of its five major goals. The NCTM authors maintain that all students can benefit from listening, reading, writing, speaking, and demonstration activities (pp. 26-28, 78-80, 140-142). For nonnative speakers of English, the NCTM states: Students whose primary language is not the language of instruction have unique needs. Specially designed activities and teaching strategies (developed with the assistance of language specialists) should be incorporated into the high school mathematics program in order for all students to have the opportunity to develop their mathematics potential regardless of a lack of proficiency in the language of instruction (p. 142).

The MSEB (1989) supports this call for more communication, recommending that teachers engage students in the construction of mathematical understanding through the use of group work, open discussions, presentations, and verbalization of mathematical ideas (p. 58). The MSEB advocates the use of nontraditional teaching models, such as paired classes, that have one teacher for language arts and one for mathematics and science (p. 65).

Such statements challenge language and content-area educators to begin working together to educate students for whom basic English skills or academic language skills are an obstacle to success.

Focusing on the Language of Mathematics

Some research on content-based instruction has focused on the language of mathematics. In 1984, researchers from the Center for Applied Linguistics (CAL) (Crandall, Dale, Rhodes, and Spanos, 1984) initiated a project funded by the Fund for the Improvement of Postsecondary Education (FIPSE). This study involved collaborative research with mathematics educators at several two-year colleges with high language-minority enrollments, and led to the development of a set of materials that could be used as a language-focused supplement to beginning algebra classes. The research phase of the project involved group problem-solving activities with language minority and majority students. The researchers produced evidence that the performance of both types of students was severely impeded by a lack of proficiency in the language of mathematics. Further, there were few language-based materials or activities in mathematics classrooms, and fewer opportunities for language arts teachers to become involved in educating these students. In sum, there was little articulation between language arts programs and mathematics programs, despite the obvious language deficiencies faced by large numbers of students enrolled in mathematics.

Meeting the Communication Need

Language minority students are often quick to develop the social language skills that enable them to communicate with their peers outside of the classroom. Within an academic context, however, this basic proficiency is inadequate because language minority students are inexperienced with or lack an understanding of the terminology and writing styles particular to a content area. These students may not be prepared to perform the higher order language and cognitive tasks required in rigorous academic content courses. This latter point also applies to native speakers of English who are often not skilled in analysis, argumentation, and evaluation.

Instruction that emphasizes language activities should be incorporated into content area lessons and curricula. This requires development in teacher training, curricula and materials, assessment, and cooperation between content and language educators.

Teacher Training

Training workshops and seminars can provide content teachers with an opportunity to consider language objectives and increased communication in their classes. An important aspect of these training seminars is the joint participation of content and language educators, providing opportunities for cooperative activities that draw on the expertise of both disciplines. Training seminars present teachers with the theoretical background for integrating language and content and provide opportunities for application through analyses of curricula, suggested instructional strategies and techniques, and assessment tools. Techniques include discovery learning, hands-on and problem-solving activities, cooperative learning and group work, and peer tutoring.

Teacher training can also be provided through the use of video. Several videos, currently under production (see Resources), demonstrate the content-language approach and materials, and have accompanying manuals for use by teachers for self-instruction when direct training is unavailable.

Curricula and Materials.

Once teachers have been trained to increase communication in class, they need appropriate materials for developing their lessons and activities. Teachers can attend workshops on material adaptation where they can learn to modify existing materials for their particular needs. In such workshops, strategy sheets (see Cuevas, Dale, Richardson, Tokar, & Willets, 1986) are used as developmental models. These strategy sheets focus on content and language objectives in lesson plans designed with communicative activities. Teachers might consider using prepared supplemental materials (e.g., *English Skills for Algebra*, Crandall, Dale, Rhodes, and Spanos, 1989) that help students become more proficient in the academic language through interactive listening, speaking, reading, and writing activities.

Assessment.

Although assessment tools for determining concept mastery of mathematics, science, and social studies are numerous, instruments for measuring content area language proficiency are scarce. Assessment tools, such as the *Pre-Algebra Lexicon* (see references), are currently being developed and field tested. The diagnostic techniques in the Pre-Algebra Lexicon are organized according to four math categories (concepts, operations, word problems, and problem solving) and the four language skills (listening, speaking, reading, and writing). The techniques allow teachers to assess growth in language skills within the context of daily mathematics instruction.

Cooperation between Language Educators and Content Educators.

Content teachers need to implement strategies for increasing teacher-student and student-student interaction in the classroom and to emphasize communication of the concepts. Language teachers need to address content language in their classes. Collaboration between content and language

teachers can be beneficial and essential to both, as language teachers can provide insights into linguistic and cultural problems and offer communicative activities for overcoming these problems, and content teachers can suggest topics for the language courses that reinforce the content the students face. These collaborative efforts can help students develop greater language proficiency and concept mastery.

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INTEGRATING SCIENCE AND LANGUAGE LEARNING

Ann K. Fathman, Mary Ellen Quinn and Carolyn Kessler

In order for new knowledge to be acquired—in science and in language—it must be an active, meaning-making process. The science classroom can also provide an excellent atmosphere for developing the kinds of social behaviors students need in order to find solutions to local and global problems. In science, language becomes the tool for communicating meanings and solutions.

For students learning English as a second language, new science concepts can pose difficult problems, especially for learners who come from diverse cultural backgrounds with worldviews that may differ from those reflected in the science classroom (Kessler & Quinn, 1987).

To promote the development of a second language through science, it may be helpful to examine learning and teaching principles that aid in the acquisition of both language and content. The principles of learning and teaching that form the basis for a new core science curriculum are remarkably similar to those widely recognized for promoting second language acquisition. The American Association for the Advancement of Science (AAAS) (1989) has formulated a set of recommendations on scientific literacy (including science, mathematics, and technology) as a conceptual base for reform in science education. Both the learning and teaching principles adapted from the Association's recommendations, as specified in *Science for All Americans*, are listed below. (Kessler, Quinn, & Fathman, 1992).

Learning Principles

The five learning principles proposed by the AAAS include the following:

1. Prior knowledge influences learning.
2. Learning moves from the concrete to the abstract.
3. Learning requires practice in new situations.
4. Effective learning requires feedback.
5. Learning is not necessarily an outcome of teaching.

Teaching Principles

Principles outlined by the AAAS for effective science teaching also relate closely to those for good language teaching. These include the following:

1. Teaching is consistent with the nature of scientific inquiry.
2. Teaching reflects scientific values.
3. Teaching aims to lower learning anxieties.
4. Teaching extends beyond the school.

Teaching Strategies for Language and Science

Teachers of science to students acquiring English can help students understand the basic content of science while improving their English skills by using specific teaching strategies that reflect the learning and

Excerpted from National Clearinghouse for Bilingual Education 1992.

teaching principles discussed above. To successfully teach science concepts to English learners, teachers need to give simultaneous attention to the language used and the content presented. This can be done by using the following strategies:

- promoting collaboration between teachers and among students;
- modifying language;
- increasing the relevancy of science lessons to students' everyday lives;
- adapting science materials; and
- using language teaching techniques in presenting science concepts.

Designing Science Activities for English Language Learners

A Model Unit for Science and Language Learning

In teaching science to English learners, the main concerns of the teacher are to make the science material understandable and meaningful, to motivate and involve the students, and to enhance communication. One approach to achieving these goals is to explore each science concept in different ways. This provides students with multiple occasions for listening to and using language structures and vocabulary related to a particular science concept. Fathman & Quinn (1989) have outlined a model for teaching science to students acquiring English in which science concepts are examined through three types of activities: a teacher demonstration, a group investigation, and an independent investigation.

By investigating each science concept through these three types of activities, students progress from a carefully guided presentation to an organized group inquiry to open-ended individual study. The sequencing of activities from teacher-directed to group-centered and student-initiated activities allows students to progress naturally through stages of language learning—from observing to solving, listening to speaking, interacting to initiating.

The focus in all three types of activities should be on *inquiry*. Even during a demonstration activity, the teacher should *guide* students into questioning and discovering relevant facts and concepts. Teachers should encourage critical thinking that facilitates comprehension of oral and written material and develops students' abilities to analyze that material. Activities should be open-ended so students can initiate and discover different ways of solving problems. Whether observing a demonstration, participating in a group, or working individually, students should develop an understanding of how to investigate through scientific observation and the collection and interpretation of data.

Before doing a *demonstration*, the teacher should find out what students' already know about the topic to be presented. In this way, students prior knowledge is activated. A teacher demonstration can serve a number of important functions such as: introducing a concept, creating interest in a topic, stimulating thinking so that students are ready to continue investigating on their own, showing students how to do something, and raising questions or presenting problems to solve. A demonstration can give students the opportunity to listen and observe before having to produce any language. The focus can be on the development of comprehension skills or on the learning of new vocabulary or concepts. In a demonstration, students watch and listen as the teacher speaks. A demonstration can be extended by having students repeat or modify what was said or done or take part in the discussion accompanying the demonstration. An initial oral and visual preview to a concept can greatly benefit a student's understanding of that topic.

After the teacher demonstration, a group *investigation* enhances comprehension and production skills through student interaction and allows for further exploration of science

concepts. Cooperative work in science activities provides an ideal environment in which to learn a new language. Language is acquired naturally as students listen to others and express themselves while working in a group.

Heterogenous grouping of students at different proficiency levels is important for providing models of good language use. More advanced students may need little guidance in following directions or carrying out an inquiry, and they can provide help for students who have less English proficiency. Roles taken by students within a group can be varied according to each student's proficiency level. For example, a student who is able to read and write English might record numbers on a chart or draw pictures illustrating the group's findings. Student participation and interaction should be encouraged through the questioning, observing, recording, and interpreting of data obtained by each group.

As a follow-up to the group activity, an *independent investigation* allows each student to examine a science concept on his or her own. Independent activities can also be carried out by pairs of students who may not yet be ready to work individually. An independent activity allows students to explore questions related to a science concept already familiar to them and extend their inquiries outside the classroom. Students at almost all levels of English proficiency can carry out individual inquiries, but they will differ in their ability to describe their observations and express solutions.

The sample concepts and activities that follow are brief examples of how to present science concepts using a teacher demonstration followed by group and independent activities.

1. CONCEPT: ELECTRICAL ENERGY CAUSES MOTION.		
Teacher Demonstration	**Group Investigation**	**Individual Investigation**
Use an inflated balloon to pick up small pieces of paper.	Use an inflated balloon to cause another balloon to move.	Use an inflated balloon to test what objects it will pick up.
2. CONCEPT: RAPID MOTION CAUSES THE TEMPERATURE OF OBJECTS TO RISE.		
Teacher Demonstration	**Group Investigation**	**Individual Investigation**
Rub a wooden block over sandpaper to show how the temperature of the block goes up.	Bend a paper clip rapidly back and forth and use cheeks to test for temperature change.	Find other objects (e.g., saw, chisel, file) outside of the class that change temperature after rapid motion and test them for temperature change.
3. CONCEPT: ANIMALS MOVE IN DIFFERENT WAYS; SOME ANIMALS MOVE BY STRETCHING.		
Teacher Demonstration	**Group Investigation**	**Individual Investigation**
Use earthworms to show how they move by stretching because they have no legs.	Observe earthworm activity when these are placed in a carton or foil.	Find examples of other animals without legs outside of class or pictures. Name and classify them according to how they move.
4. CONCEPT: RAPIDLY MOVING AIR CAUSES SOME OBJECTS TO RISE.		
Teacher Demonstration	**Group Investigation**	**Individual Investigation**
Hold a long piece of paper to the bottom lip and blow hard across the top of the paper to show how it moves up.	Blow hard across the top of a balloon and then try to explain why it rises and what makes airplanes rise into the air.	Use a fan to see what objects you can lift up into the air.

Language Focus: Sample Language Functions

In designing science activities for English learners, a teacher may want to focus on one or two language functions that are particularly appropriate for each activity. Language functions are specific uses of language for accomplishing certain purposes. An analysis of the kinds of functions needed in science activities is an essential first step in choosing a language focus for science lessons. The grammar focus can be determined by the structures necessary to express each language function. By focusing on functions used in science lessons, teachers provide students with information that has immediate practical value for understanding and communication both in and out of the classroom.

Some language functions that are frequently used in the science classroom are listed below.

directing
requesting
questioning
refusing
accepting
defining
describing
expressing opinions
agreeing
disagreeing
advising
suggesting
praising
cautioning
encouraging

Teachers can focus on language functions through oral ("What to Discuss") and written ("What to Record") exercises completed by students during and after an investigation (Fathman & Quinn, 1989). These exercises should vary in difficulty so that students at different proficiency levels can participate in activities, record their observations, and comment on their findings.

Language functions can be incorporated throughout science activities. For example, *directing* (giving and following directions) may be emphasized in an activity where the teacher first gives directions on how to build a rocket. This can be followed by an activity in which students work in groups to direct each other in building their own paper rockets.

Steps for Designing a Science Unit

The steps outlined below suggest how a teacher can develop activities on a science concept or theme.

1. Select a topic, e.g., *heat, light, animals.*
2. Choose a science concept, e.g., *light bends, water condenses.*
3. Identify the language functions necessary for science activities, e.g., *requesting, directing, informing.*
4. Design a teacher demonstration related to the concept.
5. Design one or more student group investigations to explore the concept.
6. Design individual or paired student investigations to explore the concept.
7. Plan oral exercises for developing listening and speaking skills.
8. Plan written exercises for developing literacy skills.

Conclusion

English language learners bring language and cultural differences to the science classroom. Integrating the teaching of science with language learning through collaborative interaction can result in the active negotiation of meaning through which these students come to learn scientific inquiry processes, English vocabulary and structures, and social interaction skills.

Principles for effective science teaching relate closely to those that promote language learning. These principles call for providing concrete experiences in which learners raise questions, make predictions and observations, collect data, and reach conclusions. They also call for classrooms where students come to see science as a process of inquiry, where anxieties are lowered and students

actively collaborate with one another, and where learning extends beyond the classroom.

Principles that promote both language learning and the acquisition of science concepts require relating new knowledge, moving from the concrete to the abstract, applying concepts in various settings, providing feedback, and making instruction meaningful (not overwhelming) to the learners. One approach to accomplishing this is to explore each science concept in different ways. A model has been presented in which science concepts are examined through three types of activities: a teacher demonstration, a group investigation, and independent student activities.

Teachers of learners of English have the opportunity to help their students progress in understanding science concepts while developing English listening, speaking, reading, and writing skills by applying specific teaching strategies that incorporate language functions and structures into science activities. These teaching strategies include promoting collaboration between teachers and among students, modifying teacher talk, making science relevant to students' everyday lives, adapting existing science materials and textbooks, and using language teaching techniques in presenting science concepts. By applying these strategies, teachers can give English learners the preparation they need for succeeding in the English language science classroom and ultimately in the larger school context.

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USING COMPUTERS TO IMPROVE STORY WRITING

Marjorie Montague and Fionelle Fonseca

Computers are highly motivating learning tools that actively engage students in the writing process (Montague, 1990). For elementary and secondary school students with learning problems, they offer an array of alternatives to traditional writing instruction. This article discusses (a) the advantages of using computer-assisted composing (CAC) to teach composition, (b) the effects of CAC on student writing, and (c) several caveats for teachers who plan to use CAC in their classrooms.

Advantages of CAC

Individualizing instruction for students with special learning needs in both regular and special education classrooms can be burdensome and time consuming for teachers. Computers can ease the burden of planning for the individual needs of students because of their adaptability to the user. Following are several advantages of using CAC for students with special learning needs.

1. Computer writing is an alternative for students who have handwriting problems. For students with learning problems, writing can be both physically and psychologically demanding. Computer keyboards offer an alternative and often pleasurable mode of writing for these students. Keyboard skills can be acquired easily even by very young children.
2. CAC facilitates the revision process. Both mechanical and content revision can be challenging and fun with the computer. Revision programs such as spelling checkers, thesauruses, and style analyzers allow students to analyze their writing, detect and correct errors, and improve their compositions as they compose. Text is easily moved, inserted, or deleted to help students reorganize or develop ideas.
3. CAC helps poor readers write. Synthesized or natural speech, which is now available and fairly easily installed in standard hardware, circumvents reading difficulties that many students with learning problems have. When students want text read, they can access the speech device and read along with the computerized narrator.
4. Computers facilitate discussion about writing. With teacher guidance, students learn to discuss ideas and develop plans for compositions. Then, as they write, they learn to evaluate the content, organization, and style of an essay or story. Teachers can monitor students' performance and intervene at any time to teach or refine a skill, interact with them regarding the content of the composition, or help them reflect on what they have written.
5. Computers are a naturally reinforcing learning tool. They are nonjudgmental in their acknowledgement of students responses and provide students with ongoing corrective and positive feedback.
6. CAC helps students become independent writers. Challenging integrative software programs are available for students of varying age and ability levels. Prompting programs and other interactive devices help students monitor their writing effectively.

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Effects of CAC on Student Writing

Writing process instruction (Graves, 1983) stresses ongoing revision and improvement of successive drafts of compositions. When paired with CAC, this instructional approach has improved both the quality and quantity of students' writing (for a review, see Montague, 1990). Computers facilitate the development of compositions over time by simplifying the revision process. Students can easily add, delete, or change text by using only a few word processing commands. The basic commands of most word processing programs can be learned by new students in one or two sessions, and new commands can be taught as needed. Research investigating the effects of CAC on the compositions of students who have received writing process instruction has produced several positive findings, which are highlighted in the following list:

1. Students tend to spend more time on the draft process when they use CAC rather than pencil and paper. This approach to composition instruction increases overall time on task.
2. Computer prompting programs such as CATCH (Daiute, 1986) and WANDAH (Friedman & Rand, 1989) can be used by students while they compose stories and essays. These programs have substantially improved both the amount and type of revising students do. Not only do they facilitate mechanical and grammatical error correction, they also increase the amount of content revision. Additionally, CAC seems to improve students' attitudes toward revision.
3. CAC encourages interaction between students and their teachers. Writing conferences, which are an important component of writing process instruction, can be scheduled or occur spontaneously as the teacher circulates among students who are composing on the computer. The teacher can then tailor writing instruction to students' individual needs.
4. Just as CAC improves students' interactions with teachers, it also seems to have a positive effect on interactions with peers. Students can confer about one another's writing and assist one another in surface-level or content revision of essays and stories. With CAC, students tend to talk more about text meaning.
5. In addition to improving the development of writing skills, CAC appears to have a positive effect on the development of reading skills. This may be due, in part, to the draft process instruction. Composing and revising on-line requires students to read and reread their own compositions. They also become involved in reading peers' compositions, so writing becomes a reading process as well.
6. Students' attitudes toward writing generally seem to improve with CAC. Neatly printed stories to share with other students often are motivating. Desktop publishing makes attractive production of newsletters, booklets, and class publications possible. By using these programs, students can publish their essays and stories and share them with classmates, friends, and family.

Caveats When Using CAC in the Classroom

Several caveats are presented here to help teachers establish effective computer writing environments for students, organize CAC instruction, and tailor instruction to the individual needs of learners.

First, teachers should become familiar with the school and community before implementing a CAC program. Teachers need to be aware of their students' environment, because students tend to write about their own experiences. For example, the inner-city students in our program wrote stories about their neighborhoods and families. They frequently encountered violence, sex, and drugs in their daily lives and wrote vivid sto-

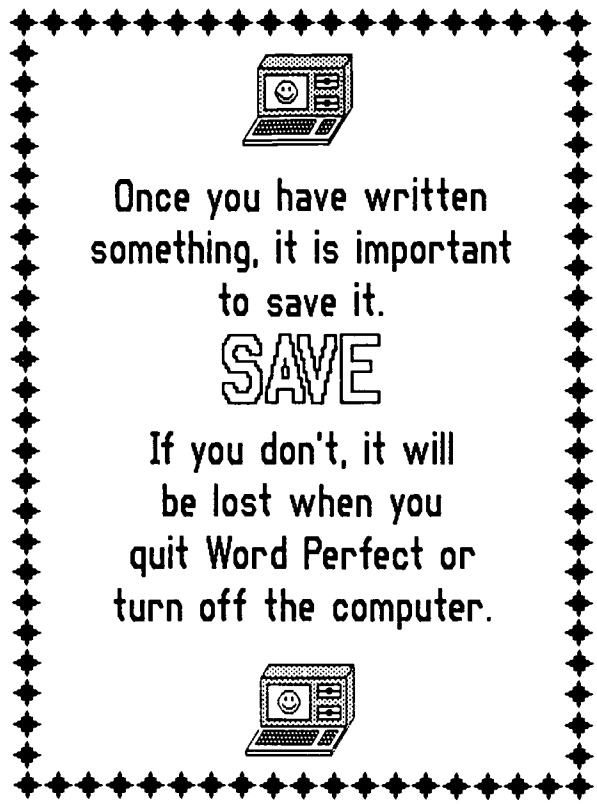
ries about these experiences. The teacher's openness and tolerance for the subjects students choose to write about (especially students who have writing difficulties) will help the students feel more comfortable about writing. They will begin to be more honest in their writing and less reluctant to express their ideas and feelings.

Second, teachers should start the CAC program at the beginning of the school year so that writing becomes part of the daily routine. They should also try to arrange the class schedule so that students use the computers at the same time and in the same room each day. This is particularly important if computer time must be reserved. Students with learning and behavioral problems need the consistency associated with a fixed routine. We found that schedule changes or system problems (hardware or software breakdowns) adversely affected our students' performance.

Third, it is important to select software that is appropriate to the age and ability level of the students, as well as appealing and interactive. Teachers may need to simplify the software directions for students. We selected a relatively sophisticated word processing program for our students because it was on the school network. To spark students' interest, we made a colorful student manual to introduce the basic commands they would be using. Figure 1 shows the section of the manual that instructs students on saving their stories and essays. This manual seemed to motivate students and served as a reference until the commands were memorized.

Fourth, the equipment must be maintained to ensure that the hardware and software are functioning. A working printer is vital because neatly printed drafts of students work should be accessible as needed. Most students will request hard copies of their stories or essays each day. These hard copies serve as tangible reinforcement and increase students' motivation to improve their writing. Students can edit the hard copy as well as do on-line editing and revision. They can share their draft copies with teachers and peers for comments and constructive criticism. Final copies can be printed in class publications and taken home for parents and friends to read.

Figure 1.
Excerpt from Word Processing Student Guide



Fifth, teachers should provide as much time as students need to learn to use the keyboard and the word processing program. Establishing good computer writing habits at the outset of CAC instruction is important to students' success as writers. Although most students will acquire keyboard skills and learn the word processing commands easily, others will need more instruction and practice. The same caveat should be heeded when teaching students to write particular kinds of compositions such as narratives or expository essays. Some students will need more intensive instruction than others in specific composition strategies.

Finally, it is important to give students latitude in the writing environment, but teachers should always set a purpose for writing. Students should be actively involved in setting personal writing goals, generating topics for writing, and critiquing their own composition and those written by their classmates. Teachers should guide rather than direct students as they engage in the writing process.

Conclusion

Computer-assisted composing can make the writing experience pleasurable for students who otherwise would be reluctant to write. As students become more familiar and comfortable with the writing process and CAC, the quality and quantity of their writing will improve. CAC can be a breakthrough for students with learning problems because it provides many different types of supports that make it possible for them to be productive and successful writers.

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ACADEMIC ACHIEVEMENT IN A SECOND LANGUAGE

Vickie W. Lewelling

The academic achievement of limited English proficient (LEP) students has long been a major national educational concern. Chamot & O'Malley (1987) suggest that, before LEP students are confronted with achieving in the regular classroom, they should be able to use English as a tool for learning subject matter. Often, LEP students become proficient in communications skills within a short time after their arrival in the United States. Sometimes, as a result of their communicative competence, these students are too quickly mainstreamed into the regular classroom where they encounter difficulties understanding and completing school work in the more cognitively demanding language needed for successful performance in academic subjects. Basic proficiency is not adequate since language-minority students do not have exposure to, or lack an understanding of, the vocabulary and context-specific language needed to perform the more demanding tasks required in academic courses (Short & Spanos, 1989). Cummins (1982) discusses the difference between the language needed for communication and the language necessary for achievement in school in terms of context-embedded and context-reduced language. Context-embedded language provides nonlinguistic supports, such as facial expressions, to give participants contextual information about what is being communicated. Context-reduced language, such as that found in most textbooks, provides only limited contextual information or extralinguistic support.

Factors That Promote or Inhibit Achievement in L2

Cognitive Development and First Language Proficiency

Second language acquisition research has shown that the development of the first language has a significant influence on the development of second language proficiency. The lack of continuing first language development has been found, in some cases, to inhibit the levels of second language proficiency and cognitive academic growth. Saville-Troike (1984, p. 214) reports that "in almost all cases, bilingual instructors' judgments of students' relative competence in native language studies coincided with the same students' relative achievement in English." Hakuta (1990) views native language proficiency as a strong indicator of second language development.

Age

Snow & Hoefnagel-Hohlè (1977) suggest that older students are better second language learners because they have achieved a higher level of cognitive maturity in their first language. Cognitive maturity, knowledge, and experience in the first language transfer to the second language. In contrast, Long (1990) concludes that there are maturational constraints on language learning, and that rate and level of attainment are contingent upon the age at which learning begins. He suggests that a sensitive period occurs in language learning. Learning that takes place

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during this period is successful, and learning taking place later is limited. Collier (1989) maintains that, for academic achievement, it does not matter when second language learning begins, as long as cognitive development continues in the first language at least through age 12.

Uninterrupted Academic Development

It is important not to limit the academic development of LEP students while they are learning English. Instruction focusing on communication skills only for 2-3 years will leave LEP students 2-3 years behind their English-speaking peers in school subjects (Collier & Thomas, 1989).

Attitude and Individual Differences

Oxford (1989) maintains that "language learning styles and strategies appear to be among the most important variables influencing performance in a second language." Saville-Troike (1984) found, in one study, that students who had active and competitive coping styles, and a more positive attitude toward learning English, achieved better in school.

Length of Time Needed to Achieve at Comparable Levels with Native-English-Speaking Peers

In a study conducted by Cummins (1981) of Canadian immigrants schooled entirely in English since arrival to Canada, learners took approximately 5-7 years to achieve comparable grade norms on achievement tests with their native-speaking peers.

Collier (1987) and Collier and Thomas (1988) studied the length of time it took for immigrants to achieve norms comparable to native English speakers on standardized achievement tests. Subjects were between age 4 and 16 when they arrived in the United States, had been in the country for 2-6 years, and had received instruction exclusively in English since their arrival. Results showed that children who were under 12 when they arrived, and who had had at least two years of schooling in their native country, reached the 50th percentile on reading, language arts, science, and social studies tests 5-7 years after arrival. Students arriving between 4 and 6, who had received little or no schooling in their native language, had not reached the 50th percentile after 6 years, and were expected to reach it after 7-10 years. The studies also found that adolescent arrivals studying only in English need 7-10 years to achieve at equal levels with native peers, and, if unable to continue the study of academic subjects while learning English, will not have enough time left in school to make up lost years of academic instruction.

A number of studies comparing the achievement of students schooled in English only and bilingual education programs, found that, after 4-5 years of instruction, bilingual program students made dramatic academic gains and the English-only group dropped below their grade level. "L1 instruction throughout elementary school years, coupled with gradual introduction of the second language, seems to produce a consistent pattern of greater achievement in the second language at the end of 4-7 years of schooling, even though the total number of hours of instruction in the second language may be dramatically smaller when compared with schooling in the second language only" (Collier, 1989, P. 522).

Transfer of Skills from L1 to L2

Cummins (1982) refers to the language needed for academic success as cognitive academic language proficiency (CALP). This type of proficiency is related to cognitive skills and conceptual knowledge and can be transferred from the native language to English. Saville-Troike (1988, p. 5) describes transfer as "a preexisting knowledge base for making inferences and predictions" or a "preexisting script for school." Hakuta gives the example that "a child learning about velocity in Spanish should be able to transfer this knowledge to English without having to

relearn the concepts as long as the relevant vocabulary (in English) is available" (Hakuta, 1990, p. 7).

Program Models That Promote Academic Achievement in L2

Successful program models for promoting the academic achievement of LEP students are those that enable these students to develop, or continue developing, academic skills while learning English. In areas where a significant proportion of the LEP population speaks the same native language, *bilingual education programs* "are highly recommended, since bilingual instruction is the only approach that combines acquisition of the target language (English), academic progress through the native language, and the bonus of bilingualism" (Santiago, 1989, p. 15).

In schools where too few students share the same native language, a recommended option is teaching *English as a second language (ESL)* using *content-area instruction*, a technique that focuses on using a second language as the medium of instruction for mathematics, science, social studies, and other academic subjects. "Many content-based ESL programs have developed to provide students with an opportunity to learn CALP, as well as to provide a less abrupt transition from the ESL classroom to an all-English medium academic program" (Crandall, 1987, p. 7).

Several studies have documented the success of *bilingual immersion programs* (also called two-way language development, dual language, and developmental bilingual education). Bilingual immersion programs are full-time programs, for both LEP and English-speaking students, that use two languages—English and the native language of the LEP group—for instruction. In some programs, the languages are used for instruction on alternating days, or one language may be used in the morning and the other in the afternoon. Other programs divide the use of the two languages by content, with some subjects taught in English and others taught in the native language of the LEP students. Because native English-speaking students and LEP students learn through both languages, they can attain proficiency in a second language while continuing to develop skills in their native language. Lindhom and Fairchild (1988), who evaluated a bilingual immersion program in California, found that LEP students attained a high level of achievement relative to national norms, and attributed the success of the students to receiving initial instruction in the native language, which, in turn, facilitated the development of English. They found that in math, reading, and language proficiency achievement, bilingual immersion students significantly outperformed students enrolled in non-bilingual immersion programs (Lindholm & Fairchild, 1988).

Assessment of Academic Achievement

The academic achievement of LEP students can be measured by teacher-made tests in each subject area, by grade point average, by student performance on tests designed by a school district to measure attainment of local school curriculum objectives, or by standardized tests designed to compare the performance of one group of students with that of all students in the United States (Collier, 1989). Navarrete et al. (1990) suggest using a combination of formal and informal measures to assess the academic ability of LEP students. Formal assessment may indicate how students are performing in relation to other students across the nation, state, or school district. Informal data can be used to support formal test findings or to provide documentation of student progress in instructional areas not covered by formal measures.

Duran (1988) maintains that, although standardized reading tests may provide information on the reading ability of LEP students in relation to other students at the same grade level, they do not provide qualitative

information about students' reading skills or information about specific student strengths or weaknesses. He advocates the use of dynamic assessment that, rather than assessing current knowledge and skills, measures individual readiness for learning new knowledge and skills (Duran, 1988). Saville-Troike (1988) views pragmatic vocabulary tests as a valid method of obtaining information on student academic progress, asserting that they measure skills and knowledge central to academic success. She concedes that "radical changes are needed in testing procedures and interpretation," and that "scores by LEP students on such tests should not be taken uncritically at face value, but that debriefing interviews afterward are essential to check on comprehension and reasons for responses" (Saville-Troike, 1988, p. 21-22).

Conclusion

LEP students have been identified as a group at risk of academic failure. For these students to achieve their full potential, a strong commitment must be made to their educational needs and futures. "Language minority students are a national resource to be nurtured and encouraged to attain their maximum level of achievement, just like any other children in our educational system" (Council of Chief State School Officers, 1990, p. 51).

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MULTICULTURAL EDUCATION

MULTICULTURAL EDUCATION FOR EXCEPTIONAL CHILDREN

Donna M. Gollnick and Philip C. Chinn

Demographic Composition

After remaining level through most of the 1980s, the child population of the United States is on the rise. The number of persons under the age of 18 will increase from 64 million in 1990 to 67 million in the year 2000. The number of babies born in 1988—3.9 million—was the greatest since 1964.

Young people from the least well off demographic groups form a growing segment of the child population. Black and Hispanic youth, who together constitute about 27% of the current child population, will make up nearly 33% of the child population in the year 2010.

In 1987, over 170,000 people under the age of 20 legally immigrated to the United States. The primary regions of origin were Asia and South America, and the countries contributing the most immigrant children were Mexico, the Philippines, Korea, the Dominican Republic, and Jamaica (United States *Children and Their Families*, 1989).

Black Americans are the largest minority group in the United States—28.9 million in 1985, about 12% of the total population. Black Americans are drawn from a diverse range of cultures and countries in Africa, the Caribbean, and Central and South America. The United States Hispanic population (not including the population of Puerto Rico) surpassed the 20 million mark in 1989. This represents a 39% growth since 1980—five times that of the nation as a whole. From 1985 to 2000, the Hispanic population is expected to grow by 46%. The term *Hispanic* refers to persons of all races whose cultural heritage is tied to the use of the Spanish language and Latino culture.

In 1990, over 30% of students in public schools, some 12 million, were from minority groups (Quality Education for Minorities Project, 1990).

In the school year 1988-1989, approximately 4.5 million children with disabilities received special education (United States Department of Education, 1990). Applying the 30% minority estimate to this number yields a minimum of 1.4 million children with disabilities who are also minority group members. In order for these students to develop to their fullest potential, educators will need to be skilled as both special educators and facilitators of multicultural education.

Purposes of Multicultural Education

It is important for all students to develop a multicultural perspective in order to enhance the following:

- a good self-concept and self-understanding.
- sensitivity to and understanding of others, including cultural groups in the United States and other nations.
- the ability to perceive and understand multiple, sometimes conflicting, cultural and national interpretations of and perspectives on events, values, and behavior.

ERIC Clearinghouse on Disabilities and Gifted Education, May 1991, #E498.

- the ability to make decisions and take effective action based on a multicultural analysis and synthesis.
- open minds when addressing issues.
- understanding of the process of stereotyping, a low degree of stereotypical thinking, and pride in self and respect for all peoples (Cortes, 1978).

Areas within the educational setting in which multicultural education is implemented are textbooks and instructional materials, curriculum and instruction, teacher behavior, and school climate (Gollnick & Chinn, 1990).

Textbooks and Instructional Materials

How teachers use textbooks and other instructional materials is extremely important in providing multicultural education. Teachers need to recognize subtle as well as blatant forms of bias such as invisibility, stereotyping, selectivity and imbalance, unreality, fragmentation and isolation, and language (Sadker & Sadker, 1978).

Invisibility means that certain microcultures, including disability groups, are underrepresented in materials. This omission implies that these groups have less value, importance, and significance in our society.

Stereotyping assigns traditional and rigid roles or attributes to a group. Stereotyping occurs across cultural and exceptionality groups.

Selectivity and imbalance occur when issues and situations are interpreted from only one perspective, usually the perspective of the majority group. With such an emphasis, minority persons and individuals with disabilities often do not learn about the contributions of members of their cultural groups to the development of our society. Such biases prevent all students from realizing the complexity of historical and contemporary situations and developments.

Unreality is most likely to present itself in the portrayal of history and contemporary life experiences. Controversial topics are glossed over and discussions of discrimination and prejudice are avoided. This unrealistic coverage denies children the information needed to recognize, understand, and perhaps conquer the problems that plague our society. Contemporary problems faced by individuals with disabilities and those from diverse racial and ethnic groups are often disguised or simply not included.

Fragmentation and isolation occur when publishers discuss issues, contributions, and information about various groups in a separate sections or chapter apart from the regular text. This add-on approach suggests that the experiences and contributions of these groups are merely an interesting diversion, not an integral part of historical and contemporary developments.

Language bias occurs when materials blatantly omit such things as gender, disability, or ethnic group references.

Making Curriculum Multicultural

Components of multicultural education that are included in many educational programs are ethnic, minority, and women's studies; bilingual programs; cultural awareness; human relations; and values clarification. Concepts include racism, sexism, prejudice, discrimination, oppression, powerlessness, power inequality, equality, and stereotyping.

If teaching a culturally diverse student population, educators need to determine the microcultures that exist in the community. Schools that are on or near Indian reservations will include students from the American Indian tribes in the area as well as some non-Indians. Urban schools typically include multiethnic populations and students from middle and lower socioeconomic levels; inner-city schools are likely to have a high proportion of poor students. Teachers in Appalachian-area schools will need to be concerned about poor and middle-class families with fundamentalist backgrounds.

One strategy for multiculturalizing curriculum and instruction is teaching from a multicultural perspective. This approach will probably require some major changes in the educational program. In this approach educators will take affirmative steps to ensure that cultural diversity and exceptionality are reflected in the curriculum. It should facilitate the development of attitudes and values conducive to the preservation and promotion of ethnic and cultural diversity as a positive quality of society (Gay, 1977). It will enhance students' self-concepts as they develop pride in their own and other cultural heritages (Gay, 1977). Without too much effort, teachers can locate supplementary materials, information, and visual aids about people of other major cultures and people with disabilities. This information should be included as part of the curriculum in every subject area, regardless of how culturally diverse the community is.

Attitudes and Teaching Styles

A teacher's behavior in the classroom is a key factor in helping all students reach their potential, regardless of gender, ethnicity, age, religion, language, or exceptionality. Unknowingly, educators often transmit biased messages to students. Most educators do not consciously or intentionally stereotype students or discriminate against them; they usually try to treat all students fairly and equitably. However, we have learned our attitudes and behaviors in a society that has been ageist, racist, sexist, and ethnocentric. Some biases have been internalized to such a degree that we do not realize that we are biased. When teachers are able to recognize the subtle and unintentional biases in their behavior, positive changes can be made in the classroom (Sadker & Sadker, 1978).

Another area that teachers might investigate and change to better meet the needs of a culturally diverse student population is that of teaching and learning styles. Both teaching and learning styles can be categorized as either field independent or field sensitive. Field-independent teachers encourage independent student achievement and competition among students. Field-sensitive teachers are more interpersonally oriented and prefer situations that allow them to use personal, conversational techniques. Similarly, field-sensitive students perform better in social situations such as group work; field-independent students work well on independent projects. Often the teacher's style differs from the learning style of the student, causing a classroom situation that may not be conducive to helping students reach their potential. Ramirez and Castañeda (1974) showed that teachers could learn to organize learning environments conducive to individual students' cognitive styles so that all students could benefit equally from teaching.

Positive School Climate

A school that affirms multiculturalism will integrate the community in its total program. Not only will the educators know and understand the community, but the parents and community will know and participate in the school activities. As long as members of the community feel unwelcome in the school, they are not likely to initiate involvement. The first step in multiculturalizing the school is development of positive and supportive relations between the school and the community. Teachers can assist by asking community members to participate in class activities by talking about their jobs, hobbies, or experiences in a certain area. They can initiate contacts with families of students. They can participate in some community events. A sincere interest in the community, rather than indifference or patronage, will help to bridge the gap that often exists between the school and community.

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MULTICULTURAL ACTIVITIES FOR THE CLASSROOM TEACHER

Mirian Ortiz and Lourdes Travieso

Multicultural education for today's society necessitates the development of new learning strategies and techniques to promote this concept within the classroom environment. Invalidation of the outdated "melting pot" theory that puts everyone into one cultural mold will only become possible with the realization that ours is a pluralistic society and that our strength lies in diversity itself.

Teachers must create an educational climate in which different cultural and linguistic patterns are accepted and nourished throughout the curriculum. Careful planning and direction are required to provide the necessary and appropriate experiences to capitalize on the child's cultural and linguistic resources. The classroom atmosphere must ensure the uniqueness of each child, and children should be encouraged to share their unique experiences with their peers.

Implementation of a multicultural setting which will permeate all facets of classroom life demands that sufficient time, effort, and energy be expended to this end. Teachers must be creative, flexible, sensitive and supportive, and must utilize all available resources, including the most valuable resources of all—their own students.

Teachers too often perceive the celebration of cultural holidays and/or the display of ethnic posters and 'heroes' as the epitome of multicultural education. Unfortunately, these activities, valid as they may be, are not sufficient to create an understanding of the concepts of multiculturalism. They become "clichés"—taught in isolation, not integrated into the total curriculum design, and placed 'back on the shelf' only to be dusted off and displayed the following year.

Title: Music

Concept:

A rich diversity of musical heritage is evident among people in different cultural groups and can be appreciated by all people throughout the world.

Objectives:

- To explore the many different types of music found throughout the world and the influences of diverse cultural backgrounds in creating this music.
- To examine native and traditional instruments of cultural groups being studied.

Grade level: 4 - 12

Time: Variable.

Activities:

- The teacher and students should discuss the value of music in their lives. How important is music to everyday life? What would it be like to go through a week without hearing music? The students should appreciate that music can be viewed as a "universal language," wherein one does not have to understand its intricacies in order to enjoy it.
- Students should bring in and listen to folk records, songs, and dances representative of other countries and cultures. Perhaps a representative of a local record

From Carl A. Grant, ed. *Multicultural Education: Commitments, Issues and Applications.* Washington, DC: ASCD, 1977. Reprinted with permission.

records from different cultures. Community members could also provide records for this purpose.

- Following are but a few examples of topics for discussion that might arise after listening to music representative of other countries and cultures:
  - — After listening to Caribbean music, try to distinguish the contributions and influences of the African, Indian, and Spanish cultures in the creation of unique musical pieces.
  - — In a more modern blend, examine how Latin music and Black Rock have combined to create the new sound of "Salsa" (literal translation is sauce).
  - — In the Chinese culture, such as that represented by the People's Republic of China, song and dance usually carry some kind of message. Some illustrative messages might be to defend our country, and to be healthy and strong.
  - — Various national minorities, such as Tibetan, Mongolian, Korean, to mention a few, are represented in the Chinese culture. The Han culture is the dominant group. To reinforce the culturally pluralistic nature of the Chinese society, children learn to sing and dance the native folk music of the regions.
- Also, the area of native and traditional instruments can provide a focus for many activities. These instruments can often be distinguished when listening to records representative of various cultures.
- Students can research some of these instruments, for example, in Caribbean music you will find claves, güiros, maracas (Indian); congas, bongos (African); and guitars and cuatros—a guitar with four double strings—(Spanish).
- Traditional instruments in the Chinese culture are found in the cymbals, tambourine, flute, drums, sheng, erhu, liuchin, etc.
- Students might find it interesting to research an instrument that is common to many different types of music to discover in which culture it originated. Another alternative would be to work in small groups on types of instruments, for example, percussion instruments or wind instruments.
- Students could make their own instruments and try to develop their own unique musical sound.

Title: Family

Concept:

Teachers and the media, either directly or indirectly, often portray families in the United States as consisting of mother, father, and children. Students, when faced with this image on a daily basis, might come to define the term *family* solely in this regard. However, an understanding that a particular term can have different meanings for different individuals is a prerequisite for meaningful communication in a pluralistic society.

Objectives:

- To enhance the self-respect of each child by focusing on different "possible" definitions for the term *family.*
- To provide an understanding that similarities and differences exist among and within families of different cultures.
- To provide an understanding that family members can assume different roles, dependent upon the structure of the defined family unit.

Grade level: K-2.

Time: Two weeks.

Activities:

- Before using the suggested activities to enhance this concept, the teacher must realize that many definitions for "family" will result from these activities. All reasonable definitions should be accepted; in essence, there are no right or wrong answers.
- Students should discuss their families. Who are the members of their families? the teacher could write the names of each child's family on the board or the students can draw and label pictures of their families.

  Possibilities that may be described by students:

  Nuclear family (parents and children)

  Extended family (including other family members)

  Single-parent family (one parent)

  Families without children (two adults)

  No-parent families (child lives with another relative, with a guardian, or withanother adult in a foster home).
- Numerous cultures view their families in a broader perspective than the nuclear family. For example, the Hispanic culture embraces the concept of the extended family. This concept includes other adult members such as the "compadre" or "padrino" (literal translation is godfather). When Hispanic children are asked about the members of their families, they will probably include other adults with whom they have a very close kinship.
- After students have finished listing or drawing the members of their families, prepare a wall mural. If a certain possibility has not surfaced because of the composition of your class, perhaps you could suggest and discuss this missing possibility.
- Students should notice the different types of families that are illustrated on the wall mural. They will realize that many different types of families exist. Help them note similarities and differences among and within families of different cultures, that is, even though a particular culture embraces the concept of the extended family, some families within this culture may be nuclear families.
- Students should derive their own definition of family, as a class, based upon their pictorial expressions.
- Student should examine textbooks, magazines, newspapers, etc., to see what kinds of families can be found and what roles are played by individual family members. Students should realize that men, women, and children all can assume different roles, dependent upon the structure of the defined family unit. For example, does the man always head the family household?
- Students can work on a booklet, "Families Can Be Many Different Things," or "Family Members Have Many Different Roles."

TEACHING CONTENT KNOWLEDGE AND ESOL IN MULTICULTURAL CLASSROOMS

Gloria M. Tang

ESOL students in the United States and Canada who study in multicultural settings take approximately 2 to 3 years to reach proficiency in basic communication skills in English (Cummins, 1984). However, they take more than 5 years to reach native-speaker levels in academic content language (Collier, 1987; Cummins, 1984). By implication, unless ESOL students learn language and content simultaneously, they will be denied the full benefits of education. However, school-age students, particularly those at the upper intermediate and secondary levels (ages 12-18), have difficulty understanding content knowledge written and presented orally in English, and they have difficulty expressing concepts in English, even when they have learned them in their first language.

How can we help students learn new content knowledge written or spoken in English? How can we enable them to demonstrate their content knowledge in English? How can we assist them in using and expressing their background knowledge in English and linking it to new knowledge?

Methods which endeavor to answer these questions can be divided into two categories: those which bring the students' English proficiency to a level at which they can read expository text in content textbooks, or those which bring the language in content textbooks to the level of the students.

Traditionally, the former has involved removing students from the regular stream and giving them intensive courses to develop their written and oral English skills until they have acquired adequate proficiency for enrollment in content-area classes. However, marginalized or segregated programs mean denying students the full benefits of education, that is, full access to content-area subject matter and, possibly, development of thinking skills. The alternative approach involves modifying the text, and perhaps, using adjunct materials to bring the language in classroom texts to students. This process commonly results in watering down the course content and exposing students to language that is not usually found in real textbooks.

A more effective solution is to employ a model which combines the two, a model which systematically integrates language and content. The proposed classroom model enables ESL students to access the language of textbooks and, at the same time, helps them reach a level at which they can read the language of content classroom texts independently as well as write academic discourse in English. It takes into consideration systematic development of students' thinking skills.

It consists of five components (see Figure 1, below) which can be sequenced in a variety of ways:

1. Explicit teaching of text/knowledge structures of text organization
2. Explicit teaching of graphic representation of text/knowledge structures
3. Explicit teaching of linguistic and cohesion devices of text/knowledge structures

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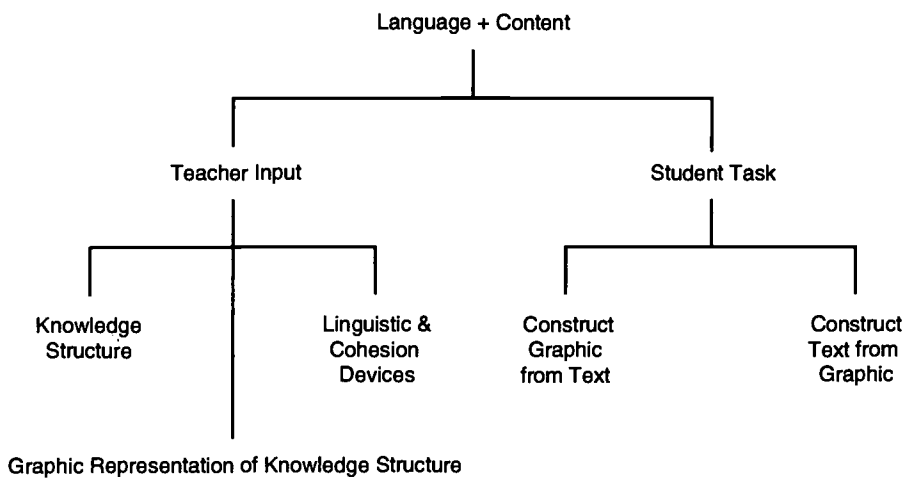
4. Setting student tasks which involve constructing graphics from expository prose, and
5. Setting tasks which provide opportunities for students to practice constructing expository prose from a graphic.

The rest of this paper shows how the model can be successfully implemented in seventh-grade social studies classes by describing the work of one teacher.

Figure 1.
A Classroom Model



Implementation

A teacher from the Burnaby School District (in British Columbia, Canada) introduced some of the components of this model into her seventh-grade social studies class and found the strategies successful. The textbook she used was *Other Places, Other Times* (Neering & Grant, 1986), a social studies textbook widely used in public schools in the Vancouver and Burnaby school districts.

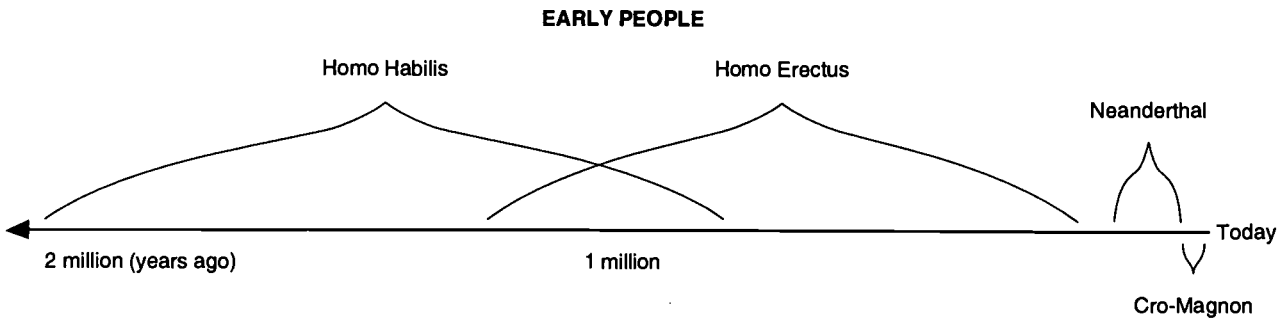
The teacher planned her lesson according to Mohan's (1986) knowledge framework. She read each chapter to determine the top level structure of the text, to organize the content according to the knowledge structures in the knowledge framework (see Figure 2, below), and to prepare a structured overview, or graphic organizer, which best summarizes the content of the chapter.

Figure 2
Knowledge Structures of Chapter 1: *Other Places, Other Times*

CLASSIFICATION/CONCEPTS	PRINCIPLES	EVALUATION
Homo Habilis—early tool using ancestors of modern man **Homo Erectus**—first human to walk upright **Neanderthal**—more sophisticated tools and social structure **Cro-Magnon**—most technically advanced of early people	**Homo Erectus** • use of fire allowed migration to colder climates • development of stronger tools and weapons allowed Homo Erectus to kill larger animals **Cro-Magnon Man** • sophistication allowed them to survive the ice age • development of farming provided food for long periods of time	
	Homo Habilis • 1.75 million to 800,000 years ago **Homo Erectus** • 1.25 million to 250,000 years ago **Neanderthal Man** • 130,000 to 30,000 years ago **Cro-Magnon Man** • 30,000 to 10,000 years ago	
DESCRIPTION	**SEQUENCE**	**CHOICE**

Chapter 1, entitled "Early People." (Neering & Grant 1986, pp, 1-27) looks at the Earth from 1.75 million years ago until the time of the first civilizations. It concentrates on the development of the four major classifications of early humankind: Homo Habilis, Homo Erectus, Neanderthal Man, and Cro-Magnon Man. The top-level structure of the chapter is a temporal sequence of descriptions, so she decided that the structured overview that would best represent it was a time line (see Figure 3, below).

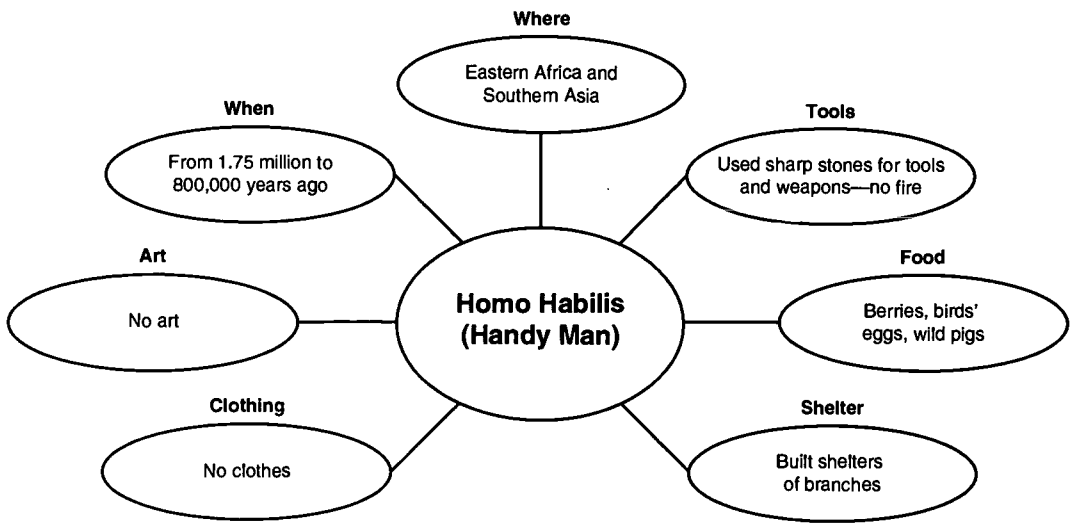
Figure 3.
Time Line of Early People to accompany Chapter 1: *Other Places, Other Times*



The graphic helped her plan the content she was going to present, that is, early people, as well as linguistic devices associated with the time line, for example, *lived from. . . . to . . . , began in. . . and ended in. . . , inhabited the earth for. . . years, during that period.* In presenting the chapter overview, she explicitly introduced the knowledge structure "sequence" and the language used in chronologically ordered texts.

Having identified the knowledge structure of each section, she decided that the chapter could be divided into four sections according to the four major groups of early people. Each section describes one group of early people, their way of life, the change and development they experienced, and the impact the environment had on them. She put the information in each section in a graphic and because similar information can be extracted from each of the sections, she organized the information in the same web-like graphic form for all the sections (see Figure 4, below).

Figure 4.
Graphic Representation of Homo Habilis to accompany
Other Places, Other Times

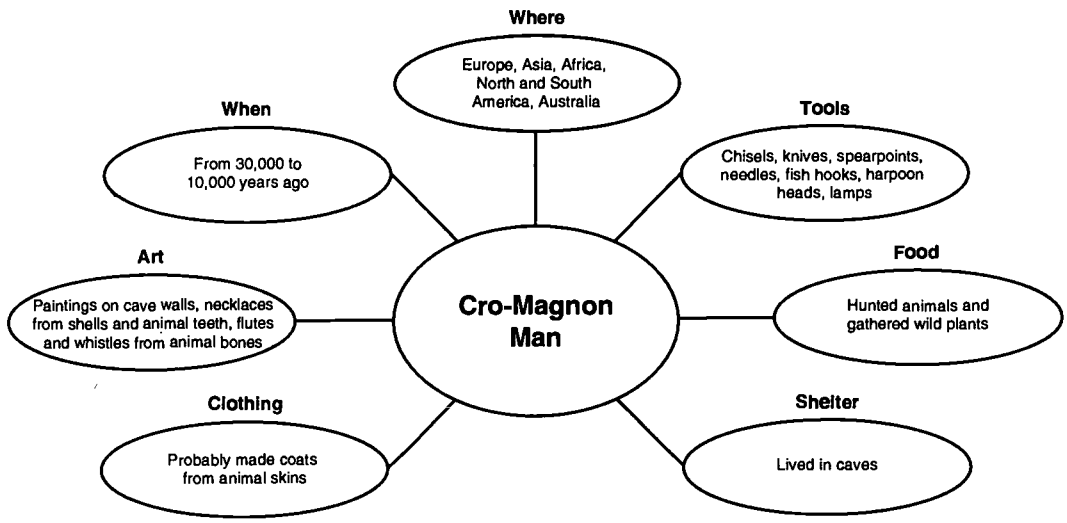


The purpose of recycling the same graphic form was to provide a schema students could access again and again. It also allowed her to use the same linguistic devices repeatedly to reinforce learning. She decided on a web because this graphic was familiar to her students.

The teacher presented the first of these completed graphic organizers, Figure 4, on the overhead projector (OHP). She used the language of description consistently to answer the questions w*hen? where?* and *what?* After the graphic presentation, she referred students to the text, explicitly drawing their attention to the knowledge structure, description, and the linguistic devices specific to that knowledge structure. In presenting the next two major groups of early people, she varied her strategies. She built up one of the graphics on the OHP while presenting the section, and she built up the other cooperatively with the students by assigning the paragraphs to be read and by again asking the questions *when? where?* and *what?* The linguistic points she focused on were verbs in the past form, for example, *were, was, lived, ate, hunted;* adjectives and adverbial phrases of comparison, for example, *longer than, short, erect, sharp, pointed, different from, the same as, similar to,* and *as large as.* By building the graphic together with students, she was helping them to make the link between the graphic and the text and to see that the two are giving the same information but in different forms. She was also exposing students

to the real language of description found in textbooks, a step towards managing school knowledge independently. After sufficient exposure to the structure and the language in two similar graphics on Homo Erectus and Neanderthal Man, the students were able to complete the section on Cro-Magnon Man (see Figure 5, below) on their own.

Figure 5.
Graphic Representation of Cro-Magnon Man to accompany *Other Places, Other Times*



To bring the whole chapter together, she prepared a table (see Figure 6, below) and required students to complete it using the information in the webs.

Figure 6
Chapter Review: *Other Times, Other Places*

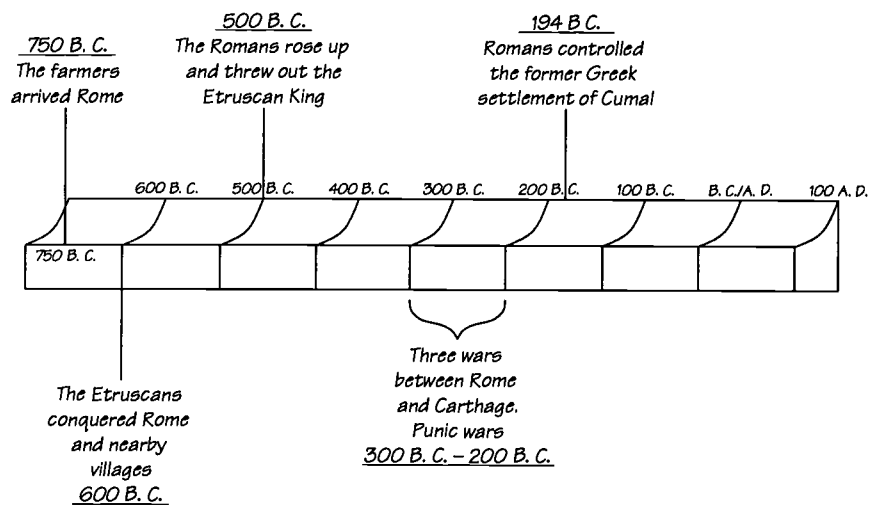
	When	Where	Tools	Food	Shelter	Clothes	Art
Homo Habilis	From 1.75 million to 800,000 years ago	Eastern Africa and Southern Asia	Used sharp stones for tools and weapons—no fire	Berries, bird's eggs, wild pigs	Built shelters of branches	No clothes	No art
Homo Erectus	From 1.25 million to 250,000 years ago	Africa, Asia, and Europe	Fire, flint blades, pointed wooden spears	Wild animals • elephants • cooked meat	Probably built shelters of branches	No Clothes	No art
Neanderthal Man	From 130,000 years ago to 30,000 years ago	Europe, Middle East	Knives, borers, spear sharpeners made from stone	Wild animals • bear • cooked meat	Lived in caves	Animal hides for clothes	No art
Cro-Magnon Man	From 30,000 to 10,000 years ago	Europe, Asia, Africa, North and South America, Australia	Chisels, knives, spearpoints, needles, fish hooks, harpoon heads, lamps	Hunted animals and gathered wild plants	Lived in caves	Probably made coats from animal skins	Painting on cave walls, necklaces from shells and animal teeth, flutes and whistles from animal bones

Using such a graphic serves several purposes: It summarizes the chapter; it reinforces the content knowledge students have learned; and it enables the student to see the relations of the knowledge in the slots, that is, the development of the early peoples. The teacher was moving them from managing information in isolation to managing the relations of information, which is a step forward in their cognitive development. The table also provides further opportunities for students to use language to compare and classify.

Note that while the vocabulary inside the cells are terms which show the content schemata of the information, the shape of the web, and the lines which join them, the headings such as *Where, When*, and *Tools* represent the formal schemata or the linguistic devices specific to that knowledge structure or genre. These are terms which can be used again and again across topics and curricula.

The students were gradually trained to build similar graphics on their own after working cooperatively with the teacher a number of times. The teacher pointed out linguistic devices and provided opportunities for them to practice constructing graphics from similarly structured text. The teacher introduced the time line in chapter 1, and she was delighted when all her ESL students could build up a time line on their own when they came to chapter 5 (see Figure 7, below).

Figure 7.
Student-Generated Time Line



To give students practice in writing a coherent passage from a graphic, the teacher provided familiar graphic representations of familiar knowledge structures and asked students to write an essay based on the graphic. She found that she had to provide linguistic devices and ensure that students knew "how to link sentences together. . . and how to present and focus information" (Mohan, 1986, p. 94).

Only by requiring students to interact with the graphic after explicit teaching can they truly learn to read and write graphics and to recognize the text structure. Constructing a prose passage from a graphic is also a step towards writing expository text. The graphic and the text are semantically comparable (see Mohan, 1989): They convey the same information and they have the same knowledge structure. But in order to convert the

graphic into expository prose, students have to translate the lines, arrows, and spatial arrangement, which are graphic representations of linguistic and cohesion devices, into linguistic and cohesion devices in text form. Figure 8 is a cause effect graphic.

Figure 8
A Cause-Effect Table for *Other Places, Other Times*
Events Leading to the End of the Roman Republic

Cause	Effect
The Roman Empire expanded rapidly.	Romans had to spend a lot of time and energy defending their empire from invaders.
Angry Italians wanted the advantages of Roman citizenship. They threatened to rebel and attack Rome.	The Romans granted citizenship to the Italians
Many internal problems existed • Poor people were starving • Government officials became corrupt • Consuls were assassinated • Slaves rebelled against rough treatment from masters.	The republican system was weakened.

The title and the headings give the signal that it is a table showing a series of causes and effects, and spatial arrangement, the lines or arrows connecting the slots, signify *caused, brought about, resulted in, leading to, so, because, the effect of . . . was . . .* or *as a result of . . . happened*

The teacher had taught the knowledge structure of cause-effect and exposed the students to cause-effect tables. She had also pointed out the linguistic devices many times and given the students practice in constructing text passages from graphics. Figure 9 shows that students could write a coherent passage on the events leading to the end of the Roman Republic and that they could produce expository prose using devices of cause-effect (e.g., *cause, the reason was, so,* and *because*).

Figure 9.
Student-Generated Text

There were 3 major events leading to the end of the Roman Republic. First, the rapid expansion of the Roman Empire caused the Romans to spend a lot of time and Energy defending their Empire from invaders. The second reason was that angry Italians wanted the advantages of Roman citizenship. They threatened to rebel and attack Rome. The government couldn't survive without them so the Romans granted citizenship to the Italians. Last, the Republican system was weakened because poor people were starving, government officials became corrupt, consuls were assasinated and slaves rebelled against rough treatment from masters.

Written by Jerry

I should, perhaps, reiterate that the process is slow. Students cannot be expected to be able to understand a social studies text or to write expository prose using linguistic devices of description, classification, or cause-effect after simply having gone through the five components once. They need explicit teaching and practice to acquire the skill of understanding and expressing content knowledge and academic language.

Conclusion

Results of research (Early, Mohan, & Hooper, 1989) carried out in schools in Vancouver point to the fact that adopting the proposed model in classroom teaching, that is, explicit teaching of text/knowledge structure and graphic representation of knowledge structures; and providing practice in constructing graphics from text and text from graphics in intermediate and secondary ESL social studies classes can help to increase students' ability to read and write academic discourse. In other words, this classroom model appears to have the potential for bringing classroom texts to a level students can comprehend, and at the same time, bringing students to the English proficiency level where they can read and write classroom texts.

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WORKING WITH THE PARENTS OF CULTURALLY AND LINGUSITICALLY DIVERSE EXCEPTIONAL STUDENTS

COMMUNICATING WITH CULTURALLY DIVERSE PARENTS OF EXCEPTIONAL CHILDREN

Teachers and other professionals providing education-related services to exceptional children from different cultural backgrounds need to be aware of unique perspectives or communication styles common to those cultures. The ways people deal with feelings—especially disappointment, anxiety, fear, embarrassment, and anger—vary considerably, and often it is not easy to discern how parents are reacting to the realization that their child has a disability. It is especially important to help parents who have been outside the mainstream of United States education understand the educational options available. To do this, professionals need to be sensitive to the different values, experiences, and beliefs that may be held by members of various cultural and ethnic groups toward special education.

Use language parents can understand and use sensitivity in communicating.

To facilitate communication, educators should use the following guidelines:

- Send messages home in the parent's native language.
- Use an appropriate reading level.
- Listen to messages being returned.

Courtesy, sincerity, and ample opportunity and time to convey concerns can promote communication with and participation by parents from different cultural backgrounds (Johnson & Ramirez, 1987). During meetings it is important to provide ample opportunity for parents to respond without interrupting. If a parent is formulating a response and has not expressed himself or herself quickly, this delay should not be viewed as a lack of interest in responding. Educators need to listen with empathy and realize that parents can change from feelings of trust to skepticism or curiosity as their understanding of programs and policies increases. It is important to realize that this reaction is normal and that parents may feel hostile or desperate as they attempt to sort out facts from their fundamental beliefs about education.

In communicating with families from different cultural groups, educators should keep in mind their diverse cultural styles. There is no one set of characteristics that can be ascribed to all members of any ethnic group to those that are descriptive of a person who has been totally assimilated into the majority culture (Carter & Segura, 1979). Unfortunately, much of the literature describing individuals from minority groups reinforces existing stereotypes. This digest offers some observations about different cultural styles that should be considered cautiously in communications with families of differing cultural backgrounds (Cloud & Landurand, 1988; Johnson & Ramirez, 1987; Taylor, 1989).

Sharing space.

People from different cultures use, value, and share space differently. In some cultures it is considered appropriate for people to stand very close to each other while talking, whereas in other cultures people like to keep farther apart. For example, Hispanics often view Americans as being distant because they prefer more space between speakers. On the other hand, Americans often view individuals who come too close as pushy or invading their private space.

ERIC Clearinghouse on Disabilities and Gifted Children, 1991, #E497.

Touching.

Rules for touching others vary from culture to culture. In Hispanic and other Latin cultures, two people engaged in conversation are often observed touching and individuals usually embrace when greeting each other. In other cultures, people are more restrained in their greetings. In the Asian/Vietnamese cultures, for example, it is not customary to shake hands with individuals of the opposite sex.

Eye Contact.

Among African-Americans it is customary for the listener to avert the eyes, whereas Euro-Americans prefer to make direct eye contact while listening. Among Hispanics, avoidance of direct eye contact is sometimes seen as a sign of attentiveness and respect, while sustained direct eye contact may be interpreted as a challenge to authority.

Time Ordering of Interactions.

The maxim "business before pleasure" reflects the "one activity at a time" mindset of United States mainstream culture. Some cultures, however, are polychronic, that is, people typically handle several activities at the same time. Before getting down to business, Hispanics generally exchange lengthy greetings, pleasantries, and talk of things unrelated to the business at hand. Social interactions may continue to be interwoven throughout the conversation.

Provide parents with information.

Much of the need for information can be satisfied through regularly scheduled meetings, conferences, and planning sessions for a child's individualized education program (IEP). Educators may assume that their own familiarity with public policy is shared by parents of children with disabilities. Usually, this is not the case. Most parents of culturally diverse children with disabilities need help in understanding the basic tenets of the law, including their own rights and responsibilities.

Support parents as they learn how to participate in the system.

Schools must make a sincere commitment to consider parents as partners in their children's education. Professionals who are attempting to work and communicate with parents of children with disabilities should be prepared to support the parents' rights and responsibilities. In essence, professionals should adopt the role of advocate. Parents from culturally diverse backgrounds should be encouraged to join parent organizations and share their cultural points of view.

Educators and other professionals should recognize parents' needs for the following:

- assurance that they should not feel guilty about their child's disability
- acceptance of their feelings without labeling
- acceptance of them as people, rather than as a category
- help in seeing the positive aspects of the future
- recognition of what a big job it is to raise a child with disabilities and help in finding programs, services, and financial resources to make it possible for them to do the job with dignity

Using these guidelines for communication, teachers and other professionals can assist parents of culturally diverse children with disabilities not only to combat feelings of isolation, but also to achieve a sense of belonging.

Encourage parental participation at home.

A growing body of research evidence suggests that important benefits are gained by school-aged children when their parents provide support, encouragement, and direct instruction at home and when home/school communication is active. Children who receive parental help read much better than

children who do not. Even instruction by highly competent specialists at school does not produce gains comparable to those obtained when students are tutored by their parents at home (Hewison & Tizard, 1980). Even illiterate parents can promote the acquisition of reading skills by motivating their children, providing an environment that promotes the acquisition of literacy skills, providing comparative and contrasting cultural information, asking the children to read to them, and encouraging verbal interaction about written material.

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CRITICAL ELEMENTS IN PARENTAL INVOLVEMENT OF CULTURALLY AND LINGUISTICALLY DIVERSE PARENTS

Anne Labay Ensle

ABSTRACT: It was my privilege to serve as the editor for the publication of a collection of University of Houston-Clear Lake masters' research studies in the area of culturally and linguistically diverse parental involvement entitled Critical Issues in Parental Involvement. I share with you my observations and conclusions drawn from this enlightening and rewarding experience.

Introduction

The involvement of culturally and linguistically diverse parents is critical to the unique educational needs of their children. The teachers and administrators of the 1990s can, through commitment and collaboration, utilize to its maximum this potentially powerful tool to augment current educational programs.

To properly ensure effective involvement, teachers and administrators must first assess the needs of its culturally and linguistically diverse student/parent population, the specific talents and training of its teaching staff, the present resources of the school, and the potential resources from the community. Teachers, administrators and community leaders should then proceed collectively, as a team, to tailor plans, to provide opportunities for parental involvement, that meet the specific needs of its target population.

Effective Communication

Effective communication must begin on first contact with these parents. Teachers and support staff should be available, in place, and prepared to deal with the first appearance of linguistically diverse parents. Communication should then continue, if necessary, in the native language of the parents by teachers, aides, and administrators. When needed, translators should be readily available. Continuous communication should then be initiated and sustained via telephone calls, personal invitations, written notes, newsletters, and even videos as most parents prefer personal communication. Advance planning and staff collaboration of talents can facilitate effective communication.

Comfort Level

The comfort level of culturally and linguistically diverse parents should be of prime consideration. They should be made to be physically and mentally comfortable and welcome in the schools of their children. Special efforts should be initiated to make these parents feel their importance. By encountering a friendly and supportive staff, these parents must be encouraged to express their needs, desires, and concerns.

Their contributions and efforts should be publicly acknowledged and rewarded. Sensitivity and respect for their culture should be exhibited by the staff in their children's schools.

Bilingual Research Journal, 1992, 16(3 & 4): 141-143. Reprinted with permission.

Barriers

Barriers that exist between these parents and schools must be identified by the schools' staff and addressed to be resolved. These can be identified through team efforts in the forms of surveys, personal contact, and professional assistance. Special inservice training can ensure the proper staff awareness of this critical area.

It is imperative that these parents be brought physically into their children's schools through planned activities and invitations provided by teachers, para-professionals, other parents, and administrators. Planned activities for these parents should include provisions for a flexible time schedule that provides for non-interference with parents' work schedules, transportation, child-care, and translators. Involvement and contributions from the community in services and materials should be sought after and encouraged.

Parental Literacy

Addressing the literacy of both the parents and children is necessary to build the overall family structure as a positive source of support for schools. English as a Second Language should be provided by the schools or the community. Instruction in functional or survival skills, parenting skills, and possible job skills can be made available through school and/or community efforts.

Education and orientation of culturally and linguistically diverse parents is necessary and should include an understandable presentation that explains the school's goals, expectations and opportunities available to their children. Collaborative efforts between staff and community and/or customized videos in the various native languages can facilitate this task.

Introduction and guidance of culturally and linguistically diverse parents into involvement that lead to *decision-making* and *governance* should be the ultimate goal of schools. This can be accomplished through collaborative efforts of administrators, teachers, parents, and communities to ensure opportunities and make provisions for the specific needs of these parents.

Continuous and sustained assessment, collaboration, evaluation, and team effort can make parental involvement a reality for culturally and linguistically diverse parents that can positively augment current educational programs. When cultivated with awareness, sensitivity, and commitment, their involvement can become a powerful catalyst for positive educational improvement of their children's educational potential.

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WHY SOME PARENTS DON'T COME TO SCHOOL

Margaret Finders and Cynthia Lewis

Instead of assuming that absence means noncaring, educators must understand the barriers that hinder some parents from participating in their child's education.

In our roles as teachers and as parents, we have been privy to the conversations of both teachers and parents. Until recently, however, we did not acknowledge that our view of parental involvement conflicts with the views of many parents. It was not until we began talking with parents in different communities that we were forced to examine our own deeply seated assumptions about parental involvement.

From talking with Latino parents and parents in low-income Anglo neighborhoods, we have gained insights about why they feel disenfranchised from school settings. In order to include such parents in the educational conversation, we need to understand the barriers to their involvement from their vantage point as that of outsiders. When asked, these parents had many suggestions that may help educators re-envision family involvement in the schools.

The Institutional Perspective

The institutional perspective holds that children who do not succeed in school have parents who do not get involved in school activities or support school goals at home. Recent research emphasizes the importance of parent involvement in promoting school success (Comer 1984, Lareau 1987). At the same time, lack of participation among parents of socially and culturally diverse students is also well documented (Clark 1983, Delgado-Gaitan 1991).

The model for family involvement, despite enormous changes in the reality of family structures, is that of a two-parent, economically self-sufficient nuclear family, with a working father and homemaker mother (David 1989). As educators, we talk about "the changing family," but the language we use has changed little. The institutional view of nonparticipating parents remains based on a deficit model. "Those who need to come, don't come," a teacher explains, revealing an assumption that one of the main reasons for involving parents is to remediate them. It is assumed that involved parents bring a body of knowledge about the purposes of schooling to match institutional knowledge. Unless they bring such knowledge to the school, they themselves are thought to need education in becoming legitimate participants.

Administrators, too, frustrated by lack of parental involvement, express their concern in terms of a deficit model. An administrator expresses his bewilderment:

> Our parent-teacher group is the foundation of our school programs . . . . This group (gestures to the Anglo, all-women group seated in the library) is the most important organization in the school. You know, I just don't understand why *those other parents* won't even show up.

Discussions about family involvement often center on what families lack and how educators can best teach parents to support instructional agendas at home (Mansbach 1993). To revise this limited model for interaction between home and school, we must look outside the institutional perspective.

Educational Leadership, 1994, 51: 50-54. Reprinted with permission.

The Voices of "Those Other Parents"

We asked some of "those other parents" what they think about building positive home-school relations. In what follows, parents whose voices are rarely heard at school explain how the diverse contexts of their lives create tensions that interfere with positive home-school relations. For them, school experiences, economic and time constraints, and linguistic and cultural practices have produced a body of knowledge about school settings that frequently goes unacknowledged.

Diverse school experiences among parents. Educators often don't take into account how a parent's own school experience may influence school relationships. Listen in as one father describes his son's school progress:

> They expect me to go to school so they can tell me my kid is stupid or crazy. They've been telling me that for three years, so why should I go and hear it again? They don't do anything. They just tell me my kid is bad.
>
> See, I've been there. I know. And it scares me. They called me a boy in trouble but I was a troubled boy. Nobody helped me because they liked it when I didn't show up. If I was gone for the semester, fine with them, and I dropped out nine times. They wanted me gone.

The father's experiences created mistrust and prevent him from participating more fully in his son's education. Yet, we cannot say that he doesn't care about his son. On the contrary, his message is urgent.

For many parents, their own personal experiences create obstacles to involvement. Parents who have dropped out of school do not feel confident in school settings. Needed to help support families or care for siblings at home, these individuals' limited schooling makes it difficult for them to help their children with homework beyond the early primary level. For some, this situation is compounded by language barriers and lack of written literacy skills. One mother who attended school through 6th grade in Mexico, and whose first language is Spanish, comments about homework that "sometimes we can't help because it's too hard. "Yet the norm in most schools is to send home schoolwork with little information for parents about how it should be completed.

Diverse economic and time constraints. Time constraints are a primary obstacle for parents whose work doesn't allow them the autonomy and flexibility characteristic of professional positions. Here, a mother expresses her frustrations:

> Teachers just don't understand that I can't come to school at just any old time. I think Judy told you that we don't have a car right now. . . . Andrew catches a different bus than Dawn. He gets here a half an hour before her, and then I have to make sure Judy is home because I got three kids in three different schools. And I feel like the teachers are under pressure, and they're turning it around and putting the pressure on me cause they want me to check up on Judy and I really can't.

Often, parents work at physically demanding jobs, with mothers expected to take care of child-care responsibilities as well as school-related issues. In one mother's words:

> What most people don't understand about the Hispanic community is that you come home and you take care of your husband and your family first. Then if there's time you can go out to your meetings.

Other parents work nights, making it impossible to attend evening programs and difficult to appear at daytime meetings that interfere with family obligations and sleep.

At times, parents' financial concerns present a major obstacle to participation in their child's school activities. One mother expresses frustration that she cannot send eight dollars to school so her daughter can have a yearbook to sign like the other girls.

> I do not understand why they assume that everybody has tons of money, and every time I turn around it's more money for this more money for that. Where do they get this idea that we've got all this money?

This mother is torn between the pressures of stretching a tight budget and wanting her daughter to belong. As is the case for others, economic constraints prevent her child from full participation in the culture of the school. This lack of a sense of belonging creates many barriers for parents.

Diverse linguistic and cultural practices. Parents who don't speak fluent English often feel inadequate in school contexts. One parent explains that "an extreme language barrier" prevented her own mother from ever going to anything at the school. Cultural mismatches can occur as often as linguistic conflicts. One Latino educator explained that asking young children to translate for their parents during conferences grates against a cultural norm. Placing children in a position of equal status with adults creates dysfunction within the family hierarchy.

One mother poignantly expresses the cultural discomfort she feels when communicating with Anglo teachers and parents:

> In the Hispanic culture and the Anglo culture things are done different and you really don't know—am I doing the right thing? When they call me and say, 'You bring the plates' [for class parties], do they think I can't do cookies too? You really don't know.

Voicing a set of values that conflicts with institutional constructions of the parent's role, a mother gives this culturally-based explanation for not attending her 12-year-old's school functions:

> It's her education, not mine. I've had to teach her to take care of herself. I work nights, so she's had to get up and get ready for school. I'm not going to be there all the time. She's gotta do it. She's a tough cookie. . . . She's almost an adult, and I get the impression that they want me to walk her through her work. And it's not that I don't care either, I really do. I think it's important but I don't think it's my place.

This mother does not lack concern for her child. In her view, independence is essential for her daughter's success.

Whether it is for social, cultural, linguistic, or economic reasons, these parents' voices are rarely heard at school. Perhaps, as educators, we too readily categorize them as "those other parents" and fail to hear the concern that permeates such conversation. Because the experiences of these families vary greatly from our own, we operate on assumptions that interfere with our best intentions. What can be done to address the widening gap between parents who participate and those who don't?

Getting Involved: Suggestions from Parents

Parents have had many suggestions for teachers and administrators about ways to promote active involvement. Their views, however, do not always match the role envisioned by educators. Possessing fewer economic resources and educational skills to participate in traditional ways (Lareau 1987), these parents operate at a disadvantage until they understand how schools are organized and how they can promote systematic change (Delgado-Gaitan 1991).

If we're truly interested in establishing a dialogue with the parents of all of our nation's students, however, we need to understand what parents think can be done. Here are some of their suggestions.

Clarify how parents can help. Parents need to know exactly how they can help. Some are active in church and other community groups, but lack information about how to become more involved in their children's schooling. One Latina mother explains that most of the parents she knows think that

school involvement means attending school parties.

As Concha Delgado-Gaitan (1991) points out ". . . the difference between parents who participate and those who do not is that they are a critical part in their children's education." Many of the parents we spoke to don't see themselves in this capacity.

Encourage parents to be assertive. Parents who do see themselves as needed participants feel strongly that they must provide their children with a positive view of their history and culture not usually presented at school.

Some emphasize the importance of speaking up for their children. Several, for instance, have argued for or against special education placement or retention for their children: others have discussed with teachers what they saw as inappropriate disciplinary procedures. In one parent's words:

> Sometimes kids are taken advantage of because their parents don't fight for them. I say to parents, if you don't fight for your child, no one's going to fight for them.

Although it may sound as if these parents are advocating adversarial positions, they are simply pleading for inclusion. Having spent much time on the teachers' side of these conversations, we realize that teachers might see such talk as challenging their positions as professional decision makers. Yet, it is crucial that we expand the dialogue to include parent knowledge about school settings, even when that knowledge conflicts with our own.

Develop trust. Parents affirm the importance of establishing trust. One mother attributes a particular teacher's good turnout for parent-teacher conferences to her ability to establish a "personal relationship" with parents. Another comments on her need to be reassured that the school is open, that it's OK to drop by "anytime you can."

In the opportunities we provide for involvement, we must regularly ask ourselves what messages we convey through our dress, gestures, and talk. In one study, for example, a teacher described her school's open house in a middle-class neighborhood as "a cocktail party without cocktails" (Lareau 1987). This is the sort of "party" that many parents wouldn't feel comfortable attending.

Fear was a recurrent theme among the parents we interviewed: fear of appearing foolish or being misunderstood, fear about their children's academic standing. One mother explained:

> Parents feel like the teachers are looking at you, and I know how they feel, because I feel like that here. There are certain things and places where I still feel uncomfortable, so I won't go, and I feel bad, and I think maybe it's just me.

This mother is relaying how it feels to be culturally, linguistically, and ethnically different. Her body of knowledge does not match the institutional knowledge of the school and she is therefore excluded from home-school conversations.

Build on home experiences. Our assumptions about the home environments of our students can either build or sever links between home and school. An assumption that "these kids don't live in good environments" can destroy the very network we are trying to create. Too often we tell parents what we want them to do at home with no understanding of the rich social interaction that already occurs there (Keenan et al., 1993). One mother expresses her frustrations:

> Whenever I go to school, they want to tell me what to do at home. They want to tell me how to raise my kid. They never ask me what I think. They never ask me anything.

When we asked parents general questions about their home activities and how these activities might build on what happens at school, most thought there was no connection. They claimed not to engage in much reading and writing at home, although their specific answers to questions contradicted this belief. One mother talks about her time at home with her teenage daughter:

> My husband works nights and sometimes she sleeps with me. . . . We would lay down in bed and discuss the books she reads.

Many of the parents we spoke to mentioned Bible reading as a regular family event, yet they did not see this reading in relation to schoolwork. In one mother's words:

> I read the Bible to the children in Spanish, but when I see they're not understanding me, I stop (laughing). Then they go and look in the English Bible to find out what I said.

Although the Bible is not a text read at public schools, we can build on the literacy practices and social interactions that surround it. For instance, we can draw upon a student's ability to compare multiple versions of a text. We also can include among the texts we read legends, folktales, and mythology-literature that, like the Bible, is meant to teach us about our strengths and weaknesses as we strive to make our lives meaningful.

As teachers, of course, we marvel at the way in which such home interactions do, indeed, support our goals for learning at school; but we won't know about these practices unless we begin to form relationships with parents that allow them to share such knowledge.

Use parent expertise. Moll (1992) underscores the importance of empowering parents to contribute "intellectually to the development of lessons." He recommends assessing the "funds of knowledge" in the community, citing a teacher who discovered that many parents in the Latino community where she taught had expertise in the field of construction. Consequently, the class developed a unit on construction, which included reading, writing, speaking, and building, all with the help of responsive community experts—the children's parents.

Parents made similar suggestions—for example, cooking ethnic foods with students, sharing information about multicultural heritage, and bringing in role models from the community. Latino parents repeatedly emphasized that the presence of more teachers from their culture would benefit their children as role models and would help them in home-school interactions.

Parents also suggested extending literacy by writing pen pal letters with students or involving their older children in tutoring and letter writing with younger students. To help break down the barriers that language differences create, one parent suggested that bilingual and monolingual parents form partnerships to participate in school functions together.

An Invitation for Involvement

Too often, the social, economic, linguistic, and cultural practices of parents are represented as serious problems rather than valued knowledge. When we reexamine our assumptions about parental absence, we may find that our interpretations of parents who care may simply be parents who are like us, parents who feel comfortable in the teacher's domain.

Instead of operating on the assumption that absence translates into non-caring, we need to focus on ways to draw parents into the schools. If we make explicit the multiple ways we value the language, culture, and knowledge of the parents in our communities, parents may more readily accept our invitations.

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FAMILY STORIES: INTERGENERATIONAL LITERACY

Joanne R. Nurss and Susan Rawlston

Family History

I left my country in December of 1979. I left my country because of the war and I wanted to survive. I left Cambodia and went to Thailand. I stayed there for two years. I live in a refugee camp with my parents. [Cambodian Woman]

Stories like this one were written by families attending an intergenerational family literacy program. In planning the curriculum for Project CLASS (for the Center for the Study of Adult Literacy at Georgia State University) we faced the challenge of developing a way to teach English language and literacy to adult family members and their children (ages 2 to 82 years) with four different native languages and cultures (Vietnamese, Khmer/Cambodian, Laos, and Spanish/Hispanic). We needed an approach and theme that addressed the diversity of ages, cultures, and native language literacy levels and developed proficiency in English language and literacy. Each family shared and recorded in a family book stories about their family, culture, and past and present lives as a way for the adults to share cultural information with their children and to develop a written family record. The family stories provided a link between the generations, a vehicle for the adults to share their native culture with their children, and an introduction for both adults and children to American culture and language. Via computer word processing, families composed, edited, illustrated, and published their stories.

Teachers created a comfortable climate in which families could share their own stories. They brought in pictures of themselves and their families at various ages, shared family traditions and celebrations, and wrote stories about interesting family events (family lore).

Families were encouraged to bring in photographs of their family. Sessions began with families sharing photographs and explaining their significance. Discussion centered on vocabulary development (labels, descriptions) and modeling of language needed to share family information. This discussion facilitated the use of English as the common language across ethnic boundaries. Students then recorded what they had shared. In the beginning classes students dictated to the teacher. Students with higher language skills wrote their own stories. Then they took their stories to the computer room and typed them onto a personal computer disk. After a draft was printed, the teachers worked with each student to edit the stories, with emphasis on one or two grammar points or written language conventions common for that student or across the class. In later visits to the computer lab, students learned to call up their stories and edit them according to previously discussed improvements. An overhead projector assisted in editing stories. Transparencies of stories were prepared and the students discussed common issues (e.g., punctuation, capitalization, plural and third person singular endings). Students edited the transparency and later transferred the changes to the disk. Finally, edited stories were printed, illustrated, and bound into a book with a laminated cover.

The adults were excited to be able to use the computers. Middle and elementary school children used knowledge acquired in school and in previous Project CLASS activities to show the adults how to use the computers. One teacher organized the computer room,

Tips from the Classroom, premier issue.

helped the other teachers become familiar with the computers, and provided the basic instruction to a group of middle school students. This core group of students could then assist each class. The room had 15 Apple IIe computers with no printers. The Children's Writing and Publishing Center software (written by and available from The Learning Company, 6493 Kaiser Drive, Fremont, CA, 94555) we used is user-friendly, has commands written in simple language, and has a good graphics component. Files were set up for each student containing a personal data disk and a folder for printer copies of their work. Each student needed a program boot disk and a personal data disk on which to save stories.

After the initial stories, the teachers introduced several themes to expand the family story books. These included foods, celebrations, games, and information about each country and about Georgia. For the games theme, teachers introduced several American games that adults and children could play cooperatively and that required the oral and /or written language. Families then discussed games from their native countries and selected one to teach to the group. The students then reviewed and discussed each game and wrote a description of one of the games for their family book. This activity facilitated cross-cultural discussion and explanation in English.

Celebrations included The New Year in Vietnam, Cambodia, and Laos; Mother's Day in Latin America; and Valentine's Day in the United States The computer program was used to make cards for Mother's Day, to write poems for lace Valentines, and to record stories about the American celebrations and similar ones in the students' countries.

The family storybooks provided the context for expanding English vocabulary, acquiring English sentence structures, and learning English spelling and print conventions. Families used spoken and written English to communicate interesting and important information both among family members and between different cultures.

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PARAPROFESSIONALS

More Than "Helping Hands": Bilingual Paraprofessionals Serving Immigrant Students

Jenny Kaplan

Where there is both a limited supply and an increased demand for bilingual teachers, in communities across the United States, bilingual paraprofessionals work to fill language and cultural gaps between monolingual/monocultural teachers and students who speak languages other than English.

Bilingual paraprofessionals often are hired to provide communication links between Limited English Proficient Students and families, and the school. They reach out to immigrant students' families and, in many cases, are the only school contact these families have. Bilingual paraprofessionals set up parent-teacher meetings, interpret for school personnel and immigrant families, and teach both school culture to immigrant families and the immigrant families' home culture to school personnel.

Bilingual paraprofessionals often come from the home countries and United States communities of immigrant students; they speak the same language as these students, in more ways than one. Many were highly educated in their home countries, and many were teachers before emigrating to this country. Educators need these paraprofessionals in schools to meet the needs of a fast growing diverse student body.

Once paraprofessionals are in place, however, their real worth is frequently undervalued. Their salaries, benefits, and "professional status" are often not commensurate with their experience or their duties. In South Texas, for example, where many immigrant students from Mexico are also migrant, persons who are certified teachers in Mexico serve as *profesores*. According to Roy Jackson of Texas' Region One Education Service Center, the *profesores* "function as paraprofessionals on paper, but are serving in reality as teachers."

In California as well, the State Department of Education recognizes that "[d]espite a lack of formal (United States) credentials, paraprofessionals are often the ones who provide academic instruction for these (limited English proficient) children." They are "often indispensable" yet must work part-time and therefore do not receive benefits (1991).

Individual paraprofessionals agree that their compensation should be commensurate with the responsibilities they assume. One paraprofessional in Florida was a full-time teacher in Haiti for seven years. He described his duties as a paraprofessional working with immigrant children as a series of undefined tasks for which he had total responsibility and little to no direction. Eventually this young man was forced to resign his position in order to find the time to go back to school and earn his United States teaching credentials. Not surprisingly, he was far from alone. Many paraprofessionals left, he said, because of "salary reasons . . . They don't believe they're fairly paid." However, many others stayed in their position "because of a strong solidarity" with the immigrant groups in the schools.

Only thirty miles away in another Florida school district, paraprofessional Maria

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Masciola echoed this sentiment of commitment and purpose: "It's a privilege to work with kids from different countries, different cultures. You learn a lot." Ms. Masciola explains, "I believe some of those kids will come to me with personal problems. I'm like a mother figure to them. . . I wouldn't want anyone to go through what I went through when I came here. I'm here to help the kids feel more comfortable. . . We should be proud of where we come from. And that's what I try to communicate."

Beyond providing supplemental instruction, Masciola, like other paraprofessionals, sets up parent-teacher conferences, sometimes assists in the main office, performs "cafeteria duty," and helps the teacher prepare instructional materials. Paraprofessionals in many schools are frequently underpaid and overworked. Yet they maintain their positions, sometimes out of economic necessity, oftentimes out of a sense of responsibility for the immigrant children and families they serve.

As Catherine Minicucci, consultant in public policy analysis and president of Minicucci Associates in Sacramento, puts it, "An aide should be a valued team member, a liaison to the community. They should participate in training as a professional, and they should be able to move up the career ladder. What you don't want to see is a general schoolwide attitude of 'We can wash our hands of this problem (of immigrant student influxes) because we have these aides.'"

Training: Pre-service, In-service, and Moving Up the Career Ladder

While most teachers and administrators interviewed value the presence of bilingual paraprofessionals in their schools, they rarely provide pre-service training for them. Many agree that paraprofessionals should be trained both in pre-service and in-service, but most training takes place according to the needs and resources of particular districts or schools, and the vast majority of training takes place in in-service workshops.

The training offered is usually to help bilingual paraprofessionals earn credentials to become bilingual teachers or other school-based professionals. Bilingual educators implement important and effective strategies for teaching immigrant and LEP children. Yet certified teachers who are bilingual and biliterate are rare. According to administrators in California, Texas, and Connecticut, the next generation of bilingual teachers will be found in the bilingual paraprofessionals serving immigrant students today.

Morgan Appel, of the Tomás Rivera National Policy Institute in California affirmed that on a national level, "we are starting to look into interested and qualified paraprofessionals as a way to augment the pool of Latino teachers." On a state level, Tony Salamanca, consultant to the California Department of Education Bilingual Education Office, echoes the need to increase the numbers of bilingual/crosscultural teachers: "We need about 20,000 bilingual teachers in California alone."

At the Board of Education of the City of New York and the Los Angeles Unified School District, administrators are working to move paraprofessionals into professional teaching positions. In New York, Bilingual Pupil Services provides training to paraprofessionals "who are within two years of being credentialed," according to Dr. Tomi Berney of the Office of Educational Research. In LA Unified, Steve Brandick asserts that "preparing paraprofessionals to become teachers would be a natural way to move teachers into the classroom from the minority populations."

In many states and at the federal level, bilingual paraprofessionals are encouraged to and supported in earning college degrees and state certification as teachers. The training programs vary in terms of moneys allotted, time commitment, on-site training available, and follow-up monitoring and support (Bradley, 1990).

Training that moves the bilingual paraprofessional up the career ladder may be especially

welcomed by paraprofessionals who wish to move on to teaching positions. Many in the field, however, may feel that "moving up" is less important than receiving support—both financial and professional—in their present position. Paraprofessionals who do not wish to become certified teachers also need pre- and in-service training, as well as administrative support.

Even if the supply of bilingual teachers were sufficient in keeping up with the influx of immigrant students, bilingual paraprofessionals would still be hired. According to Steve Brandick in Los Angeles, these paraprofessionals "represent a source of supplemental services. They become important instructional components . . . There definitely is an effort to prepare more bilingual teachers, but there's always a need for assistance."

The assistance bilingual paraprofessionals provide is especially important in the form of advocacy. Because of their sense of solidarity with immigrant families, paraprofessionals are usually the key individuals to communicate immigrant students' strengths and needs to the rest of the school community. Oftentimes, it is the bilingual paraprofessional who will bring immigrant students' academic, language, social, and cultural issues to the surface for teachers and administrators.

Recommendations

Bilingual paraprofessionals should be rewarded for their dedication to immigrant students, their ability to communicate with immigrant families, and their understanding of the sociopolitical, economic, and cultural backgrounds of the immigrant communities they serve. Because they come from the same community as their immigrant students, they are role models for these students, serving as "mother/father figures" or as "big brother/big sisters." They are classroom teachers, tutors, and translators. They are sometimes the only ones in a school to communicate with immigrant families.

In order to support the education of immigrant students, schools and districts should provide for bilingual paraprofessionals:

- paid pre-service training to prepare the paraprofessional to meet the needs of immigrant students;
- higher salaries and benefits in order to attract and retain competent and committed bilingual paraprofessionals;
- paid in-service training that supports the paraprofessional as a tutor, a translator, a classroom aide, etc.;
- optional in-service training and financial support to obtain teaching credentials;
- opportunities to formally advocate for immigrant students;
- clearly defined parameters of their job responsibilities and priorities;
- clearly defined lines of accountability and support mechanisms from the administration of the school and district; and
- a support network among paraprofessionals.

According to the school or district in which they work, bilingual paraprofessionals are referred to as teachers' aides, classroom aides, teachers' assistants, community language facilitators, community liaisons, family assistants, etc. No matter what title they are conferred, however, as key individual liaisons between schools and immigrant students' families, their responsibilities cover a wide range of duties and include tutoring, classroom teaching, translating, interpreting, school to family communication, advocating for immigrant students, discipline, referrals, and counseling.

Bilingual paraprofessionals are more than a pair of helping hands; they constitute an integral part of immigrant students' education. As such, schools and school districts should avoid high attrition rates due to minimal support and low salary. To attract

and retain this important resource, schools must extend to their paraprofessionals the attention, support, and respect they deserve.

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THE ROLE OF PARAPROFESSIONALS

Judith Lessow-Hurley

In the classroom, aides have traditionally been responsible for clerical tasks, such as record keeping, filing, copying, and housekeeping tasks, including assembling materials for instruction, replenishing materials, and supervising students' clean-up. Outside the classroom, aides have been responsible for non instructional tasks, such as cafeteria and yard duty, loading and unloading school buses, accompanying children to the nurse's office, and assisting on field trips.

Increasingly, however, paraprofessionals are involved in instructional supervision and support. For example, paraprofessionals often help children locate resources for projects or group work. They may also provide make-up lessons for children who have been absent. In addition, they may supervise guided practice and reinforcement activities that follow direct instruction by the teacher.

According to the California State Department of Education (1984), the complex environment of a bilingual classroom requires teachers to team with their aides. Bilingual paraprofessionals, often members of the ethnic community of the LEP learners, can assist in significant ways. In addition to providing instructional support, a bilingual aide in a team relationship with a teacher can:

- Help students develop language skills and learn more about the culture of their community.
- Enhance home/school communication.
- Provide a community role model (California State Department of Education 1984, p. 20).

Expanding the traditional role of the paraprofessional to roles involving instruction and even leadership requires that attention be given to appropriate training programs for teacher aides. Paraprofessionals need to understand the cultural and historical perspectives of LEP students. Training should also include the development of language and literacy skills in the non-English language and, if necessary, the development of English language skills.

Finally, paraprofessionals and teachers need to be trained to work together. Inservices for bilingual teachers and aides should include a component that will allow them to build a team and learn strategies for cooperation in the classroom.

Read More About

- Bilingual teacher competencies in "Competencies for Bilingual Multicultural Teachers," by S. Ana Garza and Carol P. Barnes, in *The Journal of Educational Issues of Language Minority Students 5* (Fall 1989): 1-25
- The role of paraprofessionals in *Bilingual-Crosscultural Teacher Aides: A Resource Guide* (Sacramento: California State Department of Education 1984).

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