The ability to deal effectively with student differences is crucial to teaching reading. Teachers must address the needs of culturally and linguistically diverse students in the regular classroom. The ability of teachers to handle differences effectively translates into instructional practices that provide for each student's self-respect and that lead all students to feel secure in the classroom. Creating successful opportunities for students with limited proficiency in English requires an understanding of nonstandard dialects, characteristics of foreign languages spoken by the students in the classroom, and students' cultural values. Although speaking with a dialect or a primary language other than English may present problems in learning to read, in a traditional general education classroom a sensitive and knowledgeable teacher minimizes this problem. Teachers who tailor reading instruction that enhances the needs of all students truly transform the literacy paradigm for students who have historically belonged to marginalized groups. Thus, by making use of effective reading strategies such as direct instruction combined with basal reading materials and literature-based reading instruction, teachers can successfully speak to the needs of culturally and linguistically diverse students. (Contains 38 references.)
Embracing Cultural and Linguistic Diversity: Culturally Responsive Reading Instruction

William Dee Nichols
University of North Carolina at Charlotte
College of Education
Department of Reading and Elementary Education
9201 University Circle
Charlotte, NC 28223-0001

William H. Rupley
Gwendlyn Webb-Johnson
Department of EDCI
College of Education
Texas A&M University
College Station, TX 77845
(409) 845-8383

Laurie R. Weaver
University of Houston – Clear Lake

Running head: EMBRACING CULTURAL AND LINGUISTIC

BEST COPY AVAILABLE
Embracing Cultural and Linguistic Diversity: Culturally Responsive Reading Instruction

Every elementary classroom is made up of children of varying intellectual ability, social or cultural background, language ability, and physical attributes. Today, more than ever, all teachers must be prepared to meet the varying educational, social, and emotional needs of all children. The culture of many students, while different from that upon which much of the U.S. educational system is based, is neither inadequate nor deficient; rather, the problem lies in the educational system. An educational system that bases its expectations, delivery, and curricular content on the norms of the mainstream population is insufficient for students of culturally and linguistically diverse backgrounds (Banks, 1994; Cushner, McClelland, & Safford, 1996). As a result, students from culturally and linguistically different backgrounds often experience a mismatch between home and school expectations (Faltis, 1997; Nieto, 1996). Thus, to ensure equal educational opportunities for all students, the educational system must be transformed so that all students have an equal chance to succeed.

When culturally and linguistically diverse students enter school, a major challenge for service providers is meeting the unique needs of each child. Many children bring with them experiences and socialized patterns of behavior that have not traditionally been valued in public school contexts (Banks & Banks, 1997). Multicultural school reform challenges educators to design and implement culturally enriched and educationally sound instruction from a strength perspective as opposed to one that is based on the traditional deficit model of instruction (Delpit, 1995). The growing and changing demographics in classrooms throughout the United States obligate educators to construct culturally responsive pedagogy that reflects these fluid demographics (Delpit, 1995; Ladson-Billings, 1994).
Culturally and linguistically diverse students are on the same reading and learning continuum as other children; however they often have experiences that are different from the mainstream. For example, culturally and linguistically diverse students often are from lower socioeconomic status homes. As a result, limited emergent literacy experiences and exposure to literature from their own culture or from traditional American literature may inhibit their success in early literacy instruction. Also, culturally and linguistically diverse students may have literacy experiences that are different from what is expected by the school and thus traditional early literacy programs do not adequately prepare them for beginning reading instruction (Stahl, 1990). Sometimes well intended early reading activities fail with these students because most culturally and linguistically diverse students benefit from early reading activities that build on their strengths rather than concentrate on eliminating their weaknesses.

**Constructing New Literacy Paradigms**

Reading instruction provides the foundation for school development in all content area subjects. Students who belong to historically marginalized groups (i.e., African American, Hispanic American, Asian American, and Native American) are rarely included in research paradigms that describe and assess the academic impact of reading instruction from a cultural perspective. While the field is persistent in documenting how these groups fall behind their European American counterparts, it does little to assess the academic growth and development from a culturally contextualized perspective. If educators are to strive toward successful academic reading outcomes for “all” children, it is important to develop instructional strategies that empower all children to prosper.

Historically, reading instruction has been based on European American paradigms that have defined appropriate socialized academic behaviors. The curriculum mirrored majority society with significant focus on reading experiences that often reflected middle income suburbia with mom, dad, two children, and family pet as constant models. While that paradigm includes many that are indeed members of society, the experiences, for example, of
culturally diverse people who may be intricate parts of extended or low-income families, and single headed households, are often neglected. While literature patterns have begun to change, instruction in schools has been slower in implementing such changes in materials chosen by teachers. What is most promising about multicultural school reform however, is its potential for impacting all children and youth. Exposure to a variety of reading experiences will enrich the lives of everyone.

**Effective Reading Strategies among Culturally Diverse Learners**

A significant body of literature exists related to students who are placed “at risk” for reading acquisition and development failure (Kunjufu, 1993). Students placed “at risk” are often found in lower socioeconomic conditions and approaches to teaching such students who are having difficulty in reading must address at least two areas. First, students may miss important ideas and focus on less relevant details while attending to personal interest facts. Also, they may not use processing strategies that can help them learn and remember content. While many students think strategically to solve problems outside of school (Holiday, 1985), such reasoning does not always find its way into the classroom of students who experience difficulties with reading.

Several case studies have addressed the problems of students placed “at risk” and the use of metacognitive strategies to improve reading comprehension in academic settings. Studies have emphasized reading improvement through the implementation of contextual instruction, reciprocal interactions, ReQuest, ReQar, interactive and dynamic assessment, characteristics of competent readers and co-listing reading classes (Brozo, 1990; Coley & Hoffman, 1990; Davis, 1990; Peresich, Meadows, & Sinatra, 1990). These studies also provide examples of strategies that are culturally responsive because they are deeply steeped in activities highlighting social relationships.

While highly socialized interaction strategies have proven beneficial to the teaching of reading for culturally and linguistically diverse students, additional challenges still face students from non-English speaking backgrounds. Krashen (1993) notes that when possible,
developing literacy skills in a student’s primary language enables them to transfer these skills into English at the appropriate time (Cummins, 1988; Krashen, 1993). In terms of developing their English reading skills, many educators feel that students with limited-English proficiency (LEP) need to understand and speak English before they can begin to read it (Brisbois, 1995). Other educators, on the other hand, feel that it is not necessary for students with LEP to master the oral language before they are introduced to the written form (Fitzgerald, 1993; Gonzales, 1994). It needs to be emphasized, however, that even though the research seems to be divided on whether students need to proficiently speak the English language before they can read it, the majority of the research seems to be in agreement that students with limited-English proficiency will learn to read better if the initial reading instruction is in their native language (Allen, 1994; Krashen, 1993; Schifini, 1994). In addition, Gonzales (1994) and Brisbois (1995) determined that students could learn to read in their native language and English at the same time if teachers use strategies that are mutually reinforcing and provide adequate vocabulary instruction in both languages.

Second-language learners benefit from reading programs that incorporate a range of contexts, both social and functional, in which reading begins, develops, and is used as a means of communication. Adapting several reading approaches can help linguistically diverse students become effective, efficient users of written English. For example the dual language reading approach makes use of native language and literacy skills to strengthen the reading process of speakers whose English is limited. Primary language reading materials, tradebooks, basal texts, and other instructional materials help strengthen bilingual reading programs. In addition, reading activities develop cognitive structures, vocabulary, comprehension strategies, and higher cognitive levels. This focus is important for a smooth transition from first language to second language reading.

**Direct Instruction Combined with Literature-Based Activities**

Perhaps the most radical procedures for helping culturally and linguistically diverse students get off to a successful start in literacy instruction are found in academic early
reading programs. Some of these programs concentrate on the direct teaching of specific language and reading skills, in which the teacher presents stimuli designed to elicit language responses. Integrating specific language activities that encourage student involvement is critical for early intervention of language development, especially for students who have limited opportunities to experience literacy outside of the classroom. A wide range of literature-based activities combined with such a program can enrich students' early reading experiences. Skill activities associated with direct explicit instruction are considered the sole focus of this program. Skills are taught throughout the school day by engaging students in meaningful language that focuses on acquisition of each goal. For example, if the teacher asks, “Where are the scissors?” students are encouraged to respond in a language manner that describes where the scissors are “The scissors are on the big table”.

Brisbois (1995) discusses the importance of vocabulary instruction, and word recognition instruction in the second language. Word recognition begins with the production of isolated words in the clarification of meaning as related to the learner. A word is printed on the chalkboard and the rule “This is a word” is taught and followed by the identity statement, “This is the word man.” Students are then encouraged to respond with complete identity statements in answering questions such as, “Is this the word dog?” “No, that is not the word dog. That is the word man.” Gestures are used to illustrate action words and students are invited to suggest other words they wish to learn. If no one volunteers a word the teacher supplies another word that has meaning for the students.

Word identification exercises can help students to develop a sight vocabulary useful for developing simple sentences. As students learn to recognize their own names, they then receive instruction on recognizing other children’s names. They can also learn names of body parts this way. New sets of words (such as is not and big) can be added to construct sentences: “Joe is not big.” Meaning is stressed in sentence reading by having students answer questions about their reading. “Is Joe big?” “No, Joe is not big.” “Is Joe little?” “Yes,
Joe is little.” After students progress with such basic tasks, they then apply their capabilities to read from teacher-prepared booklets.

A variation of this technique is the key word approach (Ashton-Warner, 1963; McCracken & McCracken, 1979; Weaver, 1994). With this approach each student develops a personalized set of word cards. To do this, the teacher asks each student which word he/she wants to learn for the day and writes the word on a card for the student. The student then illustrates the other side of the card. The student can make a drawing of the word on a separate sheet of paper accompanied by either a student written or dictated sentence. Each day, students read their word cards either individually or in pairs in association with a variety of activities. For example similarities or differences can categorize words. Students can develop oral language skills by describing a word and having a classmate identify the word. Thus with this technique students construct reading vocabularies based on words of interest to them.

A beginning reading program can serve as an extension of the language development program. It can be designed to help students become familiar with letter names, associate pictures visually with their naming words, recognize and produce rhyming words, and learn and use a limited number of sight words. Cognitive embedded tasks can help relate these activities to real-life experiences. In the alphabet learning phase of the program, children familiarize themselves with the letter names of the alphabet through identity and position statements. The child can be taught first to spell words by letter sounds (kuh-ah-tuh) and then presented with clusters of words that follow the same spelling pattern (such as cat, fat, hat, and bat). As students become more aware of the patterns found in word families, they develop a metacognitive awareness of orthographic features of words, which enables them to generalize their word recognition skills to similar orthographic features.

**Basal Reading Programs**

Basal reading programs are still used throughout the United States, and teachers of linguistically diverse students often choose to use them to teach reading. However, teachers
should be aware of special considerations when using basal readers as the primary method of teaching reading, especially to linguistically diverse students. Among these considerations are (1) special attention to developing background concepts and vocabulary in depth before reading, (2) skillful questioning during silent reading to identify and clear up misunderstandings and to enhance the students' comprehension, and (3) specific emphasis on listening to and understanding the communicative function of language, rather than fluid oral reading.

Today many of the basal series have integrated a literature approach to teaching reading and have become more sensitive to teaching reading skills in the context of the literature (Elderedge, Reutzel, & Hollingsworth, 1996). They have also shifted their design to include more shared reading approaches, rather than just teacher directed reading approaches (Hoffman, McCarthey, Abbot, Christian, Corman, Curry, Dressman, Elliot, Matherne, & Stahle, 1993). However, an alternative to using only a basal reader program for instruction is to use basal readers and literature together in teaching literacy. Some individuals (Delpit, 1991) have indicated that culturally and linguistically diverse students may need a bridge from the basal series to a more process-focused literature-based program. Combining features of direct instruction with literature of the home culture of students from diverse backgrounds may benefit students.

Morrow (1992) conducted research in second-grade classrooms on how an integrated basal and literature-based reading program affected the literacy achievement of culturally diverse children. The features of her integrated program included:

1. Literacy centers within each classroom that provided students with access to a variety of books and literacy materials. Included in the centers were multiple genres of children's literature, comfortable seating, and manipulatives (felt stories, roll movies, and taped stories).

2. Teacher-guided activities that helped students understand what they could do and should do. Included in the activities were teachers' use of modeling and scaffolding,
Embracing cultural and linguistic diversity... 9

the use of the directed reading-thinking activity (DRTA), and retellings using both books and props (felt stories, puppets, and roll movies).

3. Independent reading and writing periods were used to allow students to choose between working alone or with others, and to select from a variety of activities ranging from retelling to dramatizing stories. The basal reader portion of the literacy instruction was continued with the inclusion of the literature-based reading instruction.

Morrow's study showed that students from diverse backgrounds had improved literacy achievement. Concerns about whether students from diverse backgrounds would benefit from integrating the basal reader approach with a literature-based approach were unfounded. Components of the program that might account for its success were teachers demonstrating, facilitating, and participating in literature activities with high expectations for their students. In addition, the program featured literature that reflected the various cultural backgrounds found in the classrooms.

Reading instruction for culturally and linguistically diverse students should feature stories from various cultures and languages. Heidger (1991) states that it is extremely important for culturally and linguistically diverse students that the instruction be authentic. This means that they should be able to use literature that reflects their language and culture. Bieger (1996) encourages teachers to develop lessons using traditional literature to help provide a multicultural education to all students. Since myths, legends, and folktales reflect the values of people from around the world, these forms of literature are recommended for teachers to use. Integrated language instruction values all languages and students become literate in their own language and ultimately in English. Students accomplish this using books in writing and learning situations (Flores, Cousin, & Diaz, 1991; Heidger, 1991).

Language-based reading instruction should be a major component of an integrated language approach for teaching reading and writing to culturally and linguistically diverse students. In addition to the Language Experience Approach (LEA), teachers should use...
Embracing cultural and linguistic materials from a variety of sources. The following materials have been recommended for language focused programs in Spanish language classrooms: (1) poetry and stories from Spanish language basal readers; (2) Spanish language trade books; (3) Spanish language resource books; (4) Spanish language newspapers, newsletters, comics, and magazines; (5) Spanish language publications from government and health agencies; (6) telephone books, cookbooks, and television guides in Spanish; (7) books and stories written in Spanish by members of the Hispanic community; and (8) stories written by the students themselves. In addition to these sources, Freeman (1988) has compiled a list of sources for alternatives to Spanish language basals. For culturally and linguistically diverse students to see a connection between what they learn at school and their daily life encounters, schools must include a larger multicultural selection of literature in their curriculum (Godina, 1996).

Teaching activities that encourage production of student generated text helps develop students' self-concept simply by the creation of their own works (Freppon, 1995). The language-experience approach and a process approach to writing offers students an excellent way of developing skills that integrate cooperation-fostering story writing and peer interaction strategies for language and content learning (Godina, 1996). Promoting story writing by second language learners will create a literate classroom with students enthusiastic about reading and writing. Encouraging students to read and write everyday about their own experiences enhances literacy skills and the desire to learn. Positive literacy experiences involving reading promotes students who learn to enjoy reading and begin to seek out more information to accomplish classroom tasks in the early grades.

Predictable reading materials offer another way to develop bilingual language literacy skills. Patterned books have stories with predictable features such as rhyming and repeated phrases or refrains that promote language development (Norton, 1995). Patterned books frequently contain pictures that may facilitate story comprehension. The predictable patterns immediately involve beginning second language readers in a literacy event in their first or second language. Books with patterned structure can provide modeling as a reading strategy,
challenge students' current level of linguistic competence, and provide assistance in comprehending difficult concepts. Comprehension through the repetition of a simple sentence pattern can motivate second language learners to continue trying to learn to read. The process is important for developmental purposes and teaches students to use contextual and syntactic features of the text to identify the repeated words or phrases. These fully illustrated stories repeat simple patterns that second language learners can use to begin the reading process. Students become familiar with the story and language patterns and soon begin to create their own text with their own illustrations. In the early stages of second language acquisition, the use of the first and second language is critical for conceptual development. Later, as the second language proficiency develops, the student will focus on learning English. Patterned books' most important function is to offer immediate access to meaningful, enjoyable literacy experiences, which facilitates life long readers.

Choral reading has also been used successfully in promoting language learning for linguistically diverse students. The benefits of using choral reading to enhance children's acquisition of a second language are that it: (1) creates a low-anxiety environment, (2) provides repeated practice, (3) is based on comprehensible input, and (4) incorporates drama (McCauley & McCauley, 1992).

Implementing choral reading for second language learners begins with identifying poems and adapting them for the students. Poems would cover familiar topics for the students. For second language learners, the poems can contain a lot of action and allow lines to be added to help clarify vocabulary and emphasize meaning. After the poem has been selected and adapted, McCauley and McCauley (1992) suggest the following general procedure:

1. Give quick, interesting introduction. Focus on getting students involved in talking about the poem.

2. Read the poem aloud to students. Use expression, sound effects, and movements that the poem could represent.
(3) Make copies of the poem available to the students.
(4) Read the poem again to the students as they follow along.
(5) Read the poem with the students slowly at first, and gradually increase the speed of reading. Appropriate movements and sound effects also should be included.
(6) Give lines to the students when they feel comfortable with the words and movements. Students who want solo lines may be given them.
(7) Practice reading the poem with assigned parts.
(8) Recognize a job well done with applause, verbal praise, or both.

Multiethnic Literature

Diverse cultural literature is one means to move closer toward becoming a nation that is accepting and tolerant of all cultures. For our country to develop an understanding and acceptance of others, we will have to become educated about the cultural heritage of many groups. One of the most effective ways to accomplish this task is to incorporate multiethnic and multicultural literature into our classrooms. Multiethnic literature helps students discover the intricacies of a language, as well as the people's history and culture (Bieger, 1996; Godina, 1996). In addition, when students read literature they encounter a multitude of characters that are both similar to and different from themselves. Each character of a story is driven by certain emotions and must deal with the problems and joys of life in various ways. How the heroes and heroines react and cope provides students with insights and information well beyond their own personal experiences.

Integrating multiethnic literature into a school curriculum for second language learners helps students realize that all ethnic groups have roots in the past and a strong heritage that is a part of their culture (Bieger, 1996). Knowing about others from a similar culture encourages a sense of pride that builds a positive self-concept for students. They may discover by reading, that others from their own culture made significant contributions to society. Students encountering multiethnic literature as a part of their reading curriculum
benefit academically and learn the social values and behaviors of people in society (Bieger, 1996; Godina, 1996).

Existing reading programs can easily integrate multiethnic literature for explicit reading instruction. Teachers can share stories both orally and in written form, and instruction can coordinate language arts exercises such as vocabulary, comprehension, writing, and language development in both the first and second languages. The use of literature is an excellent way to increase cultural awareness, build vocabulary and language, develop comprehension skills, and provide writing opportunities. Multiethnic literature can provide teaching opportunities for creating lessons on figurative language, examining the story's symbolism, and integrating context with idiomatic expressions. Such explorations help students understand meaning and enhance the development of language while stimulating interest in reading.

There are four levels that teachers can use to integrate ethnic content into the curriculum (Banks, 1994). The lowest levels of integration are the "contributions approach" and the "ethnic additive approach". Teachers who use only the "contributions approach" have their students read only about the contributions of ethnic groups such as reading only about ethnic holidays, heroes, and customs. The "ethnic additive approach" does add content, concepts, and themes that reflect diverse cultures, but it does not integrate it into the existing curriculum. Instead it may become a unit that is taught for a month out of the year and then forgotten. Teachers should be encouraged to use the two highest levels of multicultural integration ("transformation approach" & "social action approach") when designing curriculum. Use of the "transformation approach" completely reconstructs the curriculum in order to allow students to view concerns, themes, problems, and concepts from the perspective of multiethnic groups. This is not a unit that lasts a month, but instead is a commitment to multiculturalism throughout the whole year. The highest form of cultural integration is the "social action approach". During this approach teachers select literature that allows students to identify social problems and concerns and to read about how the main
character made decisions and took action to solve the problem. Through the modeling of the character's actions students learn how to identify and resolve problems related to cultural differences.

Using instructional strategies that create a culturally affirming perspective in the classroom to support reading instruction can be effective with culturally diverse learners. Examples of such strategies that can be implemented in K-8 reading environments where students may be experiencing difficulty with critical reading comprehension skills are Inventionsation and Footsteps in the Hall of Fame.

Inventionsation is the development of thematic units that use inventions as the foundation for discovery and reading skill enrichment that has proven effective with culturally and linguistically diverse students. Inventionsation begins by having students begin reading biographies of African Americans, Asian Americans, Hispanic Americans and Native Americans who are often not included in instructional delivery that involves the work and inventions of Thomas Edison, Alexander Graham Bell, and Benjamin Franklin. Sharing with students the contributions of individuals like Lewis Latimer, who worked initially as a chief draftsman for Edison and Bell, provides an excellent foundation for discussions of the time period, inventions, and the critical reading skills necessary to assist in building a knowledge base. Sharing the diversity of people who have contributed to making our society more efficient and convenient can also be used as a vehicle to promote critical reading skills. Studying, for example, the development of the contact lens, the Bing cherry, the Polio vaccine, blood plasma, government, and marital property rights will open the world of discovery from an Asian, European, African, Native, and Hispanic American perspective, while providing students the opportunity to engage in critical reading.

Footsteps in the Hall of Fame examines the contributions of American citizens that led to the development of the United States. Genres of biography and historical fiction can become the foundation of critical reading development during this type of activity. Study of people and periods from a socio-political and personal perspective allows students the
opportunity to study the historical period and its people. Opportunities for generating gender consciousness can also be explored as all students are provided exposure to research and the study of men and women who are also culturally diverse at different time periods throughout our history. This culturally responsive activity can also be framed from an interdisciplinary perspective so that collaboration among teachers and students is a targeted goal in reading development. As students learn about each aspect of a person’s life they earn footsteps into the Hall of Fame that highlights their development as a reading scholar of the period and of the person. Other projects can evolve from this initial reading activity to highlight a variety of language arts within the classroom context (i.e. drama, writing, oratory, and media presentations).

Summary

The ability to deal effectively with student differences is crucial to teaching reading. Teachers must address the needs of culturally and linguistically diverse students in the regular classroom. The ability of teachers to handle differences effectively translates into instructional practices that provide for each student's self-respect and that lead all students to feel secure in the classroom.

Creating successful opportunities for students with limited proficiency in English requires an understanding of nonstandard dialects, characteristics of foreign languages spoken by the students in the classroom, and students' cultural values. Although speaking with a dialect or a primary language other than English may present problems in learning to read, in a traditional general education classroom a sensitive and knowledgeable teacher minimizes this problem.

Teachers who tailor reading instruction that enhances the needs of all students truly transforms the literacy paradigm for students who have historically belonged to marginalized groups. Thus, by making use of effective reading strategies such as direct instruction combined with basal reading materials and literature-based reading instruction, teachers can successfully speak to the needs of culturally and linguistically diverse students.
BIBLIOGRAPHY


Would you like to put your paper in ERIC? Please send us a clean, dark copy!

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Paper presented at the 2nd Annual Meeting of the Society for the Scientific Study of Embracing Cultural & Linguistic Diversity: Culturally Responsive Reading

Author(s): W. Lee Nicks

Corporate Source: Texas A&M University

Publication Date: April 1991

II. REPRODUCTION RELEASE: * One author's signature is sufficient.

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

Check here For Level 1 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

Check here For Level 2 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: William H. Rupley
Organization/Address: Dept. Edc1 College Ed Texas A&M University Cig. Sta., TX 77843
Phone: 409/845-7093
Fax: 409 845-9663
E-Mail Address: W-rupley@tamu.edu

Date: 7/25/97

Printed Name/Position/Title: Professor