

DIRECTOR'S CORNER

The Future of Diversity Education Research

Roland Tharp, CREDE



The current climate for education research heavily favors scientific study. Fortunately, the timing could not be better for the field of diversity education research.

Forty years ago, there was no such field. The monolithic school of the common tradition was unquestioned, and if "different" students had a problem with it, it was considered their families' fault. There were no programmatic experiments

see Director, page 3

A Practical Guide to Understanding and Implementing Two-Way Immersion Programs

Two-way immersion (TWI) is an educational approach that integrates a roughly equal balance of language minority and language majority students for at least half of a school day, providing content and literacy instruction in English and the native language of the language minority students. When well implemented, these programs have proved to be among the most effective in the U.S., graduating students with both grade-level academic ability and proficiency in two languages.

This fall CREDE will publish a new Educational Practice Report (EPR) on two-way immersion. Titled *Two-Way Immersion 101: Designing and Implementing a Two-Way Immersion Education Program at the Elementary Level*, the report was produced through CREDE Project 1.2, "Two Way Immersion Education," and is written by Elizabeth R. Howard and Donna Christian, researchers at the Center for Applied Linguistics. Based on more than 15 years of research and the findings of leading researchers in the field of TWI, the report is intended to present information and strategies gleaned from other successful TWI programs that can assist readers in implementing their own program.

The following is an overview of the EPR, providing brief excerpts and summaries from each section.

INTRODUCTION

The first two-way immersion education programs in the United States started almost 40 years ago, with programs such as Ecole Bilingue, a French/English program in Massachusetts, and Coral Way, a Spanish/English program in Florida. However, while the program model has been in existence in this country for quite some time, the growth in popularity of the model is a more recent phenomenon.

As interest in the model has grown, so have concerns and questions about how to design and implement strong TWI programs. This report provides an overview of the main considerations when planning an elementary level (K-5) TWI

see EPR, page 9

In This Issue

DIRECTOR'S CORNER	
The Future of Diversity Education Research	1
PROJECT SHOWCASE	
Opportunities Through Language Arts: Promoting Literacy in Middle Elementary School	6
EDUCATOR IN THE SPOTLIGHT	
Teacher Works Magic With CREDE's Five Standards and Harry Potter	2
FEATURED PUBLICATIONS	
A Practical Guide to Understanding and Implementing Two-Way Immersion Programs	1
New Guide Helps School Leaders Promote Diversity	4
RESOURCES AND NEWS FROM CREDE	5

Teacher Works Magic With CREDE's Five Standards and Harry Potter

Barbara McKenna, CREDE

Most people might write off the magic in the Harry Potter books as the stuff of fiction, but the books did work real magic last year in a Corning, California elementary classroom. The class of third, fourth, and fifth graders was introduced to the second book in the Harry Potter series by teacher Maria Sudduth, who combined CREDE pedagogy and the Harry Potter craze to help her English language learners (ELLs) successfully read at well above their expected level.

Sudduth, a veteran teacher, conducted the 12-week literature unit as part of her work for a masters program at California State University, Chico. It took place when you couldn't buy children's clothing or fast food without reference to the hapless wizard and his friends. "They so wanted to be a part of the Harry Potter thing," Sudduth remembers. "But it was so far above their reading level. My job was to figure out how to help them be successful."

Right off the bat, Sudduth enacted a CREDE standard—providing challenging curriculum—by recognizing her students' motivation and encouraging it. "So many of our ELLs are being tracked out or tracked down, and I think a lot of that is because people's expectations of what they can achieve are not high enough. If they're well supported, there's no reason you can't teach ELLs rich literature. You just need to provide lots of charting, lots of visuals, and lots of instructional conversation."

All of the CREDE standards played a part in her approach, Sudduth says. "When I discovered the Five Standards, I said, 'Oh, that's completely what I think of when I work with my kids.' These standards are exactly what I try to make happen in the classroom."

Sudduth feels that the instructional conversation (IC) was one of the most important foundations of her approach. The IC is content-focused dialogue between teachers and students in which students do most of the speaking, and the teacher listens, guides the conversation, paraphrases, and introduces content-related vocabulary into the conversation.

"During that unit, we spent about 25 minutes every day in the library with the Harry Potter book. I would read to them, and they would read along in their own books. And then we would discuss what we had read. They were so into the story that they were making predictions and then looking ahead to see if their predictions were right or looking back to verify their understanding.

"Because of the IC, we didn't just have the confident kids speaking out and everyone else agreeing with them. They had to develop strategies to back up their thinking and justify their ideas, which gave them enormous confidence in what they were saying."

Sudduth gathered some tangible proof of success as well. "The target of the project was comprehension; my goal was to raise their transferable comprehension strategies," Sudduth says. And it worked. Using the Scholastic Reading Inventory test, the school district's reading specialist tested students before and after Sudduth taught the Harry Potter unit. Students' scores in the pre-test ranged from 415 to 780; post test-results were 485 to 935—a significant rise.

"But what really went up," Sudduth notes, "were their battery of language, their spelling, and their skill with syntax and structure. *Harry Potter and the Chamber of Secrets* (Rowling, 1999) was a perfect book to use because the way that [author J. K. Rowling] uses metaphors, similes, and foreshadowing helps them to naturally develop their comprehension."

With her masters' work completed, Sudduth returns to the classroom this fall as a full-time teacher. Inspired by last year's success, she plans to implement a similar literacy unit this fall. 🌸



See Maria Sudduth's additional recommended strategies, page 3.



EDUCATOR IN THE SPOTLIGHT *from page 2*

Besides using ICs, Sudduth recommends the following additional strategies:

Along with the challenging literature, include reading materials that are at the instructional level of the students.



Use “wondering questions.” A strategy drawn from the Reader Leader program, wondering questions occur after a student “Reader Leader” reads a passage from a book and asks pairs of students to generate questions about the passage.



Engage students in joint productive activity. Sudduth engaged her students with this strategy in numerous ways, including a regular activity in which she charted the story and students’ ideas. “From the beginning of the story on through, I charted the story line and the children’s thoughts on butcher paper. When I wrote down their comments, I would put their name alongside them. Then, down the line, when the issue came up again or the question was answered, I would go back to that student and ask, ‘What do you think now?’ ”



Have students work in pairs. Sudduth paired a stronger English speaker with a less-skilled speaker, creating a symbiotic arrangement that enabled both students to improve their skills—one by receiving some one-on-one tutoring and the other by having to articulate his or her understanding of the language. Sudduth says this arrangement was especially useful for children who were shy about speaking during group discussions. “The one who was less confident about speaking in front of the whole group could tell his or her thoughts to the partner who would then share with the group.”



Create other activities in which students can apply their learning. Sudduth enlisted Jesus Cortez, one of her professors from CSU Chico, to help engage her students. Taking an idea from the book, Sudduth had her students send Cortez “owl mail” (in this case, email took the place of live owls). “As the book evolved, they started asking him a lot in-depth, critical thinking questions about the book,” she says. “When I read those, I noticed that a lot of the students who were normally the quieter ones during class discussions, especially some of the girls, were stepping up and asking questions.”

Director, from page 1

to be done because there were no hypotheses. Seeking an understanding of the issues, diversity researchers correctly, necessarily, and wisely emphasized close observation of the interactions and inscriptions in education, and they clarified precisely what needed to be researched.

Forty years later, such research questions have been asked and the groundwork has been carefully laid through qualitative studies. As a result, we are now able to engage in the kind of quantitative, experimental, quasi-experimental, and correlational research that is in demand today.

Although the first four decades of diversity research were characterized by qualitative investigation, experimental research has been a part of our work all along. During CREDE’s 7 years, and even as early as the 1970s when the CREDE leadership team began their work at the Kamehameha Early Education Program (KEEP), appropriate quantitative experimental designs were an integral part of the research. KEEP itself was one of the earliest programs to use randomized student assignment in a true experimental design of evaluation prior to scaling up. CREDE’s 32 projects represent knowledge derived appropriately from a full range of methods—from surveys and focus groups to true experiments.

Four years ago in this column, I bewailed the fact that we knew far more about what we should do than about how to do it. Even that situation has improved, and CREDE’s signature findings, the Five Standards for Effective Pedagogy, can now be reliably implemented by a group of interested teachers given appropriate professional development and support. This has allowed a rapid accumulation of evidence for the efficacy of these pedagogy principles.

For example, a CREDE research program conducted by Will Doherty, a researcher at the University of California, Santa Cruz (UCSC), and his associates (America Pinal, R. Soleste Hilberg, Georgia Epaloose, and myself) found a significant positive association between teachers’ use of the Five Standards and a variety of desirable student outcomes. The school where we worked serves predominantly low-income Latino English language learners (ELLs). The teachers’ use of the standards was recorded with the Standards Performance Continuum (SPC) (Doherty, Hilberg, Epaloose, & Tharp, 2002). Student achievement gains were estimated from standardized test scores (SAT-9). Teachers’ overall use of the standards reliably predicted achievement gains in comprehension, language, reading, spelling, and vocabulary, and student use of effective reading strategies (Doherty, Hilberg, Pinal, & Tharp, 2002).

see Director, page 8

FEATURED PUBLICATION: New Guide Helps School Leaders Promote Diversity



An important new resource on diversity has just arrived on the bookshelves. The book, *Leading for Diversity: How School Leaders Promote Positive Interethnic Relations* (2002), is co-authored by Rosemary Henze, Anne Katz, Edmundo Norte, Susan E. Sather, and Ernest Walker, and was produced through the CREDE Project 2.4, "Leading for Diversity: Professional Development for School Leaders." This book is a valuable resource for K-12 school leaders, presenting examples of educators who have fostered school environments where positive interethnic relations can flourish. It is structured to be useful for diverse purposes, including individual use, staff professional development, or within an administrative credentialing program.

Along with offering real-life examples, *Leading for Diversity* provides strategies for readers to develop their own leadership abilities; assess their own institutional structures in light of supporting or constraining interethnic relations; create a vision for interactions in their own schools; and design, implement, and assess plans for promoting positive interethnic relations.

The following overview is adapted from the book's introduction:

The impetus that led to this book emerged from a 1995 meeting between a group of principals in the San Francisco Bay Area and several staff members from ARC Associates, a non-profit organization in Oakland, CA. They came together to discuss issues they face as leaders in ethnically diverse schools and professional development options that could help them resolve these issues. A sample of questions that arose follow:

- How do we address the persistent underachievement of African American and Latino students, especially males, in Bay Area schools?
- How do we increase the number of faculty and administrators of color?
- How can we increase parent involvement among non-English speaking parents?
- How can we deal with teachers who still hold racist, ethnocentric views of students of color?
- How do we address racial or ethnic conflicts? How do we develop positive relations among the different sectors of the school community? Are there any models we can look at?

As a result of these initial meetings and inquiries, the *Leading for Diversity* Research Project was developed. We focused on two central research questions:

1. How can leaders effectively address racial or ethnic conflicts?
2. How can leaders create a foundation for safety and respect so that relationships among diverse groups and individuals can flourish?

In order to answer these questions, we conducted case studies of 21 schools across the U.S. where the student population was diverse, where there was some history of racial/ethnic tensions in the school or surrounding community, and where the leadership had taken proactive steps to improve relations among the different groups. This research spanned 3 years, from 1996-1999.

What we have learned from this study is, in one sense, very simple: School leaders can without a doubt make a positive difference in interethnic relations. How they create this positive environment is the subject of this book. The 21 schools in the study offer a number of insights that can help those in school leadership roles put into practice the ideals of safety, respect, and social justice in diverse schools.

Elementary, middle, and high schools participated in the study. We found that different levels of schooling called for certain differences in approach. For example, high schools had more ethnic studies classes than middle schools, and we found no such classes in elementary schools. There was much more emphasis on parent involvement in the elementary and middle schools than at the high schools. Differences such as these take into account both the developmental level of students and the different sizes and structures of elementary, middle, and high schools.

This book is suitable for individual and group settings and includes case studies, theoretical observations, and learning activities. The book can be used in a number of group formats: Educational administration or teacher education instructors might include it in a course that deals with issues of equity and diversity; staff developers might use sections (especially the cases in Part II) in professional development sessions for leaders; and members of a school-based study group of practitioners may find useful ideas and strategies to create a more positive interethnic school community.

The book also includes two useful resources. Appendix B, "Resources for Schools to Address Issues of Race/Ethnic Relations," is an annotated compilation of videos, curricula, and professional development materials that were used by schools in the *Leading for Diversity* research project. Appendix C is a checklist that aligns content from this book with the educational administration standards developed by the Interstate School Leaders Licensure Consortium (ISLLC). Those who are using the book as part of an administrative credentialing program will find this helpful in mapping out how the content of the book addresses the six standards.

Leading for Diversity: How School Leaders Promote Positive Interethnic Relations (2002) is published by Corwin Press (Thousand Oaks, CA). To order the book, visit the CREDE bookstore at www.crede.ucsc.edu/products/print/books.html. For more information on the *Leading for Diversity* project, visit www.arcassociates.org/leading/. 🌿



Educating Hispanic Students: Obstacles and Avenues to Improved Academic Achievement. Y. N. Padrón, H. C. Waxman, & H. H. Rivera. (2002). This report examines factors to consider in the development of effective educational programs that serve Hispanic students. It provides a synthesis of the research on the education of Hispanic students,

summarizing the problems confronting them and suggesting possible practices and solutions. The report is divided into five sections: 1) Factors in the education of Hispanics, 2) Educational status of Hispanic students in the United States, 3) Factors associated with the underachievement of Hispanic students, 4) Factors associated with the educational success of Hispanic students, and 5) Implications for policy and practice. [EPR 8, \$5.00. Order at www.cal.org/store/crede, (tel.) 800-551-3709, (fax) 888-700-3629, (email) store@cal.org.]

Studies in Native American Education: Improving Education for Zuni Children. CREDE. (2002). This 41-minute video for educators working with Native American students presents effective strategies for improving classroom instruction. It explores the vision of a classroom community in the Zuni Public Schools where students work together on challenging activities and exemplary teachers use CREDE's Standards for Effective Pedagogy. To view a five-minute excerpt, visit www.crede.ucsc.edu/products/multimedia/multimedia.html. [\$20.00. See ordering information, page 11.]

Reaching Out: A K-8 Resource for Connecting Families and Schools. D. W. Kyle, E. McIntyre, K. B. Miller, & G. H. Moore. (Corwin Press, 2002). Produced through CREDE Project 5.5, "Appalachian Children's Academic and Social Development in Nongraded Primary Schools: Model Programs for Children of Poverty," this book is an invaluable resource for educators to build strong relationships with their students' families. Particularly helpful for teachers whose classrooms reflect a diverse student population, this essential guide presents concepts and techniques that bridge the gap between home and school, so that educators can involve students' families in the education process and enhance students' learning experience. To order, visit www.crede.ucsc.edu/products/print/books.html.

Educating At-Risk Students (Yearbook of the National Society for the Study of Education, Vol. 101, Part 2). S. Stringfield & D. Land (Eds.). (University of Chicago Press, 2002). Researchers from CREDE and the Center for Research on the Education of Students Placed At Risk collaborated on this volume, which focuses on both the background causes that place students "at risk" and specific strategies that have been shown to help address students' academic risk. Topics include resiliency, educating Hispanic students, literacy, technology, and systemic supports. To order, visit www.crede.ucsc.edu/products/print/books.html.

Changing the Faces of Mathematics: Perspectives on Indigenous People of North America. J. E. Hankes & G. R. Fast (Eds.). (NCTM, 2002). CREDE researchers help explore native cultures and mathematics learning and discuss culturally relevant assessment and mathematics activities in this book. To order, visit www.nctm.org/publications, (tel.) 800-235-7566.

Educating Hispanic Students: Effective Instructional Practices. Y. N. Padrón, H. C. Waxman, & H. H. Rivera. (August 2002). (PB #5). This brief presents five research-based practices that have been particularly successful for teaching Hispanic students. It draws from CREDE's latest report, *Educating Hispanic Students: Obstacles and Avenues to Improved Academic Achievement*. Read it online at www.cal.org/crede/pubs/PracBrief5.htm.

Impact of Two-Way Immersion on Students' Attitudes Toward School and College. K. J. Lindholm-Leary & G. Borsato. (May 2002). This ERIC Digest reports on a study that examined the impact of a two-way immersion program on the language and achievement outcomes of former program participants and on their current schooling path and college plans. It is based on the CREDE report, *Impact of Two-Way Bilingual Elementary Programs on Students' Attitudes Toward School and College*. Read it online at www.cal.org/ericclldigest/0201lindholm.html.

The SIOP Model: Sheltered Instruction for Academic Achievement. Video. (Center for Applied Linguistics, 2002). This new professional development video illustrates the research-based model of sheltered instruction, known as the SIOP Model, derived from a CREDE study, that has raised achievement levels of English language learners. The 84-minute video is a valuable resource for teacher educators and staff developers to provide ongoing development to teachers of content subjects in strategies and techniques for adapting instruction to the academic needs of these students. This video presents the SIOP's eight components through footage from the math, science, and social studies classrooms of six exemplary teachers at the elementary, middle, and high school levels. The video serves as a companion to *Using the SIOP Model: Professional Development Manual for Sheltered Instruction* (Short, Hudec, & Echevarria, forthcoming). [\$75.00. Order at www.cal.org/store, (tel.) 800-551-3709, (fax) 888-700-3629, (email) store@cal.org.]

Fall Conference News. This fall, CREDE will be exhibiting at these conferences. If you're attending, stop by and visit our booth where we'll have the latest CREDE publications, professional development CD-ROMs, and of course, CREDE yo-yos.

- California Council on Teacher Education
October 17-19, San Diego, CA
- National Council of Teachers of English
November 21-26, Atlanta, GA
- National Staff Development Council
December 7-11, Boston, MA

Opportunities Through Language Arts: Promoting Literacy in Middle Elementary School

William Saunders and Claude Goldenberg, California State University, Long Beach

Opportunities Through Language Arts is a program for grades 3-5 developed by CREDE researchers William Saunders, Claude Goldenberg, and Gisela O'Brien, and numerous teacher collaborators in Los Angeles. Research and development on OLA began in the early 1990s in Southern California. Over the years, OLA has proven to be an effective means for improving literacy development for both English language learners (ELLs) and fluent English speakers. Following is an overview of the program and research findings.

The Opportunities Through Language Arts (OLA) program is comprised of 12 instructional components: (1) Literature Units, (2) Instructional Conversations, (3) Teacher Read-Alouds, (4) Assigned Independent Reading, (5) Pleasure Reading, (6) Literature Logs, (7) Passage Study & Practice, (8) Interactive Journals, (9) Culminating Writing Projects, (10) Lessons in Writing Conventions, (11) Lessons in Comprehension Strategies, and (12) Oral English Language Development through Literature. The program is aligned with CREDE's Five Standards for Effective Pedagogy, in particular, Contextualization, Cognitive Complexity, and Instructional Conversation.

Assessments of OLA and non-OLA students indicate that the program produces higher levels of Spanish literacy, higher levels of English literacy, and increased use of desirable literacy-related practices and attitudes. By grade 5, OLA students, on average, scored at least one half of a standard deviation higher than comparison students on standardized tests of English reading and approximately 0.60 to 0.75 standard deviations higher on standardized tests of English language expression and mechanics (Saunders, 1999; Saunders & Goldenberg, 1999a; Saunders, O'Brien, Lennon, & McLean, 1998).

Effects of Instructional Conversations

Some of our studies have demonstrated that instructional conversations (IC) promoted superior reading comprehension among both ELLs and fluent English speakers in a transitional bilingual education program. In a recent study (Saunders & Goldenberg, in press), we arranged for fourth-grade ELLs and fluent English speakers from one class to read a short story. They were then randomly assigned to one of two kinds of

lessons: (a) an instructional conversation, or (b) a directed-reading lesson modeled after lessons in the school's reading series. Two small groups of 6-8 students participated in the IC section while two control groups of 6-8 students participated in the directed-reading lesson modeled after lessons in the basal reading series.

Post-lesson measures showed that both groups achieved equivalent levels of literal comprehension (76%). However, a larger proportion of students in the IC group (63% vs. 13%) demonstrated a clear understanding of the story's theme. Both the students who participated in the conventional reading lesson and the students who participated in the IC understood the story at a superficial level. The difference lay in the IC students' deeper understanding of the story's theme and key concepts.

Combining Instructional Conversations and Contextualization

In another study (Saunders & Goldenberg, 1999b), we found that while instructional conversations promoted reading comprehension for all students, combining instructional conversations with literature logs proved even more effective for promoting reading comprehension among ELLs. The combination helped contextualize what students were reading by connecting it to their own experiences. For fluent English speakers, however, there was no added benefit from combining instructional conversations and literature logs.

In this study, fluent English speakers and ELLs from five fourth- and fifth-grade classes participated in a 1-week literature unit. Within each class, students were randomly assigned to one of four treatment groups: (1) instructional conversations (IC: teacher-led small group discussions of story content and theme), (2) literature logs (LL: students wrote and discussed personal experiences related to story content and theme in teacher-led small groups), (3) instructional conversations and literature logs (IC+LL), and (4) reading and study (RS, no IC or LL). The last group was the control. The study found a strong independent IC effect on comprehension for all students. This effect held up for both fluent English speakers and ELLs.

see OLA, page 7

OLA, from page 6

The study also found a strong combined effect of instructional conversations and literature logs on thematic understanding among ELL students only: 69% of the ELL students in the IC+LL group successfully explained the story's theme and 56% successfully provided an example illustrating the theme. Far fewer ELLs in the LL-only, IC-only, and control groups successfully demonstrated an understanding of the story theme.

In contrast, there were no significant differences in thematic understanding among fluent English speakers in the LL, IC, and IC+LL groups. Student performance was equivalent among the three groups; however, each experimental group demonstrated superior story understanding compared to the control group.

Our conclusion from this study was that the additional time spent sharing and discussing literature logs (which provided contextualization) combined with instructional conversations about the story proved helpful for ELL students' thematic understanding. In contrast, for fluent English speakers, the combination of the two (IC +LL) did not create additional improvements in thematic understanding beyond that which each component produced alone.

Other studies have also found positive effects from OLA on student writing (e.g., communication, conventions, dictation), on standardized test results in language achievement, and in the amount of self-selected reading that students report.

Professional Development

Obtaining these effects required large amounts of teacher professional development. In all cases where we have been able to implement OLA or components of it, teachers have participated in ongoing teacher workgroups where they learn the basic techniques and receive opportunities for discussion, practice, and feedback.

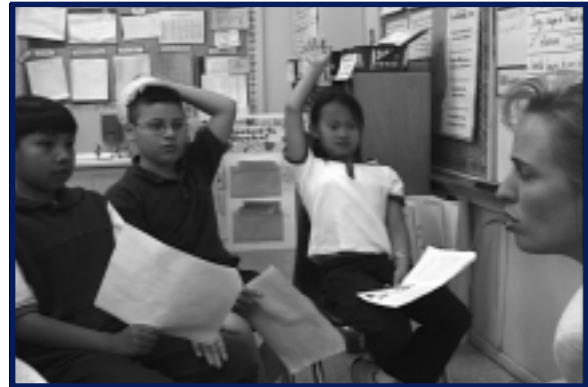
Workgroup leaders make presentations of specific practices; teachers are then expected to try them out in their classrooms. Leaders are available to come into classrooms for further demonstrations and for feedback on teachers' lessons. Teachers are also regularly videotaped; tapes are viewed, discussed, and critiqued in workgroup meetings.

The teacher training aspect of the program is intensive but essential for effective implementation of complex and challenging programs such as OLA. Despite the time requirements, teachers generally valued the experience and felt that the gains both professionally and in terms of student achievement were significant. 🌿

Online Resources

For citations and additional reading on OLA online, including reports from CREDE, please visit www.crede.ucsc.edu/research/llaa/1.5pubs.html.

For videotape overview of OLA, visit www.csulb.edu/~cgolden/videolinks.html and click on the video link for "Opportunities through Language Arts–Opening Clip."



Jennifer DiLorenzo, a fourth-grade teacher at Hazeltine Elementary school in Los Angeles, models the Instructional Conversation, which is an integral part of OLA.

Photo: David Telling

References

- Saunders, W. (1999). Improving literacy achievement for English learners in transitional bilingual programs. *Educational Research and Evaluation, 5*(4), 345-381.
- Saunders, W., & Goldenberg, C. (1999a). *The effects of a comprehensive language arts/transition program on the literacy development of English learners* (Technical Report). Santa Cruz, CA: Center for Research on Education, Diversity & Excellence.
- Saunders, W., & Goldenberg, C. (1999b). *The effects of instructional conversations and literature logs on the story comprehension and thematic understanding of English proficient and limited English proficient students* (Research Rep. No. 6). Santa Cruz, CA and Washington, DC: Center for Research on Education, Diversity & Excellence.
- Saunders, W., & Goldenberg, C. (in press). The effects of an instructional conversation on transition students' concepts of friendship and story comprehension. In R. Horowitz (Ed.), *The evolution of talk about text: Knowing the world through classroom discourse*. Newark, DE: International Reading Association.
- Saunders, W., O'Brien, G., Lennon, D., & McLean, J. (1998). Making the transition to English literacy successful: Effective strategies for studying literature with transition students. In R. Gersten & R. Jimenez (Eds.), *Promoting learning for culturally and linguistically diverse students*. Monterey, CA: Brooks Cole Publishers.

Director, from page 3

A set of studies by CREDE researcher Peggy Estrada at UCSC over a 4-year period consistently showed a positive relation between implementation of the Five Standards and student outcomes in first and fourth grades. In the 1st year, first graders whose teachers were stronger implementers of features of the Five Standards scored higher in reading and language on the Spanish Achievement in Bilingual Education test. Fourth graders whose teachers were stronger implementers scored higher in reading and language on the SAT-9 (Estrada, in press). In the 2nd year, the vast majority of students in strong implementers' classrooms reached grade level in reading, whereas less than half did so in weaker implementers' classrooms (Estrada & Imhoff, 2001). In the 3rd year, nearly 100% of students reached grade level in reading in strong implementers' classrooms, whereas 69% did so on average in weaker implementers' classrooms (Estrada & Imhoff, in press).

Teachers' use of the Five Standards has also been linked to factors critical to school performance, such as motivation, perceptions, attitudes, and inclusion. In another CREDE study, predominantly Latino ELLs in classrooms using the Five Standards slightly or moderately spent more time on-task, perceived greater cohesion in their classrooms, and perceived themselves as better readers having less difficulty with their work (Padrón & Waxman, 1999). Another study found that American Indian students in mathematics classes integrating the Five Standards reported more positive attitudes toward mathematics (Hilberg, Tharp, & DeGeest, 2000).

In addition to improving academic achievement, effective implementation of the Five Standards has resulted in improved harmony in the classroom as well. Findings, replicated over 2 years with two cohorts of students (Estrada & Imhoff, 2001, in preparation), indicated that, across language programs, peer inclusion was greater in classrooms in which students participated in more joint productive activities or peer collaboration.

These consistent findings from controlled and correlational studies demonstrate a systematic relationship between use of the Standards for Effective Pedagogy and improved student performance across a broad range of outcomes. Taken together, these findings provide strong support for the instructional effectiveness of the Five Standards.

This fall we begin a set of true experimental studies that will test the hypothesis that implementation of the Five Standards results in a wide range of desirable student outcomes, including academic achievement, positive school attitudes, and greater inclusion and harmony. Stay tuned!

In the meantime, we have prepared a technical report and bibliography that details these and many relevant recent studies. Email crede@cats.ucsc.edu or call 801-459-3500 to request a copy of Technical Report No. G1, "Research Evidence: Five Standards for Effective Pedagogy and Student Outcomes."

And please help! We are attempting to catalog all quantitative and qualitative research that is relevant to the Five Standards. Please let us know about your own work or that of your colleagues in this area by contacting the email or number above.

More information on the Five Standards and the SPC is available online at www.crede.ucsc.edu/standards/standards.html. The final reports of CREDE's 32 projects are available online at www.crede.ucsc.edu. 🌿

References

- Doherty, R. W., Hilberg, R. S., Epaloose, G., & Tharp, R. G. (2002). *Development and validation of the Standards Performance Continuum: A performance-based measure of the standards for effective pedagogy*. Manuscript submitted for publication.
- Doherty, R. W., Hilberg, R. S., Pinal, A., & Tharp, R. G. (2002, April). *Transformed pedagogy, organization, and student achievement*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Estrada, P. (in press). Patterns of language arts instruction activity: Excellence, inclusion, fairness, and harmony in first and fourth grade culturally and linguistically diverse classrooms. In H. C. Waxman, R. G. Tharp, & R. S. Hilberg (Eds.), *Observational research in U. S. classrooms: New approaches for understanding cultural and linguistic diversity*. Cambridge, MA: Cambridge University Press.
- Estrada, P., & Imhoff, B. D. (2001, April). *Patterns of language arts instructional activity: Excellence, inclusion, fairness, and harmony in six first grade classrooms*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Estrada, P., & Imhoff, B. D. (in press). One road to reform: Professional development, pedagogy, and student achievement in the context of state reform of literacy instruction. In S. Stringfield & A. Datnow (Eds.), *The imperfect storm: Successes and failures of school reform efforts in multicultural/multilingual settings*. Cambridge, MA: Cambridge University Press.
- Estrada, P., & Imhoff, B. D. (in preparation). *Peer joint productive activity and peer inclusion in culturally and linguistically diverse classrooms*.
- Hilberg, R. S., Tharp, R. G., & DeGeest, L. (2000). The efficacy of CREDE's standards-based instruction in American Indian mathematics classes. *Equity and Excellence in Education*, 33(2), 32-39.
- Padrón, Y. N., & Waxman, H. C. (1999). Classroom observations of the five standards of effective teaching in urban classrooms with English language learners. *Teaching and Change*, 7(1), 79-100.

program, and the core characteristics that need to be in place in order to have strong model fidelity.

ESSENTIAL CHARACTERISTICS OF TWI PROGRAMS

Definition and Goals

TWI is an educational approach that integrates language minority and language majority students for all or most of the day, and provides content instruction and literacy instruction to all students in both languages. TWI features three defining criteria:

1. Programs must include fairly equal numbers of two groups of students: language majority students and language minority students.
2. Programs are integrated, meaning that the language majority students and language minority students are grouped together for academic instruction.
3. Programs provide core academic instruction (i.e., content courses and literacy courses) to both groups of students in both languages.

Following from this definition, there are four central goals of all TWI programs.

1. All students will develop high levels of proficiency in their first language.
2. All students will develop high levels of proficiency in a second language.
3. Academic performance for both groups of students will be at or above grade level.
4. All students will demonstrate positive cross-cultural attitudes and behaviors.

Criteria for Success

According to Kathryn Lindholm-Leary (1990), one of the leading researchers in the field of two-way immersion education, there are eight criteria for success that all TWI programs should adhere to.

They are

1. Programs should provide a minimum of 4 to 6 years of bilingual instruction to participating students.
2. The focus of instruction should be the same core academic curriculum that grade level peers receive in regular programs.
3. Optimal language input (i.e., input that is comprehensible, interesting, and of sufficient quantity) as well as opportunities for output should be provided to students, including quality language arts instruction in both languages.
4. The target (non-English) language should be used for instruction a minimum of 50% of the time (to a maximum of 90% in the early grades), and English should be used at least 10% of the time (but increasing in amount to 50% as students progress up the grades).



5. The program should provide an additive bilingual environment so all students have the opportunity to learn a second language while developing their native language proficiency.
6. Classrooms should include a balance of students from the target language and English backgrounds who participate in instructional activities together.
7. Positive interactions among students should be facilitated by the use of strategies such as cooperative learning.
8. Characteristics of effective schools should be incorporated into programs, such as qualified personnel and home-school collaboration.

Instructional Strategies

Teaching in a two-way immersion education program is one of the most challenging situations that a teacher today can face, and as a result, there are certain instructional strategies that are particularly important to use in such an environment.

1. Separation of Languages: The teacher speaks exclusively in the language of instruction, for example, according to the content area taught.
2. Sheltered Instruction: The integration of language and content instruction, where teachers use strategies such as speaking slowly and clearly, using visual aids and manipulatives, and building on prior knowledge.
3. Active/Discovery Learning: The use of tangible objects that can be manipulated assists students in understanding abstract concepts.
4. Cooperative Learning: Language minority and language majority students work together to complete tasks.

VARIABLE PROGRAM FEATURES

Decisions such as the following must be made before a new TWI program can be launched.

see EPR, page 10

EPR, from page 9

Program Setting

Depending on the population of students in the surrounding area, TWI programs may be implemented as a neighborhood school or as a magnet school.

Because it is recommended to start a TWI program with kindergarten, most programs are created as a strand within a school and may later expand into a whole-school program as they grow.

Grade of Entry/Articulation

It is recommended that most programs start at the kindergarten level, or kindergarten and first grade. It is essential that the program extend for at least 4 to 6 years.

Regardless of whether a program decides to begin with a pre-K, kindergarten, or kindergarten and first grade, it is important to start with at least two classes at each grade level because some attrition is inevitable.

Program Model

There are two main program models in two-way immersion education: 50/50 and 90/10. In both cases, these ratios refer to the percentage of instructional time in each language (e.g., Spanish and English), NOT the student population.

Language Distribution

Because two languages are used for instruction in TWI programs, the issue of how to distribute content area instruction across the two languages is another decision to be made. In 90/10 programs, because most of the instruction is in the target language in the primary grades, this does not become a major issue until the upper elementary grades. In 50/50 programs, because instruction is provided in equal ratios in both languages at all grade levels, this is a decision that has to be made from the very beginning.

There are three ways that language distribution can be accomplished, and most programs use a combination of two or all three methods. The methods are *time*, *topic*, and *person*. For example, there are two classes of integrated students, one class spending the morning with a teacher who provides math and language arts instruction in English, and the other class spending the morning with a teacher who provides science and language arts instruction in Spanish. At midday, the two classes of students switch teachers for the other subjects.

Initial Literacy Instruction

There are three main approaches to initial literacy instruction, and they tend to be aligned with certain program models:

1. **Minority Language First:** This approach is used in a classic 90/10 model. Students are integrated all day, and all students receive initial literacy instruction in the minority language only.

2. **Both Languages Simultaneously:** This approach is most frequently used in the classic 50/50 model. Students remain in integrated groups all day and, from their time of entry into the program, receive literacy instruction in English during English instructional time and literacy instruction in the minority language during instructional time in that language.

3. **Native Language First:** This approach involves separating the students by native language and providing the language minority students with initial literacy instruction in the minority language, and native English speakers with initial literacy instruction in English. This approach is frequently used in situations where a 90/10 model is preferred, but there are concerns about the literacy development of the native English speakers.

ADVICE FROM EXISTING PROGRAMS

As part of the TWI survey questionnaire used for the online *Directory of Two-Way Bilingual Immersion Programs in the U.S.*, program staff are asked to comment on the most important features of their programs and to offer advice to new programs. The new EPR synthesizes the most frequent responses covering topics such as (a) planning; (b) qualified staffing; (c) parent involvement; (d) equal status of the two languages, cultures, and groups of students; (e) high expectations; and (f) ongoing reflection and self-evaluation.

CONCLUSION

There is a lot to consider when designing and implementing a two-way immersion program. Some characteristics of TWI programs are essential and need to be in place in any TWI model, while others may vary across programs. TWI programs hold great promise, and when well-implemented, are among the most impressive forms of education available in the United States, as their student populations exit with grade-level academic ability as well as language and literacy ability in two languages.

Two-Way Immersion 101: Designing and Implementing a Two-Way Immersion Education Program at the Elementary Level (EPR 9) will be available in the fall 2002 for \$5.00 plus shipping and sales tax at www.cal.org/store, (tel.) 800-551-3709, (fax) 888-700-3629, (email) store@cal.org. For further resources and more information on the Two-Way Immersion Education project, visit www.cal.org/crede/twoway.htm. The online *Directory of Two-Way Bilingual Immersion Programs in the U.S.* is available at www.cal.org/twi/directory.

References

Lindholm, K. (1990). Bilingual immersion education: Criteria for program development. In A. Padilla, H. Fairchild, & C. Valadez (Eds.), *Bilingual education: Issues and strategies* (pp. 91-105). Newbury Park, CA: Sage.

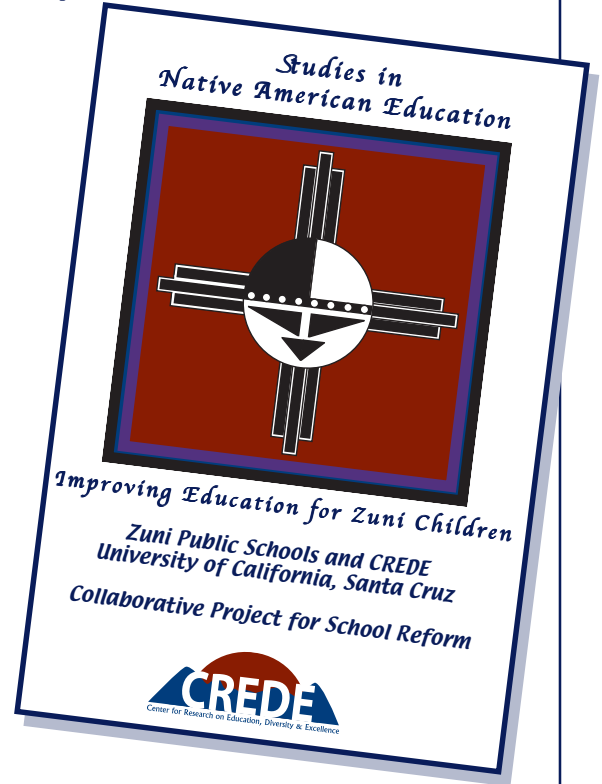
Studies in Native American Education: Improving Education for Zuni Children

A professional development video produced by
the Center for Research on Education, Diversity & Excellence
and
Zuni Public Schools

A valuable resource for educators working with Native American students, this 41-minute video presents effective strategies for improving classroom instruction.

Studies in Native American Education features master teachers using CREDE's Standards for Effective Pedagogy, which stress the fundamental approaches vital for the effective education of culturally and linguistically diverse students.

- ❖ Teachers and Students Producing Together
- ❖ Teaching through Conversation
- ❖ Developing Language and Literacy Across the Curriculum
- ❖ Teaching Complex Thinking
- ❖ Making Meaning
- ❖ Modeling
- ❖ Student-directed Activity



For use by teachers, professional development instructors, educators, communities, and anyone seeking effective education reform for Native American students.

VHS • 41 minutes • June 2002 • \$20



Studies in Native American Education: Improving Education for Zuni Children

To Order

Phone: 800.551.3709

Fax: 888.700.3629

Web: www.cal.org/store/crede/

Email: store@cal.org

Mail: CALStore, Center for Applied Linguistics,
4646 40th St. NW, Washington, DC 20016

\$20 x Quantity: _____ Subtotal: \$ _____
Tax: \$ _____
Shipping: \$ _____
Total Enclosed: \$ _____

Name _____
Address _____
City _____ State _____ Zip _____
Phone _____ E-mail _____

Type of Payment. All payments must be in U.S. dollars.

Make checks payable to "CAL/CREDE."

Purchase Order (must be signed and on company letterhead)

Check/money order VISA MasterCard

Card No. _____ Exp. Date _____

Signature _____

State	Sales Tax	Order total	*U.S. & Canada Shipping
D.C.	5.75%	\$1-20	\$2.00
Florida	6.0%	\$21-\$299	10% of subtotal
Others	No tax	\$300 and up	5% of subtotal

*For shipping for all international orders, add 20% of subtotal.
Tax-exempt organizations in DC and FL must include tax-exemption certificate.



Center for Research on Education,
Diversity & Excellence/CAL
4646 40th Street, NW
Washington, DC 20016-1859

Address Service Requested

Nonprofit Org.
US POSTAGE
PAID
Washington DC
Permit No. 9429

**Center for Research on Education,
Diversity & Excellence**

Roland Tharp, Director
Yolanda Padrón, Codirector
Barbara McKenna, Communications Coordinator
Kumud Krishna, Newsletter Production

University of California, Santa Cruz
1156 High Street
Santa Cruz, CA 95064
831-459-3500 (o), 831-459-3502 (f)
www.crede.ucsc.edu
www.cal.org/crede
crede@cats.ucsc.edu

University of Houston
College of Education, Curriculum and Instruction
143 Farish Hall
Houston, TX 77204
713-743-9816 (o), 713-743-4990 (f)
www.coe.uh.edu/crede/

**Talking Leaves
Summer 2002, Vol. 6 No. 2**

Sequoyah, a Cherokee born in the 18th century, used the phrase **Talking Leaves** to refer to the white man's ability to put words on paper. Sequoyah created the first Cherokee syllabary, which transformed Cherokee society from non-literate to literate in one generation.

This newsletter is supported under the Educational Research and Development Center Program (Cooperative Agreement No. R306A60001-96), administered by the Office of Educational Research and Improvement (OERI), U.S. Department of Education. The findings and opinions expressed here do not necessarily reflect the position or policies of OERI.

This issue and past issues are available online at www.cal.org/crede/pubs/.