INTERCULTURAL DEVELOPMENT RESEARCH ASSOCIATION

IDRA Newsletter

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Breaking the Bonds of Boredom in Science and Math

by Veronica Betancourt, M.A.

Inside this Issue:

With the implementation of the *No Child Left Behind Act*, a systematic movement has been sweeping the nation to improve how our increasingly diverse population of children are educated. Our collective goal should be to nurture the budding scientists and mathematicians of the 21st Century to explore, discover and expand our universe.

This is a much different concept than what traditionally has been seen in secondary classrooms. Reminiscing on personal math and science experiences may drum up scenarios of teachers with radiant cat-eye glasses attempting to maintain a room full of students through authoritative disciplinary measures. As scientific facts and figures were dragged out in one continuous sentence, students often wondered how all of this information was relevant to them. Even if there was an inkling of personal connection, the continuous lecture-style classes minimized time to process new information.

Listening to nonstop lecture was not confined to science alone. Walk down the hall to the math class that offered the same type of classroom environment – one where lower extremities lost all feeling as the time crept by and the tick-tick-ticking of the clock was the only audible sound. So, the golden question that must be asked is: What can educators actively do to change this unconstructive cycle of mundane, disconnected redundancy in math and science?

Creating the Learner-Centered Classroom

We can begin by focusing on the needs of the student and shifting the responsibility of learning from just the teacher, to active learning by the student, with facilitated guidance. Scientific exploration means engulfing students in a realm of uncertainty and exploration that may actually create uneasiness for many teachers. But diving into this unexplored region shifts science and math teaching as we know it.

A learner-centered environment is crucial to guiding students toward an interactive and constructivist approach to learning. This environment includes small group discussions,

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student-generated investigations, peer evaluations that reflect reasoning evidence, and personal interpretations (Stepanek, 2000).

We can no longer rely on the mediocrity of test-driven curricula where meeting the minimal requirements of high-stakes tests is cause for celebration or where scripted lessons and timelines dictate materials, lessons and assessments, with little room for creativity and valuing of students and teachers (Brown, 2006).

Creating an environment that is learner-centered is easier said than done. Students need to develop a thorough understanding of science and math at every angle, including what it is and what it is not, its current limitations and its limitless possibilities, and how it applies and contributes to cultures around the world. This shift is not effortless; it requires patience, acceptance and persistence.

What can be done to rejuvenate mathematical and scientific souls? Teachers can "facilitate activities unlike any they experienced themselves as learners" (Windschitl, 2006). Teachers can create and sustain an environment where students become active learners in a class filled with student excitement, engagement and inquiring minds that thirst for new knowledge through questioning, hypothesizing, discovering and challenging new concepts in math and science (Villarreal, 2006).

Teachers can create and sustain an environment where students become active learners in a class filled with student excitement, engagement and inquiring minds.

Neglecting the notion of community in the rush to cover curricula can eliminate a vital element of effective teaching (Williams, 2001). Following are some possibilities.

- Demonstrate belief in every student's intellect and capabilities. Modeling this belief in them will transform their attitudes toward math and science from that of *passive recipients* with no voice, to *learning activists* with vocal vitality.
- Provide a safe haven for students, where the academic and social environments are non-threatening as well as academically challenging. This will allow for students to negotiate and construct their own ideas, theories, and meaning of topics and text.
- Pace the class so that students can bring in their own life experiences and culture to enable them to process the information and solidify connections. It matters not how well-organized a mandated curriculum or scope and sequence is if students have no time to internalize it.
- Allow for academic talk negotiations among students during small group activities and minimize the typical classroom language where teachers initiate the conversation, students respond, and teachers evaluate and move on (Williams, 2001).
- Question students in ways that provoke and challenge their thinking and current academic beliefs through

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In This Issue...

The Intercultural Development Research Association *(IDRA)* is a non-profit organization with a 501(c)(3) tax exempt status. The purpose of the organization is to disseminate information concerning equality of educational opportunity.

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It Takes Two to Techno

Integrating Technology with FLAIR

by Juanita C. García, Ph.D.

The tango (the "techno" in this article's title) is one of the most intriguing of all dances. It is derived from the fusion of various forms of music, and it leads the dancers to make a strong connection with the music. Integrating technology with FLAIR (a professional development model) in a school is much like the music of the tango.

In schools, organizational culture has a certain style and character, but a good school fuses values and norms, the very soul of the organization, to provide a strong functioning culture that is aligned with a vision and purpose and inspires a common direction. This article describes how technology with FLAIR fits the "music" of a school (the complex patterns of beliefs, values, attitudes and behaviors shared by the members of an organization), what characteristics set them apart from other models, and perhaps most importantly how teachers dance with both.

Click for Success

The blending of technology into the curriculum can provide meaningful learning experiences for all children, especially those considered at risk of educational failure. Schools that capitalize on the relationship between technology and instructional renewal help students develop higher-order thinking skills and function effectively in the world beyond the classroom.

Technology integrated with FLAIR places the student at the center of the curriculum by valuing the heritage and the capacities that students bring with them to the academic experience.

Achieving such fundamental change, however, requires a transformation of not only the underlying pedagogy (basic assumptions about the teaching and learning process) but also the kinds of technology applications typically used in classrooms (Means, 1997).

IDRA has been working with an elementary school in Louisiana that is committed to the total growth of its students. Serving grades Pre-K through five, the school has long been ranked as one of the top elementary schools in the parish. Its multiculturally diverse enrollment is comprised of about 460 students.

As described on its web site, the foundation of the school's philosophy is development of the child morally, intellectually, socially and physically. The school strives to meet individual needs while encouraging high expectations, independence, self-discipline, self-confidence and an awareness of self-worth. The aim is to offer a variety of experiences at every grade level to foster full development of student talents and interests.

IDRA has been working with the school to implement IDRA's Focusing on Language and Academic Instructional Renewal (FLAIR) model. More recently, we brought in a powerful technology integration component.

What is FLAIR?

The goal of FLAIR is to increase the cognitive growth and academic achievement for all students, including linguistically diverse students, through an intensive language-across-the-curriculum program that is created by means of sustained and intensive campus-based professional development.

This professional development model helps people in the school community work together to transform every classroom into a powerful learning environment, where students and teachers are encouraged to think creatively, explore their interests and

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achieve at high levels.

With FLAIR, this Louisiana elementary school has created a campuswide instructional vision that accepts no excuses for failure. All staff value the heritage and the capacities that students bring to the academic experience. Teachers incorporate research-based higher-order thinking literacy strategies into daily classroom instruction for all students.

The teachers and staff have built a learning community in which the principal supports staff. She has developed a collegial relationship with teachers, involving them in the decision making process. Teachers collaboratively and continually work together, reflecting on their students and their teaching.

Classnotes Podcast – Episode 4
"A Model for Successful Reading Instruction"

IDRA's Focusing on Language and Academic Instructional Renewal (FLAIR) model capitalizes on the campus leaders, mobilizing the principal, teachers, librarians and support staff as a force to tailor-make a reading program that is research based and that results in better achievement for all students. Working with the school's teachers and principals, and using the existing curriculum, FLAIR helps transform every classroom into a powerful learning environment, where students and teachers are encouraged to think creatively, explore their interests and achieve at high levels. In this episode of the IDRA Classnotes podcast series, Dr. Juanita García and Hector Bojorquez, IDRA education associates, discuss this model and the impact they've witnessed at one sample school site.

What is Technology Integration?

For some educators, this question is a difficult one to answer. Clearly, it is more than merely using a computer as a typewriter, calculator or film projector. Many believe it begins with solid planning by the teacher so that the use of technology is meaningful and relevant to the educational experience of the student. It should support rather than dominate a solid curriculum. Others agree that it should assist the student with problem solving and create collaborative learning environments whereby the teacher seamlessly transitions from the role of facilitator to that of a learner.

Collectively, technology is a magnificent way to open doors for students and to assist students in becoming engaged learners. And finally, it is a tool that is able to bridge the gap between academic disciplines, thus affording educators the opportunity for thematic unit planning (Jeffries, 2000).

The FLAIR technology integration framework includes the following elements:

- Technology for language and academic language acquisition (research, communication and problem solving).
- Technology for blending and connecting across content areas (i.e., mathematics and social studies).
- Technology for student exploration and development of content area knowledge.
- Technology for teacher planning, collaboration and learning.
- Technology to accurately measure authentic classroom use LoTi (Levels of Technology Implementation).
- Technology integration for the development of authentic student products.
- Technology integration for student engagement that draws upon students' experiences in the digital world.
- Technology integration that transforms teachers' perspectives about newly discovered student strengths and interests.

When planning a technology-infused lesson, instructors ask themselves if their students are using the technology to produce, create or communicate, and what higher-order thinking skills are being addressed. Who is creating and why? Hector Bojorquez, of IDRA, adds, "By expecting students to create and to address higher-order thinking skills in their projects, instructors are taking the first step to seamless integration" (2007).

Forever Tango: The Highly Successful Run

What do you get when teachers design meaningful learning experiences, facilitate the use of quality technology integration and apply effective teaching strategies? The answer is NITS! No, not the hair kind, but self-ascribed "nerds in training!" These teachers are:

- Empowered classroom teachers who build on their leadership capacities;
- Teaching and learning in powerful ways;
- Dedicated to training followed by

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This We Know

All of Our Children are Learning

A Brief Rumination on Parent's Qualifications for Judging the Quality of the Teaching Their Children are Receiving, Using Math as an Example and Considering the NCLB/Title 1 Section 1118 Parent Engagement Rules

by Aurelio M. Montemayor, M.Ed.

Prologue: Which Students Can Learn – Algebra

A parent in a south Texas community brought a letter received from her son's high school announcing that the school was not meeting adequate yearly progress (AYP) because of math. In a problem-solving conversation, a group of parents wondered if the problem was that the teachers were unprepared or uncertified to teach algebra. But further probing revealed that most of the teachers were in fact certified and seasoned practitioners of mathematics. Instead, they learned of an algebra teacher who stated that most students in the school "do not have the capacity to learn higher math."

In another example, while conducting a training of trainers session for Eisenhower Grant Scholarship elementary teachers, IDRA was preparing these selected teachers to develop workshops and presentations to extend their knowledge in the teaching of math and science to their campus peers. Upon reviewing some very exciting, participatory and creative plans for presentations in science teaching, the facilitator asked where the parallel workshop plans were for pre-algebra instruction. The response was: "Oh no, we cannot do that for these teachers and students. Algebra is just too abstract!"

A parent does not need to know the content, the language of instruction or effective teaching pedagogy to judge whether children are learning and succeeding.

Seeing students through these cloudy lenses ensures that few students will ever master algebra. The status quo was proof of prejudice.

All Children Ahead in Math

Math prejudice directly contradicts the premise of "leaving no child behind." It also presents a critical locus to meet the parent involvement requirements in the law: engaging parents in judging the teaching quality when a school is not meeting AYP.

Math is *not* too abstract for the so-called masses.

- See the work lead by Kathryn Brown in IDRA's Math Smart! institutes for creative answers to that myth (Brown, 2006).
- Check with Bob Moses' Algebra Project (Moses and Cobb, 2001; Moses, et al., 1989).
- View the movie *Stand and Deliver* (1988), with the caveat that calculus is really for a broader audience than a select number of bypassed and ignored Latino geniuses.

Math is a great litmus test of teaching quality. The parent-useful and friendly assessment is: How well are children learning to use and apply math, algebra and so-called "higher mathematics"?

Parent's Math Teaching Skills? Not in This Approach

Before we explore some questions parents can ask, let us be clear about the domain we are working in. Parenting training is a broad aspect of working with parents, targeted to improving parent's skills in bringing up and educating their children. Within this domain, the math-teaching-quality conversation would shift to the parent as math teacher. There is a large body of literature that focuses on the literacy of the parent, especially the mother, and points to children's literacy skills directly flowing from the caretaker's skills.

Likewise there is a comparable emerging body connecting parents and families and math. In contrast, we are concentrating on those aspects of

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parent involvement that highlight the parent as resource to the school, as decision makers about the quality of the education of their children, and as leaders in creating schools that work for all children.

Parents as Resources for Quality Math Education

Parents, families and others in the community can inquire without any further preparation than their faith in their children and their desire to have high quality schools. One first thing to check is if the secondary math teachers are prepared and certified to teach their classes. Second, find out whether any of these teachers consider algebra and beyond as appropriate only for a select few students. If a major block is the lack of resources to hire sufficient, highly qualified teachers, parents are a powerful ally to administrators whose pleas for added resources are not being heard.

At the elementary level, first find out if any teacher is mouthing some version of " I was never good in math." Then ask the principal how that lack is being made up for. Are the best and brightest teachers in math accessing the children whose classroom teachers admit to limitations in that area?

A parent does not need to know the content, the language of instruction or effective teaching pedagogy to judge whether children are learning and succeeding.

What is the Question?

Ask students: "What helps you learn math?" and "What blocks you from learning math?"

Ask teachers: "Do you think all children can learn math?," "What do you do if students don't learn math with the way you are currently teaching?," and "How do you change your teaching to engage the students that are not

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Tools for

Teaching Quality for Success

Success in school means having quality teachers, teachers who know their subject, who know effective instructional practices, and who value their students. Unfortunately, many students do not have access to these teachers. This shows up in the high numbers of students who fail at least one part of standardized accountability tests, who are held back and who do not graduate from high school. It also shows up in the low numbers of young people who are going to college and graduating. Why this dismal lack of success for some?

For some time, observers have ascribed students' lack of success exclusively, or primarily, to students. IDRA believes that much of our schools' failure is due to limited access to quality teaching. IDRA has taken an unwavering stand for quality teaching for all students – teaching that is characterized by strong content knowledge and effective pedagogy, quality decision-making in the classroom, self-efficacy, innovation, capacity to teach diverse students, and is grounded in community and institutional support. IDRA's work is guided by the conviction that all students deserve success, and failure is never an option.

A Snapshot of What IDRA is Doing

Developing leaders – IDRA has been developing a new observation tool to assist in the instruction of English language learners. This Student Engagement Observation Tool is designed to assist teachers in their instruction and ensure the cognitive engagement of all students, including English language learners, in the content being taught. Educational research is very clear about cognitive engagement. Without engagement, learning cannot take place. This tool, and its accompanying Teacher Strategies for English Language Learner Engagement Tool, is part of a new professional development model called Engagement-Based Sheltered Instruction (EBSI). This professional development model enhances and refines teachers' use of sheltered instruction as a method to develop content and language skills of English language learners.

Conducting research – IDRA's Science Smart! model offers the opportunity to become familiar with and implement various approaches that may be used in any classroom setting through engagement of scientifically-based researched strategies that build bridges between understanding science and becoming scientifically literate. This professional development package is especially designed to be integrated with a school district's current curriculum through needs assessments, observations, online teacher support, mentoring, trainer preparation and ongoing evaluations.

Tools for Action continued on next page

Action

Informing policy – IDRA has articulated the role of policy in shaping the quality of educational services to minority children and to those with special needs. Dr. Albert Cortez and Dr. Abelardo Villarreal have outlined a set of criteria to assess the adequacy and appropriateness of policies that ensure students' full participation, engagement and success in the educational process. The criteria are presented in the June-July 2006 issue of the *IDRA Newsletter* article, "Assessing Policies for Success of Minority Children."

Engaging communities – IDRA's Quality Schools Action Framework shows how we can strengthen public education for all students. Specifically, it provides a model for assessing school outcomes, identifying leverage points for improvement, and focusing and effecting change. The leverage points focus on changing four school system features: parent and community engagement, student engagement, teaching quality, and access to quality curriculum. True, sustainable action for change that fundamentally alters the lived experience of children in the classroom must address the root causes and trends that give rise to inequity.

What You Can Do

Get informed. The National Council for Teachers of Mathematics has set up Illuminations, a web site with standards-based resources to improve teaching and learning of mathematics for all students. **http://illuminations.nctm.org**

Get involved. The Family Involvement Network of Educators (FINE) is national network of more than 5,000 people who are interested in promoting strong partnerships between children's educators, their families and their communities. FINE is sponsored by the Harvard Family Research Project. **http://www.gse.harvard.edu/hfrp/projects/fine.html**

Get results. The following web sites offer prepared and integrated lesson plans for many subjects and grades.

- Open Educational Resources: **http://www.oercommons.org/**
- Read * Write * Think by the International Reading Association and National Council of Teachers of English: **http://www.readwritethink.org/index.asp**
- ARTSEDGE by the National Arts and Education Network: **http://artsedge.kennedy-center.org**
- Thinkfinity by the Verizon Foundation: **http://www.mped.org/home.aspx**

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mastering the required skills?"

Ask principals, "What are you doing to encourage the modification of the curriculum and the teaching approaches so that all children are learning?" and "How are tutoring and other supplementary educational services helping to engage students and support their academic success?"

See the following suggestions from *"10 Tips for Parents Who Choose to Stay Put"* (KSA-Plus Communications, nd).

- "Get extra help for your child. If the school fails to meet its learning goals for three straight years, your child is eligible for additional academic help, such as afterschool tutoring, paid for by the federal government. Some schools offer extra help after the second year to keep parents in the school. You can press your school to do this. Check to see what extra help your school is providing. Often this support is provided by community organizations, such as a local YMCA, library, or Boys and Girls Club."
- "Make sure the school's improvement plan focuses on areas where the school is not doing well. All schools now have to publish annual report cards, showing how *all* students are doing in reading and math. If the data show that math scores are low, for instance, you'll want to make sure that the school's improvement plan has steps for strengthening the math program. Maybe the school will spend more time on math during the school day, create an after-school program to help struggling students, improve staff training for teachers and so on. These annual report cards also need to describe how different groups of students are performing. For instance, if low-income students are lagging, the school improvement plan should describe what will be done to help those students. Start

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by asking if *all* classes offer high quality teaching and a challenging curriculum so that *all* children will meet the standards."

Also see Pages 9 and 10 for sample surveys one community is using.

Epilogue: Parents as Advocates and Catalysts for Quality Teaching

There are many more questions that laypersons can ask of educators (*As A Parent, Here are 12 Things You Should Know about and Expect From Your Schools… and Yourself*, KSA-Plus Communications, nd). None of these require that the inquirer be an expert in mathematics or teaching. The answers will cause the educator to rethink and come up with better ways to support academic success for all children: truly high quality teaching for all students.

Resources

Brown, K. "Making Math Real for Students," *IDRA Newsletter* (San Antonio, Texas: Intercultural Development Research Association, March 2006).

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Aurelio M. Montemayor, M.Ed, is an IDRA senior education associate and director of the Texas IDRA Parent Information and Resource Center. He also serves on the national board of PTA. Comments and questions may be directed to him via e-mail at comment@idra.org.

Highlights of Recent IDRA Activities

In March, IDRA worked with **4,894** teachers, administrators, parents, and higher education personnel through **42** training and technical assistance activities and **121** program sites in **12** states plus Brazil. Topics included:

- Albuquerque Public Schools, New Mexico
- Santa Monica-Malibu Unified School District, California
- Medina Valley County ISD, Texas
- Roma County ISD, Texas

Participating agencies and school districts included:

- College Access and Success
- English as a Second Language Strategies for Math
- Families and Technology
- Public Funding for Public Schools
- Engaging All English Language Learners

Activity Snapshot

During IDRA's 14th Annual *La Semana del Niño* Early Childhood Educators Institute, more than 250 teachers, administrators and parents participated in a series of information-packed development sessions that were customized to their varied concerns. This institute provides the nation's only gathering place for teachers and parents concerned with early childhood education of English language learners. The institute participants explored, assessed, and reflected on research-based, effective practices that lead to children's success. The teachers, administrators and parents attended workshops about creating opportunities for children to develop a love for reading while they are doing mathematics, art, music and science.

Regularly, IDRA staff provides services to:

- public school teachers
- parents
- administrators
- other decision makers in public education

Services include:

- training and technical assistance
- evaluation
- serving as expert witnesses in policy settings and court cases
- publishing research and professional papers, books, videos and curricula

For information on IDRA services for your school district or other group, contact IDRA at 210-444-1710.

Parents and Students Examine Math Curriculum and Instruction at their High School

A group of parents participating in a parent leadership series led by IDRA at a high school in Texas decided that their leadership project would be to survey parents and students. These parents are very concerned about the math curriculum and instruction, because this year their children's high school was put on the list of not achieving adequate yearly progress (AYP) for the first time. They had collected anecdotal evidence of what the problem might be but wanted to have more data in terms of family and student opinions about the situation. At first, they decided to just ask two questions of other parents and caretakers: What helps your children learn math? and What blocks them from learning math? After further conversation, they decided to conduct a more extensive survey and to include students. They hope to have some preliminary findings by the end of June.

Following are their surveys. The first is for parents who will survey other parents, and the second is for students who will survey other students.

Adult/Adulto Name/*Nombre* _____

Mathematics Survey / *Encuesta sobre la Matemática*

Please mark (fill the circle) that best indicates your opinion. *Por favor marque (rellene el circulo) que mejor indica su opinión.*

1 My children have high grades in math.
Mis hijos tienen altas calificaciones en matemáticas.

Never *Nunca* ○ Rarely *Raramente* ○ Sometimes *A Veces* ○ Often *Seguido* ○ Always *Siempre* ○

2. Students are encouraged to ask questions.
Se les anima a los estudiantes que hagan preguntas.

Never *Nunca* ○ Rarely *Raramente* ○ Sometimes *A Veces* ○ Often *Seguido* ○ Always *Siempre* ○

3. When students don't understand a concept, different ways are used to teach it.
Cuando los estudiantes no entienden un concepto, se usan distintas maneras para enseñarlo.

Never *Nunca* ○ Rarely *Raramente* ○ Sometimes *A Veces* ○ Often *Seguido* ○ Always *Siempre* ○

4. The supplementary educational services, such as tutoring, help the students to succeed in their classes.
Los servicios educativos suplementarios como profesor particular les ayudan a los estudiantes para tener éxito en sus clases.

Never *Nunca* ○ Rarely *Raramente* ○ Sometimes *A Veces* ○ Often Seguido ○ Always *Siempre* ○

The next two questions require a brief answer. Please give your honest opinion. *Las siguientes dos preguntas requieren una respuesta breve. Por favor de su opinión franca.*

5. The most important thing that school can do to help a student learn math is:
La cosa mas importante que la escuela puede hacer para ayudarle a un alumno para que aprenda matemáticas es:

6. The biggest block in school for a student to learn math is:
La barrera más grande que existe en la escuela para que un alumno aprenda matemáticas es:

Student/*estudiante* Name/*Nombre* _____

Mathematics Survey / *Encuesta sobre la Matemática*

Please mark (fill the circle) that best indicates your opinion.
Por favor marque (rellene el circulo) que mejor indica su opinión.

1. I have high grades in math.
   Yo tengo altas calificaciones en matemáticas.

Never *Nunca*	Rarely *Raramente*	Sometimes *A Veces*	Often *Seguido*	Always *Siempre*
○	○	○	○	○

2. I am encouraged to ask questions in math class.
   Se me anima a que yo haga preguntas en la clase de matematicas.

Never *Nunca*	Rarely *Raramente*	Sometimes *A Veces*	Often *Seguido*	Always *Siempre*
○	○	○	○	○

3. When I don't understand a concept, different ways are used to teach it.
   Cuando no entiendo un concepto, se usan distintas maneras para enseñarlo.

Never *Nunca*	Rarely *Raramente*	Sometimes *A Veces*	Often *Seguido*	Always *Siempre*
○	○	○	○	○

4. The supplementary educational services, such as tutoring, help me to succeed in my classes.
   Los servicios educativos suplementarios como profesor particular (tutoría) me ayuda a tener éxito en mis clases.

Never *Nunca*	Rarely *Raramente*	Sometimes *A Veces*	Often *Seguido*	Always *Siempre*
○	○	○	○	○

The next two questions require a brief answer. Please give your honest opinion.
Las siguientes dos preguntas requieren una respuesta breve. Por favor de su opinión franca.

5. The most important thing that school can do to help me learn math is:
   La cosa mas importante que la escuela puede hacer para ayudarme a aprender matemáticas es:

6. The biggest block in school for me to learn math is:
   La barrera más grande que existe en la escuela para que yo aprenda matemáticas es:

Expanding Blueprints for Action

Children's Outcomes, Access, Treatment, Learning, Resources, Accountability

by Rosana G. Rodríguez, Ph.D., and Bradley Scott, Ph.D.

Previous *IDRA Newsletter* articles have described IDRA's work in Texas creating cross-sector and cross-race leadership to improve access, excellence and equity in education. As background, the U.S. Supreme Court unanimously ruled in *Brown vs. Board of Education* more than 50 years ago that sending children to separate schools purely on the basis of race was unconstitutional. Seven years prior, the U.S. Circuit Court of Appeals, Ninth Circuit ruled in *Mendez vs. Westminster and the California Board of Education* that Mexican American children could not be denied access to public school or a quality education because they were Mexican American.

While these two decisions, among others, transformed the nature of U.S. public education, the objectives of these rulings have not been fully met. According to the Harvard Civil Rights Project, 40 percent of Black students attend schools that are 90 percent Black. This is up from 3 percent in 1988. In nine out of 10 of these schools, the majority of children are poor.

Latino children are the most segregated and attend the poorest schools. They receive the poorest preparation by the least trained teachers and have little access to rigorous curriculum that would prepare them for college.

In addition, "75 percent of the 4.5 million students who speak a language other than English have a seat in the classroom but are left out of the class because of English-only policies that are concerned with politics instead of learning" (Robledo Montecel, 2003).

Clearly, the promise of *Brown* and *Mendez* is not yet met. And the current anti-immigrant environment certainly threatens the promise even further.

It is critical and timely that African American and Latino communities come together in fostering lasting and meaningful coalitions that can help fulfill the promise of these two cases for all children in this nation and particularly for African American and Latino learners.

Rev. Dr. Martin Luther King Jr. reminds us that we are "inextricably linked" in a web of mutuality. And Cesar Chavez emphasized that the end result of education must surely be service to community, not only for their sake but for our collective good.

Blueprint Dialogues in Communities

To this end, with funding from the Annie E. Casey Foundation, IDRA has implemented three "Blueprints for Action" dialogues in Texas, and recently two more in Albuquerque, New Mexico, and Little Rock, Arkansas, with plans to expand to other states. The dialogues use a cross-sector multi-racial approach for gathering participants, educators, parents, business and community representatives engaged in a roundtable discussions focusing on actions to address key education issues in their communities, including equitable funding, ensuring graduation for all, quality schooling and access to higher education.

The groups create "blueprints" for action, based on these questions:

- What are the challenges to access and success for *all* students?
- What resources, strengths and assets can be tapped to create local blueprints for action that will result in access and success?
- What opportunities can be seized upon to accomplish this goal?
- What local actions are needed to fulfill the promise of *Mendez* and *Brown*?

Hearing Student Voices

The dialogues held in Albuquerque, New Mexico, brought in a critical component that is often overlooked in education: the importance of student voices. Prior to the dialogues and with assistance from IDRA and Critical Exposure, local students learned about the

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landmark cases and began to take pictures of their realities within schools, capturing in their words and through their eyes whether or not the promises of *Brown* and *Mendez* were being fulfilled in their districts.

These powerful images became part of a gallery to be appreciated by the entire community before the dialogues began. Participants had an opportunity to meet and hear from the students and consider these pictures as a powerful reminder of what remains to be done. The images and stories became a critical component in setting the stage throughout the next day's dialogue planning.

In Little Rock, Arkansas, IDRA staff met with African American, Latino and Asian students representing three public school districts. Students participated in an assessment of strengths, weaknesses, opportunities and threats (SWOT) relative to the fulfillment of the promises of *Mendez* and *Brown* in their communities. Working in teams, students identified eight key issues. Students presented these to roundtable participations at an evening reception of community members and school leaders, and issued a call to action. (The article by student Brandon Love in the April issue of the *IDRA Newsletter* was a product of this interaction.)

IDRA continues to foster new or strengthened alliances among and between groups with local leaders committed to continuing this work through sustained dialogues and action. Toolkits for taking local action are provided as follow-up to the Blueprint Dialogues, and the IDRA web site is poised to leverage the meetings at state and national levels (www.idra.org/mendezbrown).

Insights

Important insights are emerging of national significance from the Blueprint Dialogues.

- **In terms of process**, communities of color must have opportunities and support at the local level to voice concerns regarding access to education. People in communities yearn to communicate with one another across groups, but often lack opportunities or a process to do so in ways that result in collective and focused action. Facilitated interaction can yield greater interconnectedness, build on assets, strengthen will for effective action and focus on results.
- **In terms of context**, valuing and engaging students and communities are essential elements for school success. Students and community are where great reservoirs of strength and insight can be found. Each community needs information about its local schools in order to hold schools accountable for fulfilling the promises of *Mendez* and *Brown*. While complexity and diversity within and among groups pose challenges, these serve as launch points for building trust and taking collective action on behalf of all children.
- **In terms of issues**, the dialogues

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Student Voices

High school students in Albuquerque, New Mexico, participated in the Blueprint Dialogues by sharing through photographs and their words whether or not the promises of *Brown* and *Mendez* were being fulfilled in their schools. Here is a sample of their insights.

Separate Tables

"These pictures were taken of a photography class. It shows how students are separate – there are tables for White students and other ones for African American students. They don't interact together in class!"

– Randa Hussein, Grade 11

Moldy Ceiling

"This picture is of my government class that has a moldy roof. The mess was caused by a leaky roof, which is a problem in many other rooms and in the hallways. This is a way that the *Brown* and *Mendez* cases aren't being fulfilled, in that our schools aren't receiving [the support] they desperately need. I took this picture to show people that, even though we set high standards, that high standards may not always be fulfilled."

– Jazmine Ralph, Grade 12

Broken Fence

"This picture is of a broken fence in the back of my school. I took this picture for a couple of reasons. Because the fence looks and appears to be broken, I felt that the fence represented and symbolized the promises desired from the *Brown* and *Mendez* cases. While they appeared to be fixed on the surface, if you look deeper or beyond the surface, there is still much to be changed and fixed. We cannot continue to just attempt to mend those problems of which the cases fought for. We have come a long way, but we have still have further to go."

– Fatimah Martin, Grade 11

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evaluation, analysis, justification, processing of information, inferencing and predicting. Steer away from an overabundance of factual information and move toward building new bridges between their current beliefs and scientific evidence in order to construct new knowledge.

Reflecting and Reasoning Actions

Breaking the bonds of boredom in science and math requires rethinking even the most basic assumptions and habits. In a recent discussion with a group of secondary science teachers, there was much debate over the effectiveness of classroom arrangement. The high school teachers felt a need to instill discipline, individualized responsibility and ownership of self; the middle school teachers convincingly conveyed their views on fostering student achievement through cooperative learning, collaborative problem solving and peer support.

The room arrangement at the high school was traditional: six rows of desks with each row consisting of five chairs, all facing the front of the room where the teacher typically stood for an extended lecture-style teach where students were expected to copy notes and then reinforce their learning through a pencil and paper task.

The high school teachers shared their views on why their rooms were arranged in this particular fashion:

- To prepare for exit exams equated to *foster responsibility,*
- To prepare for exit exams and to problem solve meant to *promote individual thinking*, and
- To eliminate socializing and keep control of the class was their way of *maintaining classroom control*.

This scenario represents the type of traditional talk that Windschitl (2006) describes as a focus on student acquisition of scientific facts, concepts, principles and skills. While this is not a *terrible* thing, it also is not the most conducive environment to be placed in for 50 minutes a day, where exposure to abstract concepts and foreign academic terms may actually come across as vulgar if repeated out of context. This, in essence, is that same reminiscent classroom that you either experienced yourself or had friends who told you dramatic stories of the class. The National Research Council (1996) suggests that the characteristics of a classroom community include: respect for diversity of ideas, skills and experiences; responsibility of self and peer learning; and collaboration. Essentially, it emphasizes that "learning science is something students do, not something that is done to them" (NCR, 1996).

The middle school teachers had a very different outlook on the same question about the reasons for their room arrangements:

- To pick each other's brain meant to *develop thinking abilities,*
- To build work ethics and learn to work with each other helped address *real world needs while eliminating the "I don't want to work with them," attitude*; and
- To foster peer explanations *when kids "just don't get it."*

The middle school teachers shared a common initiative in which they were building on a sense of community learning by arranging the room into collective sets of fours. A classroom arrangement like this fosters the mini-roundtable discussions that are often necessary when trying to make sense of unfamiliar science "stuff." Additionally, it recreates a feeling of comfort and safety for students who face a multitude of teachers, classmates, expectations and pressures that increase exponentially as they progress into each grade level.

Do not misconstrue a student-centered learning environment as a free-for-all where nothing is accomplished because discussions run amuck or where the teacher is rolled into a ball in the corner because he or she has lost control.

Rather, imagine a room filled with students who have learned to sit in small groups and still focus on the teacher for instructions, information or expectations; a room where the once penetrating ticking of the clock has been supplanted with the buzzing of children actively engaged in a math or science task; a room where questions fly out of the mouths of children because they have an inner desire to find the solution to some real-world problem that requires their expertise; and a room where you are no longer the central dispatch unit, but rather, the director of a highly orchestrated, well-disciplined group of active learners.

Demonstrate belief in every student's intellect and capabilities. Modeling this belief in them will transform their attitudes toward math and science from that of passive recipients with no voice, to learning activists with vocal vitality.

Imagine a room completely different from that of a previous era, where the models used to demonstrate concepts were rare gems that were too valuable to let inquiring minds actually touch and explore them. Imagine that room filled with academic conversation occurring among *all* students, regardless of cognitive, social, gender, ethnic or cultural differences as they engage in inquiry, determined to find a solution to the task at hand. You are not just breaking the old teaching bonds of boredom, you are actually freeing the scientists and mathematicians of the

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playing and *trial and error*;
- Planning technology-infused lessons;
- Expecting students to create and to address higher-order thinking skills in their projects;
- Using online, ongoing assessments and discussion forums with IDRA's online eLearning tool;
- Planning with facilitators and other teachers via this eLearning tool, webcams and web casting;
- Video taping for classroom demonstrations and for assessing teacher growth;
- Using assessment tools, such as handhelds (i.e., Palm Pilots, Pocket PCs) for making instructional decisions and assessments on the fly and tracking performance;
- Unafraid to seek new learning experiences that stretch their abilities;
- Risk takers who create classroom environments where students feel safe to take risks in their learning; and
- Opportunity seekers who look to transform existing curriculum with a dose of technology infusion.

It Takes Two to Tango

Certain activities cannot be performed alone, such as dancing the tango and educating our children. IDRA's professional development approach fosters increased teacher capacity to enhance student achievement by combining knowledge, teachers' self efficacy and teachers' rational thinking processes essential to decision-making (Villarreal, 2005).

Technology integrated with FLAIR places the student at the center of the curriculum by valuing the heritage and the capacities that students bring with them to the academic experience. It empowers teachers by equipping them with certain knowledge and resources to make better classroom and instructional decisions. This is paramount if we are to prepare the students of today for the challenges of the future.

Resources

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Villarreal, A. "Rethinking Professional Development as a Tool to Stimulate Teacher's Decision Making Authority," *IDRA Newsletter* (San Antonio, Texas: Intercultural Development Research Association, May 2005).

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underscore that accountability in education is good and must be shared and accomplished through multiple measures that do not hurt kids. Coalition building of diverse sectors working toward a shared vision of excellence, access and success for *all* children must span across disciplines and sectors.

Partnering with the Annie E. Casey Foundation, IDRA is drawing upon prior work of a National Consultative Group of key leaders from educational and civil rights organizations that was convened in 2005. To bring the work to national scale, IDRA is exploring possibilities to foster a national shared vision and a common discourse for building cross-sector and multicultural alliances as advocates in education.

Presentations at the National Conference of Public Education Network in Washington, D.C., in December gave yet another opportunity to meet with national leaders and explore the following key questions:

1. What are the most strategic ways to advance a national scale-up of the *Brown* and *Mendez* community action dialogues?
2. What are the next steps and the supports needed for a national scale-up effort?
3. How can we seize the potential to work collaboratively for the greatest national impact?

As a resource for communities, IDRA has developed *A Community Action Guide – Seven Actions to Fulfill the Promise of Brown and Mendez* (which is available free online at http://www.idra.org/mendezbrown/promise.html) that supports local leaders in taking specific steps to fulfill the promise of *Brown* and *Mendez*. This resource outlines key areas emerging from local dialogues, such as equitable funding, accountable schools, quality schooling, ensuring access and inclusion, and strengthening school holding power. This resource is intended to spark cross-sector cross-race action for joint leadership aimed at what must be done and what can be done together across all racial groups to create schools that are equitable and excellent for *all* children.

All children have equal rights to quality education, regardless of where they live and who they are. Educational equity is not just morally right, it is right for kids, right for learning and right for democracy. IDRA's stand on this issue is not just for some, not just for most, but for every single child.

Rosana G. Rodríguez, Ph.D., is IDRA director of development. Bradley Scott, Ph.D., is a senior education associate and director of the IDRA South Central Collaborative for Equity. Comments and questions may be directed to them via e-mail at comment@idra.org.

You Can't Win If You Don't Get to Play

A Summer Institute on Engagement-Based Sheltered Instruction

Why are so many secondary English language learners failing to meet academic standards? What are their barriers to achievement and success?

Educational research tells us clearly to pay attention to student engagement. Our everyday experiences with students also confirm the need for students to be engaged in the game of learning if they are to have a chance at academic success.

Yes, student engagement is a problem all around, but especially for English language learners! Like the players in that all important ball game, English language learners can't win if they don't get to play!

This summer, the IDRA is offering training opportunities for school districts to bring your teachers together to focus their attention and develop their expertise in delivering engagement-based instruction to your English language learners. IDRA can bring to your school a two- or three-day institute to accomplish the following goal and objectives.

Goal

Gain understanding of and practice using engagement-based sheltered instruction for maximum academic success.

Objectives

1. Review academic needs of English language learners and gain a deeper understanding of what is difficult for them in math, science, social studies and English.
2. Closely examine the current knowledge base on student cognitive engagement and strategies for engaging students in the classroom.
3. Explore through first-hand experiences and case studies the reasons for English language learner disengagement.
4. Guide reflection and self assessment of each teacher's instruction using basic tools/instruments for assessing student engagement in the classroom.
5. Revisit sheltered instruction to adapt instructional strategies and learn to design lessons for structured student engagement.
6. Learn about IDRA's Engagement-Based Sheltered Instruction Model, a dynamic and comprehensive professional development program that provides extended training and focused assistance throughout the year to help teachers deliver engagement-based sheltered instruction.

This institute is designed for **secondary sheltered instruction content teachers and ESL teachers** who are ready to expand and extend their understanding and expertise of sheltered instruction and English language learner engagement.

Date: Dates in June or August can be negotiated and tailored to school district need.

Cost:
Two-day institute: $3,000
Three-day institute: $4,500
(maximum of 25 participants)

Contact: Dr. Adela Solís at adela.solis@idra.org or Kristin Grayson, M.Ed., at kristin.grayson@idra.org. 210-444-1710

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21st Century to explore, discover and expand our universe.

Resources

Brown, K. "Re-Invigorating Math Curricula," *IDRA Newsletter* (San Antonio, Texas: Intercultural Development Research Association, April 2006).

National Research Council. *National Science Education Standards* (Washington, D.C.: National Academy Press, 1996).

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Williams, J.A. "Classroom Conversations: Opportunities to Learn for ESL Students in Mainstream Classrooms," *The Reading Teacher* (May 2001) Vol.54, No 8.

Windschitl, M. "Sparking the Debate Over Science Reform Education," *The Education Digest* (January 2006) pp. 20-31.

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New!

Free!

IDRA has launched a new podcast series designed to be a tool for public school teachers and administrators as well as to provide insights into key issues in education in the United States.

Online Now

Episode 11: "Valuing Families in Children's Education" IDRA Classnotes Podcast – Aurelio Montemayor, M.Ed., illustrates the contrast between the valuing and deficit models of thinking and acting, and he provides examples of schools that are valuing families as partners in children's education.

Episode 10: "Early Childhood Classrooms of Excellence" – José L. Rodríguez, M.A., and Josie Cortez, M.A., share highlights of IDRA's model and transformations that have occurred in classrooms for children, teachers and families.

Episode 9: "Fostering Gender Equity in the Classroom" – Frances Guzmán, M.Ed., discusses where gender inequities tend to show up in classrooms and how educators can make changes to ensure equity for girls and boys.

Episode 8: "Framing Systems Change for Student Success" – Dr. Robledo Montecel outlines promising strategies to improving achievement in high poverty schools.

www.idra.org/podcasts

A podcast is an audio file that can de downloaded to your computer for listening immediately or at a later time. Podcasts may be listened to directly from your computer by downloading them onto a Mp3 player (like an iPod) for listening at a later date. The IDRA Classnotes podcasts are available at no charge through the IDRA web site and through the Apple iTunes Music Store. You can also subscribe to Classnotes through iTunes or other podcast directories to automatically receive each new podcast in the series when it is released. Classnotes is free of charge.

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