The report details the findings of a study concerning the support services needed to provide effective public school instruction for California's population of linguistically and culturally diverse students. Information was obtained from three sources: school district and intermediate agency administrators and professional personnel trainers; principal and faculty of an elementary school with an increasingly diverse population; and professional development literature. Findings, presented here are to be verified later by questionnaire survey. Four principal challenges were identified: (1) providing instruction that accommodates both similarities and differences in the needs of diverse students; (2) expanding all teachers' and administrators' insights and knowledge regarding limited-English-proficient (LEP) students' experiences and language development needs; (3) providing high school students with equal access to all academic opportunities; and (4) developing an adequately prepared teaching force. Specific recommendations for program implementation support are outlined in three areas: personnel knowledge and skill development; development of classroom instructional strategies; and use of technology. The elementary school studied is discussed as an illustration of these needs. Contains 12 references. (MSE)
Implementation of Support Efforts: Promoting Effective Instruction of Linguistically and Culturally Diverse Student Populations

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Introduction

The student population in border states such as California and Arizona includes increasingly more students with an array of sociocultural backgrounds. The proportion who come from homes in which a language other than English is spoken and the number of first languages represented among them also are increasing. As a result, more and more teachers in urban, suburban, and rural areas are expected to provide effective instruction to linguistically and culturally diverse student populations.1

Data collected by the California Department of Education Bilingual Education Office (CDE/BEO) (1993) illustrate the challenges teachers face. In two years' time, the number of limited English proficient (LEP) students in the state increased by 220,000, and it is projected that 60%, or more, of new students entering California's schools will be LEP. Spanish-speaking students comprise the largest proportion of LEP students in California, but there have been sizable increases in the number of students for whom Vietnamese, Hmong, Armenian, and Arabic are primary languages. Many school districts report 30 or more non-English primary languages represented among students in their schools.

Thus, rapidly growing requirements for all schools and education personnel in California include (a) development of programs that promote effective learning opportunities for diverse students, and (b) teacher development in skills, and knowledge, cultural sensitivity, and understanding to teach them. School districts in Arizona face similar challenges.

In response, the Southwest Regional Laboratory’s (SWRL's) Metropolitan Trends and Research Outcomes (METRO) Center sought to identify the support requirements associated with implementation of effective instructional programs for diverse students. Information was obtained from three sources:

1. local school district and intermediate agency administrators and professional personnel trainers responsible for (a) designing and implementing instructional approaches appropriate to diverse students, and (b) providing the associated professional development requirements;

2. the principal and faculty of an elementary school faced with the challenges posed by an increasingly diverse student population; and

1 Throughout the remainder of this report, "linguistically and culturally diverse student populations" is shortened to "diverse students" to aid the flow of discussion.
relevant professional development literature that plays a key role in all efforts to better serve diverse students.

Further verification of information from these sources will be obtained through administration of a questionnaire. Items will be developed from data contained in this report. The questionnaire will be administered to a broad sample of teachers in the METRO Center's region and presented in a later report.

Implementation Support Requirements as Perceived By Administrators and Trainers

Representatives of school districts and county offices of education in Southern California worked with METRO Center staff to identify key issues relative to implementation of effective instructional programs for diverse students. Participants included: (a) county office of education professional development coordinators specializing in bilingual instruction; (b) a school district coordinator of bilingual education programs; (c) a school district coordinator of language minority programs; (d) a university professor who is responsible for preservice programs that qualify participants for California’s multiple and single subject teaching credentials with a bilingual emphasis (BCLAD/CLAD credentials); and (e) a high school principal and an elementary school vice principal whose schools serve diverse student populations. These practitioners raised four overarching challenges and identified a wide array of specific approaches and insights that, based on their collective experience, support implementation of effective instruction for diverse students.

Major Challenges

One of the major challenges they identified was to provide effective instruction that attends to both similarities and differences in the needs of students from various linguistic and cultural backgrounds. In doing so, it is important to keep in mind that diverse student groups typically include students for whom English is the primary language, along with students among whom a variety of other primary languages are represented. Students also may bring a wide range of cultural backgrounds and expectations to their schooling experiences. Thus, effective instruction not only needs to build students' language and other academic skills, but also affords students opportunities to see their own images and values represented in what is learned.
A second major challenge posed by administrators and trainers is expanding all school administrators' and all teachers' insights and knowledge regarding (a) what it means to be LEP, and (b) how instruction in a student's primary language, in English-as-a-second language (ESL), and/or use of specially designed academic instruction in English (SDAIE) promote learning on the part of not only LEP but also English proficient students. Given the growing proportion of schools and classes in the METRO Center's region that includes large numbers of diverse students, all educational professionals need to acquire and make use of these insights and knowledge.

Providing diverse student populations at the high school level with equal access to all available academic opportunities was seen as a third major challenge faced by schools in the METRO Center's region. Of particular concern is providing school and classroom level instruction that meets the needs of the growing segment of students who are entering high school with both limited English proficiency and limited prior schooling experience.

The fourth major challenge raised by administrators and trainers is developing a teaching force with sufficient numbers of teachers who have satisfied the credential requirements for working with LEP students to meet state and federal education instructional program mandates.

**Specific Implementation Support Recommendations**

Specific implementation support recommendations offered by the group of school administrators, instructional program directors, and professional development coordinators focused on three areas: personnel knowledge and skill development, instructional strategies to be used in the classroom, and use of technology to accomplish needed program and personnel development and implementation.

Table 1 lists the personnel knowledge and skill development considered to be imperative to implement effective instruction of diverse students. Building a general understanding of key features of such instruction was seen as a major area of concern. As designated by the target audiences, the group thought that teachers, teacher trainers, school administrators, and instructional aides all needed to be familiar with the philosophy and methodology of multicultural education, including knowledge of the various instructional approaches that support LEP students' acquisition of English language and other academic knowledge and skills. Other specific recommendations centered around the importance of acquainting teachers, teacher trainers, and school administrators with state guidelines and frameworks regarding the instruction of diverse
students, especially their acquisition of English language, and other academic knowledge,
and the skills and teacher credentials required for working with them. Familiarization
with levels of English language proficiency and demographic profiles of students
comprising the diverse student population in their respective schools were other
important implementation needs. Special needs of newcomer students, e.g., students who
are new to schools in the United States, also were highlighted.

Table 1
Recommendations Regarding Personnel Knowledge and Skill Development To Support
Implementation of Effective Instruction of Linguistically and Culturally Diverse Student
Populations

<table>
<thead>
<tr>
<th>Specific recommendation</th>
<th>Target audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>General understanding of instruction of diverse student populations</td>
<td>T, TT, A, I*</td>
</tr>
<tr>
<td>Training in philosophy and methodology of multicultural education</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Attention to differences between bilingual instruction and multicultural instruction</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Application of state guidelines and frameworks regarding instruction of diverse student populations</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Illustrative examples of English language development of LEP students from preproduction through fluent English proficient designation</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Characteristics of newcomer students, e.g., students new to schools of the United States</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Demographic profiles of schools' student populations, including historical perspective of changing demographics</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Strategies for instructing LEP students, how evolved and recent changes in strategies</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Acquaintance with key research on effective instruction of diverse students, including interviews/dialogues with experts such as Krashen, Tikunoff, Cummins, Ramirez</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Clear examples of SDAIE and primary language instruction</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Requirements to obtain CLAD/BCLAD credential including sources of training</td>
<td>T, TT, A</td>
</tr>
</tbody>
</table>

Instructional planning and materials
Exemplary lesson plans to serve as models for how all students can be involved in instruction
Acquaintance with language development materials available from school, district, county office, publishers, national bilingual clearinghouse

*Key: T = Teacher; TT = Teacher Trainer; A = Administrator; I = Instructional Aide/Assistant
<table>
<thead>
<tr>
<th>Specific recommendation</th>
<th>Target audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approaches to content coverage when classes include diverse student populations</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Relate State curriculum framework to approximate units in district texts for diverse student populations</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Acquaintance with resources available at Buenos Center in Colorado on bilingual special education</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Provide California Bilingual Trainer of Teachers Project (BTTP) training resources</td>
<td>TT</td>
</tr>
<tr>
<td>Use of Instructional Aides</td>
<td></td>
</tr>
<tr>
<td>How to work with bilingual aides</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>How to work with instruction aides in reading programs used in the classroom</td>
<td>T, TT, A, I*</td>
</tr>
<tr>
<td>Bilingual methodology to be used by/with aides</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Helping aides work effectively with heterogeneous cooperative student groups</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Training in assessment of students' language skills with emphasis on differences rather than disabilities</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Awareness of confidentiality with respect to assessment</td>
<td>T, A, I</td>
</tr>
<tr>
<td>Using portfolio assessment techniques</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Using respect for diversity to increase parent involvement</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Strategies for parent involvement in children's schooling</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Taking advantage of available supplemental program funds</td>
<td>T, A</td>
</tr>
</tbody>
</table>

*Key:  T = Teacher; TT = Teacher Trainer; A = Administrator; I = Instructional Aide/Assistant

Another personnel development priority was informing teachers, teacher trainers, and school administrators about materials and resources that support effective instruction of diverse students. Need for training in the use of instructional aides to support effective instruction of LEP students also was mentioned. Other recommended personnel development emphases included training in ways to assess students’ English language skills and ways to involve parents from all the cultural and language backgrounds represented in the student population in school endeavors.

Based on their knowledge and experience, practitioners also suggested more specific areas of instructional expertise that teachers, administrators, and instructional aides should acquire to implement effective instruction of diverse student groups. These are listed in Table 2. The practitioners thought that knowledge of the characteristics of
LEP students' English language usage, as they progress from very limited to proficient use of English, helps teachers, administrators, and instructional aides instruct diverse student groups more effectively.

**Table 2**

*Areas of Instructional Expertise That Support Implementation of Effective Instruction of Linguistically and Culturally Diverse Student Populations*

<table>
<thead>
<tr>
<th>Recommended instructional process</th>
<th>Target audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of English language acquisition</td>
<td>T, A, I*</td>
</tr>
<tr>
<td>Knowledge of characteristics of English language usage from preproduction through transition to regular classes, including observable evidence of growth in English language skills</td>
<td>T, A, I</td>
</tr>
<tr>
<td>Knowledge of types of instructional activities students may be expected to complete successfully at various levels of English language usage</td>
<td>T, A, I</td>
</tr>
<tr>
<td>Processes for tracking students' English language development across usage levels</td>
<td>T, A, I</td>
</tr>
</tbody>
</table>

Enhancement of instruction

Regardless of whether teacher or administrator is bilingual, knowledge of and skill in use of primary language instructional strategies that promote acquisition of English, primary language, and academic content skills and knowledge

Skill in use of sheltered approaches to subject matter instruction

Other effective approaches to academic content coverage in classes that include diverse student population; approaches specific to grade levels and subject areas and across all grade levels and subject areas

Attention to students' home cultures

Availability and selection of textbooks and other curriculum materials that reflect students' cultures

Use of parents and others to acquaint all students with multiple cultures represented in school/classroom

Apply academic content to situations in multiple cultures, e.g., use of architecture from a variety of cultures to illustrate geometric concepts, skills

Knowledge of educational philosophy and practices in students' home cultures

Monitoring student academic progress

Skill in use of multiple approaches to student assessment that employ a variety of means for demonstrating what has been learned

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*Key: T = Teacher; A = Administrator; I = Instructional Aide/Assistant*
Along similar lines, knowledge of instructional approaches that most effectively support students' acquisition of academic knowledge and skills, as they move through various stages of English language proficiency, also was considered important. Ability to use several processes for tracking students' acquisition of English language skills was another important component of effective instruction for diverse students.

Enhancement of instruction, beyond use of written and oral text, was seen as another essential ingredient of effective instruction. Skill in using instructional strategies that incorporate and build upon the various home cultures represented among students in a school or class was another need that was highlighted. Uses of academic assessments that employ a variety of means for demonstrating what has been learned rather, than relying solely on written products, also were given high priority.

The group agreed that building the knowledge and skills outlined in Tables 1 and 2 will require extensive personnel development support. Thus, they examined the role technology might play in meeting this need. As a stimulus for discussion, they reviewed a multimedia teacher training package developed by Indiana University and the North Central Regional Educational Laboratory. Table 3 reports the strengths they identified and questions they raised regarding the feasibility of using multimedia technology.

### Table 3

*Use of Technology To Support Personnel Development Required To Implement Effective Instruction of Linguistically and Culturally Diverse Student Populations*

<table>
<thead>
<tr>
<th>Practitioner recommendations</th>
<th>Target audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths of multimedia approach to personnel development</td>
<td>T, TT, A, I*</td>
</tr>
<tr>
<td>Access to a wide variety of examples of exemplary practices regarding instruction of diverse</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>student populations documented so user can explore practices that are especially appropriate</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>for specific ethnolinguistic group(s)</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Add to and update personnel development content based on changing student populations</td>
<td>T, TT, A</td>
</tr>
<tr>
<td>Availability of articles and/or lectures by key researchers, curriculum developers, and</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>expert teachers for review at choice of user</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Indexing for flexibility of use; user does not have to go through entire professional</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>development package</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Ease of access to information about diverse cultures</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>Communication among users based on information added to package and/or associated e-mail</td>
<td>T, TT, A, I</td>
</tr>
<tr>
<td>support</td>
<td></td>
</tr>
</tbody>
</table>

*table continues*
Practitioner recommendations | Target audience
--- | ---
Scheduling flexibility for end user regarding time engaged in personnel development activities | T, TT, A, I
Availability of computer capability required to run multimedia technology; school and district program people indicated computer requirements either exist or are in process of purchase; county office of education training coordinators were skeptical | A*
Making professional development packages user friendly so teachers, teacher trainers, administrators, and instructional aides can readily access areas of interest | T, TT, A, I
Treat as more than a correspondence course for credentials, e.g., BCLAD credential in California | T, TT
Identify areas of personnel development when technology makes the greatest contribution; be sure to know where other media are equal to or better than technology | T, TT

*Key: T = Teacher; TT = Teacher Trainer; A = Administrator; I = Instructional Aide/Assistant

In the group’s view, a wide variety of information and illustrative examples can be included in a multimedia approach to professional development, which increases the likelihood that teachers, administrators, and instructional aides will attend to the linkages among language, cultural, and academic factors that influence the learning outcomes of diverse student populations. Given the ease of access to all or selected parts of a training database, the practitioners expected that most teachers and administrators would use such a resource to gain information and ideas they particularly need about how to work more successfully with diverse student populations. Seen as a major advantage was the possibility that persons who typically would not have time (or take the time) to participate in off-campus professional development efforts would work through training activities that could be completed on site via a computer. Using multimedia technology to exchange information with other individuals who are working to increase their knowledge and skills in the same personnel development areas was seen as another strength.

Most questions about the feasibility of having multimedia training available at school sites dealt with (a) acquisition computer technology necessary to operate such training; and (b) selecting the content to be included. Interestingly, district professional development program directors, school principals, and school vice principals were less concerned about technology resources than were county office of education professional
development coordinators. School district representatives reported that their districts were greatly expanding computer technology at the school-site level and felt that by the time multimedia-based professional development programs were available, their schools would be equipped to support on-site use of the programs. To encourage wider use of a multimedia program, the practitioners suggested that initial efforts should include a variety of self-contained information and instructional components that users could access and complete in relatively short time blocks. However, at the same time, they stressed the importance of making interlinkages among these components readily apparent and easily accessible; persons using the work station then would be cognizant of the ways in which instructional strategies, academic content, and students’ English language development and culture work together in effective instruction of diverse students.

Support Requirements in a School Serving an Increasingly Diverse Student Population

To learn more about the implementation support required as a school’s student population becomes increasingly more diverse, METRO Center staff worked with an elementary school in Southern California. The school is located in a district that serves a medium-size commercial area and surrounding suburban communities. At the farthest boundaries of the district, where the school is located, suburbanism gives way to a less densely populated, low-income setting. A high proportion of the student population comes from low-income families. Transiency, drugs, and high unemployment are prevailing problems in the area served by the school.

School Characteristics

Student mobility is a high concern. Each year, half or more students are new to the school. During the school year, one third of the student population changes through exiting and entering students. The student population is growing. For example, in 1986 the school served 428 students. By the 1992-93 school year, enrollment averaged 650. A total of 875 students were enrolled, 467 of whom were new to the school and 226 students who left. In 1993-94, average enrollment reached 670 students. In fall 1994, an additional 100 students entered the school, pushing enrollment above 700 students.

With growth, the population of the school also is becoming more diverse. Data indicate the proportion of African American students increased from 4% in 1986 to 11% in fall 1993. Hispanic students comprised 15% of the student population in 1986,
growing to 35% in fall 1993. Of these students, approximately 70% were deemed to be LEP. Seventy-nine percent of the student population was white, non-Hispanic in 1986; in fall 1993, they represented only 51%. At the same time, the number of Asian students is growing. In total, in fall 1993, 10 non-English primary languages were represented among students at the school.

During the 1993-94 school year, the professional staff at the school included 23 teachers. All teachers were credentialed within the areas they were teaching. However, with the changing student population, additional teachers who meet CLAD or BCLAD requirements are needed.

Types of Support Identified

During the course of the 1993-94 school year, the principal and teachers at the school worked with METRO Center staff on several occasions to explore the kind of support they thought would help them respond effectively to the increasing diversity of the school's student population. Center staff visited classes to observe the ways in which teachers currently were working with diverse students. The principal and teachers visited SWRL to become familiar with the types of support available to schools undergoing similar changes. They also reviewed the multimedia training program developed by North Central Regional Educational Laboratory and the University of Indiana and provided recommendations for use of multimedia training materials to support implementation of effective instruction of diverse student populations.

Table 4 summarizes the support priorities identified by the principal and teachers at the school. Interestingly, their priorities coincided with several recommendations received from administrators and professional development directors described above. The principal's top priority was to make teachers, parents, and others who work at the school aware of both the special needs of LEP students and of the modifications in instruction required to meet the challenges posed by limited English proficiency. Teachers concurred with this priority, but they stressed the need for sufficient training and information to recognize the capability of students at varying levels of English proficiency and then adapt instruction to meet the challenges the students face.
Table 4
Principal and Teacher Priorities To Support Adaptation of a School’s Instructional Program to an Increasingly Diverse Student Population

<table>
<thead>
<tr>
<th>Support priority area</th>
<th>Principal’s recommendations</th>
<th>Teachers’ recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of special needs of LEP students</td>
<td>Demonstrate to teachers, parents, and others the characteristics of LEP students that call for modifications in instructional approaches.</td>
<td>Provide professional development opportunities that include concrete examples of the challenges LEP students face. These should be specific to the classroom and presented in ways that help teachers see the challenges that students face.</td>
</tr>
<tr>
<td>Knowledge and skill in use of bilingual, ESL, SDAIE, and other instructional approaches that increase all students’ learning in schools</td>
<td>Provide opportunities for effective teachers already on the school faculty to develop knowledge and skills required to obtain language development specialist certification and/or BCLAD credential.</td>
<td>Training and information that help teachers recognize capability of LEP students to engage in classroom instruction in English. This should be more specific to participation in classroom instruction than the testing done to determine general English proficiency levels. Models of ways students at various levels of English proficiency participate in instruction are needed.</td>
</tr>
<tr>
<td>Serving diverse student populations</td>
<td>Build awareness and knowledge of ways to use multiple languages in a classroom. Develop teachers’ skill in use of sheltered English approaches.</td>
<td>Make it possible for teachers who want to obtain special certificates or credentials to work on areas where they need further knowledge and skill without requiring participation in areas where they already are experts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provide models of how effective teachers use sheltered English approaches in various subject matter areas. It would be most helpful if at least some models were grade-level specific and showed how their use increased learning opportunities for all students.</td>
</tr>
</tbody>
</table>

*table continues*
Another priority was building knowledge of, and skill in using, instructional approaches that increase all students’ learning in schools serving diverse student populations, such as bilingual, ESL, and SDAIE instruction. The faculty includes a higher proportion of highly effective teachers who have opted to remain at the school for several years than one might expect to find at a site as far removed from the mainstream of the school district and serving so challenging a student population. Thus, the principal was concerned about helping teachers complete of requirements needed to qualify for special certificates and/or credentials appropriate to meeting the needs of the increasingly diverse student population. Teachers also saw the need to increase the number of CLAD/BCLAD certificated teachers on staff. However, they preferred a training approach that allowed them to emphasize their own developmental needs, rather than being required to complete a broad scale training effort that would require them to repeat work in knowledge and skill areas they already possessed.

Beyond certification/credential qualifications, development of ways to use multiple languages in a classroom, and skill in use of sheltered English approaches, also were support priorities related to better serving a diverse student population that include LEP
students. Again, teachers' requirements were more specific than those of the principal. Teachers asked for models of how effective teachers worked with such populations that covered various subject matter areas and were grade level specific. They also sought guidelines and techniques for verifying that all students, particularly LEP students, were appropriately involved in instructional activities.

Skill in working with cooperative learning groups was another priority identified by the school principal. Most teachers at the school already were making extensive use of cooperative groups. Their priorities built from their perceptions of what teachers who were not yet using these approaches would need to know to implement this sort of instruction. They gave heavy emphasis to showing teachers how to introduce students to cooperative learning rather than to the theory and rationale for using cooperative learning groups, although they thought some theoretical insights would be needed.

Use of bilingual instructional aides was an area both the principal and teachers were considering as a means for increasing the responsiveness of the school’s instructional program to the changing student population. Hence, support regarding effective ways to use such aides was of interest to them.

**Computer-Based Multimedia Approach**

Their review of the multimedia teacher development program developed by Indiana University and North Central Regional Laboratory led the principal and teachers to see such an approach as a vehicle for meeting their professional development support priorities. The teachers thought a computer-based multimedia approach lent itself to providing the individualized professional opportunities they were seeking. They also thought the approach could include the examples and models of students’ English language proficiency and instructional approaches they requested. In addition, apart from the instructional approaches being demonstrated, they saw opportunities to explore the ways in which model classrooms were set up to meet the needs of diverse student populations, and why. Commentary by model teachers, and other teachers who were implementing similar approaches, also were seen as information sources that would be of considerable use to them and other teachers. They recommended development of a taped unit that follows a model teacher using an instructional strategy, such as cooperative learning or sheltered English, across a full school year. The adaptations required to meet students’ language, academic, and social growth and development then could be modeled and discussed. Organizing of the multimedia program in a way that a teacher could easily move to the skill and content area of interest was seen as a necessity.
Approaches To Improving Instruction of Diverse Student Populations

The administrators, professional development program directors, and teachers working with the METRO Center staff emphasized teacher development as the primary means for improving instruction of ethnolinguistically diverse student populations. Their input focused more on the content of this support than on how it might be accomplished. Nonetheless, the processes that might be used to increase the knowledge and skills of teachers, administrators, and instructional aides working with diverse student populations are important.

Requirements of Professional Development

Regardless of the direction a professional development effort might take, previous research has shown that to achieve full effect, any professional development effort must meet several requirements. Guskey (1986) identified four principles essential to effective professional development:

1. Take into account that change is a gradual and difficult process requiring both time and effort on the part of participants.

2. Remember that change involves both learning to be proficient at something new and finding meaning in this new way of doing things.

3. Ensure that participants receive regular feedback based on student progress, giving special attention to effects of new strategies on changes in student learning.

4. Provide continued support and follow-up after initial training because few participants move from development directly to effective use of new processes. They need support as they fit the processes into their repertoires.

Griffin (1993) found that effective professional development (a) is designed as a consequence of systematic problem identification by those most directly related to the problem; (b) is interactive; (c) mitigates to some degree status differences between teachers and administrators; (d) depends less on consultants and more on teachers and administrators for substantive and procedural guidance; (e) is formulated and monitored largely according to the perceptions of the participants; (f) is formulated in part in terms of a careful analysis of the organization and the people for whom it is intended; (g) is
flexible, and responsive to changes in participants and settings; and (h) within reasonable limits, is situation-specific.

Linking teachers' requests for access to a wide array of information about the following topics is a demanding undertaking: (a) students' English language acquisition, (b) instructional strategies that promote learning in diverse student groups, (c) classroom settings that facilitate all students' participation in learning, and (d) the professional development requirements listed above. Needs, as perceived by teachers, call for making a wide range of information, examples, guidelines, and discussions readily available to teachers when they are most applicable to improvements being undertaken. Yet, effective professional development calls for long-term inquiry, analysis, and adaptation support. A solution to the dilemma may be to combine multimedia professional development support with collaborative, school-based reform efforts.

The Role of Collaborative Reform Efforts

Site-based management, professionalizing teaching, teacher empowerment, and schools as centers of inquiry describe the sorts of school and classroom reform efforts that could take advantage of access to a multimedia professional development support base, while ensuring that long-term improvement is undertaken (for examples of such collaborative reform efforts, see Berry & Ginsberg, 1990; Carnegie Forum, 1986).

Done properly, collaborative reform efforts cultivate new ways of thinking about teaching and learning on the part of school administrators, as well as teachers, and give these new insights as much or more credence than old ideas about classroom instruction (Grossman, 1992). The teacher's mind set is a key to productive collaborative reform. Such a mind set values and uses information about instruction and student learning, asks questions about what might happen if instruction were modified, and seeks information as to why one approach to instruction works better than another given particular groups of students (cf. Darling-Hammond & Snyder, 1992; McClure, 1992; Richardson, 1992). Asking what knowledge and theory are behind particular reforms, and seeking new understandings about teaching and learning, also are integral to such improvements. Access to relevant knowledge and skills through a multimedia database may encourage such inquiry, thereby increasing the quality of the reforms that result.

Grossman (1992) found little evidence that participation in collaborative reform efforts in itself leads to changes at the classroom level. However, when participation is combined with a knowledge base that provides models of effective student and teacher performance in classrooms serving diverse student populations, the likelihood increases.
that teachers will change existing classroom practices, in addition to acquiring new knowledge and understanding about teaching and broadening their sense of professional responsibility.

Therefore, these may be an added value from combining (a) collaborative improvement for instruction for diverse student populations, and (b) a professional development approach that accommodates individualized knowledge building. The blend could help circumvent some problematic aspects of expanded professional collaboration and responsibility that run counter to increasing and maintaining teacher involvement in expanded professional roles. For example, without careful team-building, other teachers may mistrust input offered by teachers who assume responsibility for some part of an improvement effort, particularly if these teachers have fewer years of teaching experience than others at the school. Also, after engaging largely in professional development activities provided by outsiders, looking to a peer for new knowledge, skills, and guidance can be difficult (Wasley, 1992). Availability of a database to bolster teachers’ input and suggestions may encourage other teachers to act upon them. Further, teachers who elect to remain apart from collaborative planning and development efforts, because of the additional workload they impose, can use the multimedia database to gain knowledge and skills that facilitate their participation in school and classroom improvement efforts (cf. Levine & Eubanks, 1992; Zeichner, 1994).

Summary

The administrators, professional development program directors, and professional staff of one school who worked with METRO Center staff identified a wide array of knowledge and skills required to provide effective instruction for ethnolinguistically diverse student populations. Generally, teachers requested more examples and classroom and learning-specific information than did administrators and professional development directors. All felt that teachers, administrators, teacher trainers, and instructional aides needed to know more about the challenges faced by LEP students, become more skilled in ways to assess and build their English language skills, and engage them successfully in instruction conducted in English. All saw a multimedia teacher training approach as an important vehicle for improving instruction of diverse student populations. Combining such a resource with collaborative school efforts to improve education of diverse student populations was advanced as a promising direction for future support efforts to take.
References


