

NOTICIAS de TODOS

News from TODOS: Mathematics for All

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The mission of TODOS: Mathematics for ALL is to advocate for an equitable and high quality mathematics education for all students, in particular Latino/Hispanic student, by advancing the professional growth and equity awareness of educators.

A Reflection on my Work with Latino Parents and Mathematics By Marta Civil

I have been working on issues related to Latino parents' engagement in mathematics education for almost fifteen years. Research with parents is indeed one of the key areas of research in our NSF-funded Center CEMELA (Center for the mathematics education of Latinos/as; <http://cemela.math.arizona.edu>). Currently our main research study in this area is looking at Latino parents' perceptions of the teaching and learning of mathematics. In this reflection, however, I focus on some of the highlights of the work I did prior to CEMELA as a way to explain the background for our current work.

One of the original motivations for my current work was and continues to be the idea of mathematics teaching innovations that could help us bridge the gap between in-school and out-of-school learning. Our work takes place in Mexican / Mexican-American, working class communities in the Southwestern United States. Our efforts have been geared towards the development of learning environments that build on the students' and their families' knowledge and skills. But, how do we uncover that knowledge and those skills that all families have? Through the Funds of Knowledge for Teaching project and then later during the Bridge project, the teachers (sometimes accompanied by university researchers) visited the homes of some of their students. Using in-depth questionnaires (on family history, labor history, perspectives on education, uses of mathematics at home and at the work place), these teachers were able to uncover some of this knowledge and those skills/experiences that reside within the households. Our challenge then was to use this knowledge in learning modules that would make mathematics more meaningful (both from a cognitive and from an affective point of view) for the school children. These household visits certainly had an impact on the teachers in that they saw the families and "the home as a real learning place, real learning environment, you know I didn't think it was so much a learning environment as it is" (teacher's interview).

But to me the most rewarding and eye-opening experience was another activity we developed towards this effort to bridge the gap between in-school and out-of-school, namely, our mathematics workshops for parents. Through these workshops, we do not only learn about the parents' ideas and perceptions about the uses of mathematics and about their children's mathematical education, but we engage in joint explorations that allow us to establish a two-way conversation grounded on the learning and teaching of mathematics. It is important to note that the success of this approach is in its continuity: these are not isolated workshops, but rather series of sessions with the same group of parents: sometimes we call them "math for parents courses", but our preferred term lately is "tertulias matemáticas" (mathematical circles). We (parents, university personnel, and sometimes teachers) come together to do and talk about mathematics. Our workshops are modeled after the work we have been doing for years in professional development for teachers. They are highly participatory, hands-on, and centered on what we view as meaningful school mathematics tasks. What have we found out from these "tertulias matemáticas"?

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Parents learning mathematics at one of the tertulias matemáticas

Parents like being learners of mathematics.

Although most of the parents originally come because they want to help their children, they soon become interested in the content as learners themselves. The parents in our projects have made it very clear that academic mathematics is important to them. They want to learn this type of mathematics to help their children, but also for themselves, as this excerpt from a mother's reflection captures quite well:

I am so happy with all these mathematics workshops because I realize how to help my children understand mathematics in a different way, from a fun approach, all together as a family. ... And also for us, because one never knows when we may use it, and this way we move forward, and no one is going to mandate that it has to be the way they say, because we also think and solve problems.

Parents value teaching for understanding.

Parents enjoy finding out the "why" behind the many things they had memorized as children in school.

[This project] has been very different from my previous experience (with math). I went through my whole life being told how things were not and not given any freedom to figure it out on my own. Being able to experiment with blocks or whatever is much more interesting.

I'm amazed because [I see] something that I didn't see before, and it clicks in my mind and I understand why things are the way they are. I get excited because now I know, I'm not accepting it, now I know why that is the way it is.

We argue that if parents learn mathematics with an emphasis on understanding rather than rote memorization, they are more likely to become quite vocal about the importance of understanding for their children's mathematics education. As one mother very eloquently said, "I don't want them [teachers] to teach to the test. You have to be versatile in many things. If you don't understand, what's the point?"

Parents bring their own beliefs and values.

Like everybody else, parents often have deep –rooted beliefs about the teaching and learning of mathematics. A clear example of this is with the algorithms for division. In all the workshops where we have parents who learned how to divide in México, this topic comes up. As they compare the methods traditionally taught in México and in the U.S., comments along the lines of "their" method being more efficient (because they write less as they do the subtraction in their heads) always come up. These differences in approaches are fantastic opportunities to engage in not only the mathematics behind the different methods but also in a conversation about issues related to the teaching and learning of mathematics. Another salient topic among immigrant parents is the differences between the educational systems:

No, I'm not happy [with the system at her son's school]. I feel that there is repetition of a lot of things; I don't understand why the teaching is so slow, I don't like it, I don't like the system, I don't like it at all. When we go to México, my nieces and nephews or my husband's nieces and nephews, they are children that are more or less the same age as Jaime and I see that Jaime is behind. Here they tell me that Jaime is really excellent.

To me, this is not about discussing which system is "better." But we have to be aware that parents are going to bring up these comparisons and that these perceived differences may lead to conflict between parents and teachers. We all bring our valorization of knowledge. But these differences may also lead to conflict between parents and children:

Last night my son said to me that school from México was not valued the same as school here, that is, it doesn't count. What I studied there doesn't count here. He knows that what is taught here is different from what is taught there and so he says, 'why would I ask my Mom for help if she's not going to know.' So, there is a barrier.

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Subject: TODOS NOTICIAS

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Parents have mentioned to us that when they try to help their children with the mathematics homework, they often run into two obstacles—the language (English /Spanish) and the mathematical approach. Several of these parents have mentioned how they know the content but they do not know it the way their children are learning it and then they (or sometimes their children) feel that they cannot help them:

He [her son] doesn't feel very sure that I am understanding him because the problem is written in English. I don't know how to read it and he doesn't... know how to translate well for me because he speaks Spanish and reads Spanish, but we say different things for the same words and questions, I think he thinks I studied differently.

Parents value to concept of “confianza” / trust. As I mentioned earlier, this kind of work requires time. It is not about isolated workshops but about establishing rapport and connections with the families. I want to end stressing the importance of the concept of “confianza” when working with parents.

When I joined this group, for me the most important foundation was the confianza that each one offered me.... I can say that all that I now know and have learned has been accomplished by means of the confianza (a mother reflecting on her experience with the math workshops).

At last, I also have someone that more than a teacher is a friend and most importantly inspires me: Confianza, the confianza that I in particular never had with any other teacher of mathematics. ...Thanks to the confianza that exists in the group we can work without problems and pose any sort of question without fear.

This concept of “confianza” is not only important for the parents in the workshops. The final excerpt below is from a fifteen-year old reflecting on the impact that these workshops had on his mother:

Now that she [his mother] is attending these workshops she is learning in a different way, understanding the why of the formulas and where they come from and how they can be applied in her life; she shares it with the entire family and we all get involved in a mathematical gathering that is fun. We are all teachers and students at the same time, there is no difference and that there be much respect and confianza is most important.

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Marta Civil is a professor in Mathematics at the University of Arizona. Her research in mathematics education spreads over two areas: teacher education and equity in mathematics education. In particular Dr. Civil's research focuses on a socio-cultural approach to the mathematics education of ethnic and language minority students (school age and adults). Her overall research interest in teacher education is in the area of elementary teachers' (preservice and practicing) understanding of and beliefs about mathematics, its teaching and its learning.

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President's Corner



Buenas Noticias: A summary of accomplishments in 2006-2007

By Miriam A. Leiva

It is a pleasure to write this column for the newsletter because there are always good news and information to report. In our short history, we have received support from many organizations, foundations, friends, in particular TODOS members that work on our behalf and mission. In this column, I will write about current programs, initiatives, and funding that have been received. I begin by describing a new program established to honor students at the local and regional level.

TODOS Honors Students:

The shy high school girl spoke in a soft voice, "... *they placed me in the lowest math class, but I knew that I was good in math and fought to be in the advanced section. I am glad I did.*"

On February 2, 2007 TODOS honored three outstanding Hispanic/Latino mathematics students, their teachers and families from the Greater San Diego Area. This initiative is new to our organization, dating back to a similar program

in Houston, July 2006, at the Texas mathematics conference, CAMT (Conference for the Advancement of Teaching), another in Phoenix in conjunction with the NCTM Regional, and the last one at the Greater San Diego Mathematics Council Conference. These events took place at TODOS receptions sponsored by Houghton Mifflin School Division where the students were honored together with their teachers, principals, supervisors, superintendents, as well as family and friends. The teachers and principals were given a one-year membership in TODOS or an extension on their current membership. Casio donated calculators and Houghton Mifflin also provided other gifts for the recipients.

I report these events *first* because this initiative embodies the mission of TODOS through recognizing students' excellence in mathematics and increasing equity awareness in their districts. Through such programs we encourage students to pursue high-level work in mathematics, support their teachers, inform parents; and disseminate our message to the community.

In the next few months we will hold similar programs around the country thanks to the generous support of Houghton Mifflin School Division and we invite you to attend. One look at the pride in the parents' faces and the emotion of the honoree will be well worth your trip to one of these programs in the summer and fall, including NCTM regional meetings (Houston, Kansas City, Richmond) as well as CAMT in San Antonio.

Mathematics of Native and Latin Americans:

Another program that is new to TODOS in 2006-2007 is the Key Curriculum Press TODOS Poster Set. Through its president, TODOS member Steve Rasmussen, we have received 200 poster sets entitled, *Mathematics of Native and Latin Americans*, that include the following posters:

- Math of the Incas
- Math of the Mayans
- Math of the Aztecs
- Math of the Navajos

At the TODOS Exhibit Booth in Atlanta, we will give a set to new or renewing members with a 3-year membership, until we run out. Further, Key Curriculum has pledged to give TODOS 30% of the sales of the set and will continue to donate TODOS notebooks at the NCSM conference. Dr. James Barta is the editor and chair of a committee that will develop a document with classroom activities to supplement the posters. This publication will be made available to our members and to Key Curriculum Press.

Other Partnerships:

TODOS has partnered with several organizations in various ways since our inception. One such

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project is the TODOS NCTM Program Strand at national and regional meetings, where TODOS recommends speakers that present on topics that address our mission and goals. Other state and regional conferences, including Texas and California mathematics groups have also included a TODOS strand in their programs.

Look for the following TODOS strand presentations at the NCTM annual meeting held in Atlanta this March, session #s: 752, 760, 819, 820, 880, 887, 961, and 969

TODOS is currently assisting NCTM with reviewing and editing the translation of several of its important documents including the Executive Summary of the *Principles and Standards for School Mathematics* and the NCTM Brochures for Parents that is already posted on the NCTM website (<http://www.nctm.org/families/index.htm>) We also collaborate with The Math Forum, <http://mathforum.org/>, and have translated their Problems of the Week into Spanish. These are available to Math Forum subscribers as well as TODOS members. In addition, the Math Forum sponsors our web-based TODOS Discussion Board. For more information contact our Webmaster, Suzanne Alejandre, suzanne@mathforum.org

We support and engage in collaborations with other organizations. In the fall, we participated in meetings of the New York City Mathematics Teachers Association, the Greater El Paso Council of Teachers of Mathematics, and two conferences of the California Mathematics Council, with leadership provided by area TODOS members. In the spring we will be a partner at the Radical Math conference, *Creating Balance in an Unjust World*, in New York City; two of our members, Rico Gutstein and Larry Lesser, will present and represent us. Finally, Texas Instruments Inc. has partnered with TODOS in California to implement programs that will focus on both technology and equity in the mathematics classroom. A TODOS-TI Task Force, led by Dr. Mike Lutz, is developing the materials to be used.

We look for other such for alliances and count on you to keep us informed and connected.

The TODOS meeting at the Atlanta Conference:

The annual members' meeting of TODOS will be held on Wednesday, March 21 from 2:45 to 4:30 pm as part of the NCSM Conference at the Omni Hotel. Highlights of the meeting include the presentation of the Iris Carl Leadership and Equity Award, the Duke Energy Foundation Teacher Scholarships, the McDougal Littell Professional Development Awards, and

information on other TODOS activities. We also invite you to the annual TODOS reception on Thursday night, March 22 to meet old and new friends. You will receive more information about the Atlanta events via email.

Lessons from Immigrant Children: The Making of an Advocate

By Rosemary Klein

Charlotte Mecklenburg Schools, Charlotte, NC

Mecklenburg County, North Carolina, has one of the fastest growing Latino immigrant populations in the country. The signs of this growth are visible everywhere. In a part of the country where 20 years ago one was hard pressed to find ingredients for any diverse ethnic foods, shelves are now full of hot peppers. The sound of Spanish is everywhere in the community and schools. How are the schools adjusting to the burgeoning Latino population? Are these children getting the preparation they need to be successful in society? Can an English as a Second Language program be enough to help these children? What exactly do these kids need?

In 2003, I became a part of a tutoring program co-sponsored by my church. I was attracted by the opportunity to use my newly acquired Spanish, and was curious about, and attracted to, this new population in our area. Since I am a teacher, I thought that being a tutor for recent Latino immigrants would be something I could do as a service to our new neighbors. Little did I know this experience would turn me into a passionate advocate for the children of immigrants. Through my work in this program, I came to realize two important things about children from non-English speaking households that have far reaching implications for education. And I learned these lessons from a delightful group of children.

Briseida was ten, bright eyed and enthusiastic about everything. She was a joy to tutor, because she caught on to everything immediately and loved to learn. She was especially talented in math, with excellent number sense and well developed skills. One day she came to me, with her math homework. "I'm all finished," she said proudly. The assignment was a simple one—naming the fractional parts shaded in the figures on the page in her book. To my surprise and Briseida's dismay, all her solutions were wrong. As she and I talked about the work, it became clear that she knew exactly what fractional parts were all about; she didn't have any idea what "shaded" meant. Briseida's family speaks only Spanish; the only English she hears is at school,

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and “shaded” was not a word she knew. This was an eye-opening experience for me. I realized that mathematics can be heavily language-based and that a non-English speaker could easily find this confusing. A subsequent conversation with Briseida shed light on her placement in mathematics at school. She made reference to being in a mathematics class with another child in the program of much lesser ability and motivation. I began to ask how she could possibly be in a low math group. I came to realize that Briseida’s placement was based upon the challenges she faced to show what she could do mathematically because she struggled to understand test questions posed in English.

During my work as a tutor, I quickly came to discover that every week there were children with mathematics assignments they could not understand, claiming the teacher had not taught them what they needed to complete the assignments. The children had a difficult time just articulating what went on in their mathematics classrooms. This was bothering me a great deal until one day, while listening to a Spanish radio station, the situation became clear to me. Most of these kids speak English like I speak Spanish. I can carry on a slow conversation in Spanish, but when faced with a lecture, or a radio program, or a natural conversation taking place, I understand very little. This is the world of immigrant children. Of course the teacher is teaching mathematics, but the children do not fully understand.

I came home every week becoming more and more outraged about the plight of the immigrant children whom I tutored. They were being expected to assimilate into the school culture with a brief foray through a pullout ESL program. As soon as they could speak intelligible playground English, which is far from academic English language, they were placed into an all-English classroom. Quite often, the teacher with whom they were placed had minimal experiences with ESL students, especially in teaching mathematics. Briseida was in the lowest math class, not because she could not do mathematics, but because she struggled to read the test in English.

A bright mathematics student, Luis claimed that the teacher never taught addition of fractions, and yet was assigned addition of fractions homework. Because he could not understand the language of instruction, Luis tuned out during class and could not do homework assigned. The schools are full of such children, many of whom are very talented mathematically, but unable to show what they understand because of language barriers. Children with the potential to attend college and be productive, responsible citizens, are being

denied opportunities because they are stuck in dead-end remedial classes which focus on repetitive drills and not on interesting and challenging mathematics. What a loss to our society.



An adult volunteer tutoring a young immigrant student

Immigrant children and their families need mentors. They need tutors to help them with mathematics homework, and to interpret the day’s lessons. Our program is run through a coalition of churches and uses a corps of high school and adult volunteers to work with immigrant students. Programs such as these are invaluable; and can make a difference for immigrant students’ mathematics learning.

Teachers need to be aware that an immigrant child’s difficulties are not necessarily mathematical, but with the English language. The child needs scaffolding to learn mathematics. In a class with many non-native English speakers, a teacher can slow her pace, employ dialog with the students in which the students reiterate what has been said by the teacher, and constantly check for understanding. Teachers should be aware that children who are learning English may not ask questions; therefore, teachers must anticipate their areas of struggle. This kind of teaching will benefit all children, including immigrants and native English speakers who struggle in mathematics. Above all, school systems must make a commitment to this growing student population. It is in our society’s best interest to educate immigrant children and it’s just the right thing to do. They have the potential to be outstanding, some even brilliant contributors to our world, and it is our responsibility to make this possible for them.

Rosemary Klein teaches sixth grade math at Bailey Middle School in Cornelius, North Carolina. She also tutors Latino children in an afterschool tutoring program.

Institutionalized Caring: The Basic Ingredient for School Improvement

By Raul Piña

The basic ingredient that is necessary for school improvement is “institutionalized caring.” We assume that every teacher and every school administrator cares about children. We assume that all educators care about our students, care about colleagues, and care about our profession. My experiences during 13 years as a middle school teacher and administrator, leads me to believe that this is not always the case. We need to reevaluate our school improvement efforts in order to ensure that our words and actions demonstrate caring for all members of our learning community.

A principal and mentor, Joe Statmiller, once told that we had to institutionalize caring in our school before we could improve student achievement. “We have to expect caring,” he said. “Sometimes we need to demand caring,” he added. Mr. Statmiller modeled caring in every task he carried out as a school leader. He took great pride in the appearance of our school building. He also made a sincere effort to connect with the community he served. Mr. Statmiller was able to communicate to staff members, parents and students that the new standards for behavior and learning at our school were set high because he cared. Within two years, student achievement improved in all academic areas. Institutionalized caring served as the basic ingredient for school improvement.

For the past four years, I have served as the principal at Marc T. Atkinson Middle School in the Maryvale area of Phoenix, Arizona. Atkinson serves 1450 students in grades 6-8. Hispanic students make-up 87% of the student body, and 29% of our students are classified as English Language Learners. At our school, 84% of our students qualify for “free or reduced lunch.” Even though our students face many challenges in the area of socioeconomics, our school has enjoyed tremendous success. Atkinson M.S. has been labeled “Performing Plus,” by the Arizona Department of Education for the last two years. Discipline problems have decreased dramatically, while morale and “Blue Knight Pride,” are at an all-time high.

On a daily basis, my staff and I make deliberate efforts to institutionalize caring at our school. As part of this work, we actively pursue interventions that support students in the areas of language acquisition, literacy and mathematics. We have made a commitment to move students forward

academically regardless of the gaps in their academic backgrounds. We also model caring by attending to the physical and emotional needs of our students with the help of our counselors, teachers, and support staff. We make home visits and hospital visits, and we raise money to help our families in crisis. Some school improvement experts believe that we need to focus strictly on student achievement in order to improve our schools. We believe that we cannot improve student achievement unless institutionalized caring is a collective commitment at our campus.

Raul Piña is the Principal at Marc T. Atkinson Middle School, a TODOS. School, in Phoenix, Arizona,

TODOS has received the following special memberships and contributions.

Special Memberships:

Benefactor: Susie Håkansson. *Sustaining:* Olga Vargas-Lester.

Special Contributions:

In honor of:

Carol Edward, Jose Franco, Shirley Frye, Eleanor Linn, Bob McDonald, Nora Ramirez,, and Juracy Soares (by Miriam Leiva)
Lena Licon-Khisty (by Della Leavitt)

In Memory of

June B. Dabney by Miriam Leiva
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General Contributions: Richard Kitchen, Della Leavitt, and Margaret Robinson.

All contributions in addition to in honor of, in memory of, should be sent to our TODOS Mathematics for ALL, P.O. BOX 25482, Tempe AZ 85285-5482, attention Miriam Leiva. Also all special memberships, sustaining and benefactors should be sent to Bob McDonald at the same address. TODOS is a 501 c3 charitable organization and donations are tax deductible. If you have made a contribution in the past that has not been published in Noticias, contact Bob McDonald for inclusion in the next issue.

Lesson Study: Collaboration among Middle School Mathematics Teachers of Latino Students

By Cynthia Anhalt, Laura Farias, Salvador Farias,
Josie Olivas, Melanie Ulliman

Sunnyside Unified School District
Center for the Mathematics Education of
Latinos/as (CEMELA)
The University of Arizona

Last semester, a team of middle school mathematics teachers of predominantly Latino students in collaboration with the Center for the Mathematics Education of Latinos/as [CEMELA] conducted a lesson study cycle. Lesson study has origins from the Japanese professional development teaching culture. We followed the traditional lesson study structure that allowed all of us to design a lesson and then each of the participating teachers taught the lesson as it evolved with modifications based on the team's observations and debriefings. Our discussions and the negotiations that took place on what constitutes effective teaching were based on and influenced by our individual teaching experiences and the book, *The Teaching Gap* by James Stigler and James Hiebert. Our overall goal for the evolving lesson was for students to initially think independently and then to collaborate with a partner to arrive at a solution.

The lesson involved addition of fractions with unlike denominators, which the middle school students had not worked on yet this year. The students first given the following word problem, "*Cecilia uses $\frac{2}{6}$ pound of cheddar cheese and $\frac{1}{4}$ pound of mozzarella cheese to make nachos. How much cheese does she use in all?*" The students were initially given time to think independently. Most of them readily added the fractions by adding the numerators and by adding the denominators, and wrote down a solution of $\frac{3}{10}$. After discussions took place among partners, only a few pairs of the students changed their solutions to $\frac{7}{12}$, recognizing that it was necessary to find a common denominator. It was not until additional tools were given to students as the lesson evolved, namely fraction bars, did students begin to think critically about their methods since they had to "justify" their solutions with the fraction bars. It was at this point that most of the students were able to make connections between the fractions, the fraction bars, and the meaning behind the need to find a common denominator.



Students justifying their solution with fraction bars

Our reflections on this lesson involve issues surrounding teaching mathematics to Latino English Learning students. One salient goal of allowing students to make mistakes initially (adding the numerators and the denominators) was to observe how students would later correct their own thinking after finding their own errors. We feel that the impact of students realizing their own mistakes and understanding why a common denominator is necessary for adding fractions will have a deep effect on their continued learning of fractions. We realize that all students need to make these connections, and this approach proved to be especially crucial because English Language Learners (ELLs) may not always "fully" understand everything the teacher is saying during English instruction. Teaching-by-telling often has a negative impact because some students whose academic English may not be developed appropriately for the grade level expectations will never have an opportunity to learn some concepts. In our research lesson, we deliberately planned for students to fully engage during a problem-solving and concrete experience, with the concept of the need for a common denominator, and did not focus on telling them initially how to add fractions with unlike denominators by a procedure. It was difficult to observe them making the mistake, yet it was powerful to watch the "discovery" they later made on their own. We did intervene, but only to ask questions and to continue engaging them in the discourse of the mathematics that was involved. We found that by designing the lesson as we did, the ELLs were able to actively engage in academic discourse regarding fractions in a meaningful way.

Because lesson study allowed us to work collaboratively in planning, teaching, and observing each other during the teaching and critiquing of the lesson, and ultimately during the modification of the lesson for improvement, it was a way for us to systematically examine our practice while focusing on the lesson. Collaboration was a key factor because we found that our combined strengths for designing effective instruction for our students are greater
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than our individual efforts. Engaging in the collaborative lesson study process allowed us to improve the lesson with students' best interests in mind. As we observed the evolving lesson each time, our attention was on the students' learning, interaction, and engagement during the lesson. Our experiences in doing lesson study allowed reflection time in the midst of debriefing during the lessons and gave us an opportunity for growth in our individual teaching with a focus on our ELL student population.

Cynthia Anhalt's current research focuses on improving mathematics teaching in the middle school level through lesson study with a focus on issues of language and mathematical representations and their influence on teachers' design and implementation of academic tasks. She is a post-doctoral fellow with the Center for the Mathematics Education of Latinos/as. Laura Farias, Salvador Farias, Josie Olivas, and Melanie Ulliman are mathematics teachers at Chaparral Middle School, Tucson, AZ.

Conference: Creating Balance in an Unjust World
April 27th - April 29th Long Island University
www.radicalmath.org

Keynote: Bob Moses, The Algebra Project
Join educators, parents, students, activists, and community members from around the country for a 3-day conference to explore the connections between math education and social justice. How has math literacy been a gatekeeper to future educational and financial success?

How can math educators ensure equity in the classroom? How can issues of social, political, and economic justice be integrated into math curriculum? What is Ethnomathematics and how is it related to our work with students? These are a few of the many issues participants will have the opportunity to explore throughout conference.

Texas MELL Project Helps English Language Learners in Mathematics

By Bill Jasper, Sam Houston State University
(jasper@shsu.edu)

The Texas State University System Mathematics for English Language Learners (TSUS MELL) project is a multi-year effort to develop instructional resources designed to increase the effectiveness of mathematics instruction for ELL students in Texas' K-12 schools. The MELL project is one of the six major components of the Texas Mathematics Initiative and is a partnership between the Texas State University System, its component universities and the Texas Education

Agency. Educators from Texas State – San Marcos, Sam Houston State, Lamar, Angelo State, and Sul Ross Universities have worked together to develop research-based instructional materials to help teachers raise the performance levels of ELL students.

Scores on the annual Texas Assessment of Academic Skills and Knowledge (TAKS) tests show a consistent achievement gap between ELL students and other special population groups of students. The MELL project addresses this statewide need by providing instructional materials and professional development training for teachers. The MELL Project Director, Dr. Leslie Huling, guides this important effort, and is particularly proud of the Classroom Practices Framework, which contains six components necessary for success in mathematics by the English Language Learner. These six components are learning atmosphere and physical environment, instructional practices, mathematics content and curriculum, language practices, family and community involvement, and assessment of student learning. This framework, along with all copyrighted MELL products, is available free for educators on the MELL website (www.TSUSMELL.org).

An additional MELL resource includes the Teachers Guide to Teaching Mathematics for English Language Learners developed by Dr. Bill Jasper (jasper@shsu.edu) and his team at Sam Houston State University, and is aimed at the TAKS objectives on the Texas Exit-level Mathematics Test. This detailed guide provides instructional strategies for helping ELLs, and focuses on the ten objectives on the exit-level test. Dr. Joyce Fischer (JoyceF@txstate.edu) at Texas State University – San Marcos and her team created a thorough list of Spanish resources to support the learning of ELLs in mathematics and an analysis of professional development models for teachers of ELLs. Another important resource from the MELL team includes the Quick Start Module, an on-line training program available for college credit through Sul Ross University. Additional resources are available on the TSUSMELL website.

The MELL project also involves professional development training, including six Critical Campus Partnership Summer Institutes that were held in 2006. Additional summer institutes are planned for 2007, involving partnerships between university educators and Regional Education Service Center experts. An additional teacher's guide for middle school geometry and measurement, and a two-day MELL training module for service centers are currently being developed, with anticipated delivery before this

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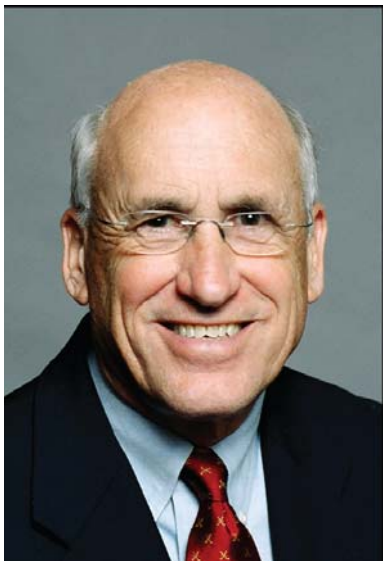
(Jasper, continued)

summer. In addition, MELL sponsors an annual conference on Math for English Language Learners for teachers and university faculty. The 2007 MELL conference will be July 5-7 in San Marcos. Interested educators should visit the MELL website (www.TSUSMELL.org) or contact any of the key personnel on the MELL project.

Bill Jasper, Associate Professor of Mathematics Education, Sam Houston State University, is the principal investigator for his university on the Texas Mathematics for English Learners (MELL) Project. In this capacity, he directed the development of a teacher's guide for the Texas Academic Skills and Knowledge (TAKS) Exit Level test, and is currently developing a second teacher's guide for middle school teachers of English Language Learners. He presents at numerous national and regional conferences on strategies that help ELLs improve their mathematics skills. He is also on the board of directors for the Southwestern Educational Research Association, and was selected for the Excellence in Teaching Award for Sam Houston State University in 2006.

Welcome to the Circle

By Francis (Skip) Fennell
President, National Council of Teachers of Mathematics



NCTM needs more leaders—now. Our need for key players in all that we do has inspired NCTM to establish the Leadership Circle for Affiliates.

First, let me extend our sincere congratulations and appreciation to your Affiliate for becoming a charter member of the Leadership Circle. In welcoming each Affiliate to the circle, we recognize that it represents leadership that we not only acknowledge but actively seek. The work of

your Affiliate to connect its members to NCTM increases our resources and opportunities to meet common challenges and achieve shared goals. Your Affiliate's support allows us to speak collectively with a powerful, unified voice. Because of what your Affiliate does, we can be more effective as we pursue our quest for a high-quality mathematics experience for all students.

There are many aspects of an Affiliate's work that are vital to NCTM's mission. The members of each Affiliate are positioned to give NCTM important information on issues that affect many in the community of mathematics educators. Your Affiliate's membership can provide NCTM with advice on how to link state and national services to members. Affiliates offer models for building and maintaining partnerships that will not only increase NCTM membership, but also influence local, regional, and national initiatives related to the teaching and learning of mathematics. You are important to us! We thank you for all that you do, and we urge you, by all means, to continue your good work.

Speaking of initiatives, I would like to take this opportunity to describe some recent and forthcoming projects at NCTM. Most notable among these is the release of *Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics: A Quest for Coherence*. Unfortunately, much of the news media's initial reporting on the suggested core of a unified mathematics curriculum for pre-K–grade 8 misrepresented it as everything from the end of the Math Wars and “fuzzy math,” to the “new, new” NCTM Standards—and many things in between. Nevertheless, *Curriculum Focal Points* is having the impact that NCTM had hoped. The publication has begun what promises to be a far-reaching dialogue about how to bring coherence to the pre-K–8 mathematics curriculum. The sets of grade-specific Curriculum Focal Points have already influenced revisions or reviews of curricular frameworks in at least 10 states. The Focal Points are being presented in a variety of settings and to diverse constituencies:

- All the regional meetings of the United States Department of Education's
- Mathematics and Science Partnership projects
- Key legislative staff from the U.S. Senate and House of Representatives
- The Brookings Institution
- The Conference Board of the Mathematical Sciences
- The National Math Panel
- Major publishers of pre-K–8 math curricula

This is only a partial list of the groups that are interested in learning more about Curriculum

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Focal Points. To date, there have been nearly half a million downloads of the text of the publication from the NCTM Web site.

However, *Curriculum Focal Points* isn't the only new development at NCTM. The Council will soon release its first research analyses, briefs, and clips, called "Research ABCs." Eventually, this initiative will provide a valuable, rich resource for mathematics leaders in our Leadership Circle. Moving in another direction, NCTM's task force on leadership development has begun work on a plan for developing and retaining new leaders—an important goal for us all. On another front, we continue to offer the highest-quality professional development for math educators at our Annual Meeting and Exposition and our regional conferences. These meetings provide important opportunities for Affiliates to meet and expand their work. This year's Annual Meeting will feature Tom Friedman, Pulitzer Prizewinning author of *The World is Flat*. Sessions will include an update from the National Math Panel, a panel discussion of the need for a national curriculum, and many other informative sessions.

But still more is going on at NCTM. Be sure to make frequent visits to our Web site—www.nctm.org. Download NCTM's new position statements and share them with colleagues, administrators, and others who can benefit from their messages. Stay abreast of the activities related to the 100th anniversary of NCTM's award-winning journal for high school math teachers, *Mathematics Teacher*, which is celebrating 100 years of service in 2007.

We welcome—we seek—your suggestions on ways that NCTM can provide the best possible service to members. So extend your connections with NCTM. We hope to learn from you as well as to assist you in working toward more and better mathematics for all students.

MEMBERSHIP
Membership dues for
TODOS: Mathematics for ALL
are \$25 per year, or 3 years for \$70.
Information on Institutional and District
Membership is available on our
website

www.todos-math.org

Results of the 2007 TODOS Election

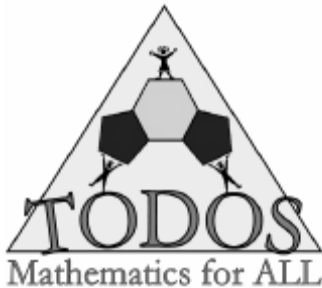
The Nominations and Elections Committee is pleased to report that **Nora Ramirez** has been elected to serve as **President-Elect** and will, in 2008, succeed current President Miriam Leiva. Ms. Ramirez is a founding member of TODOS and currently serves as Director of Professional Development at the Arizona State University Center for Research in Education, Science, Mathematics, Engineering and Technology in Tempe, Arizona. Shirley Frye completes her term as TODOS Past-President.

Noemi Lopez was elected to serve in the office of **Member-at-Large** over the next 3 years. She fills the office currently held by Marta Aliaga who completes her term. Ms. Lopez is currently Director of Client Development for the Houston (TX) School System where she also serves as Mathematics Specialist and Supervisor.

We are fortunate to have these two outstanding professionals with distinguished careers in mathematics education and strong commitments to equity as leaders. Each individual will assume her office on March 21 at the TODOS Board of Directors meeting in Atlanta.

The Nominations and Elections Committee thanks members of reviewing the candidates and voting, and, on behalf of all TODOS members we offer a sincere thanks to the outstanding candidates who agreed to run for office as well as to the members who contributed to this important process by sending in nominations. In 2008, TODOS will elect a new Vice President and another Member-at-Large and later this year the committee will place a call for nominees.

Ed Dickey, Chair
 Nominations and Elections Committee



NOTICIAS de TODOS

Spring 2007, V. 3, N. 1

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- *A Reflection on my Work with Latino Parents and Mathematics*
- *Buenas Noticias: A summary of accomplishments in 2006-2007*
- *Lessons from Immigrant Children: The Making of an Advocate*
- *Institutional Caring: The Basic Ingredient for School Improvement*
- *Lesson Study: Collaboration among Middle School Mathematics Teachers of Latino Students*
- *Texas MELL Project Helps English Language Learners in Mathematics*
- *Welcome to the Circle*
- *Announcement interspersed: Results of TODOS 2007 Election, Conferences, Announcements, TODOS Strand for NCTM 2007, Member Gifts, Committee, Board, & Task Forces*

The mission of TODOS: Mathematics for ALL is to advocate for an equitable and high quality mathematics education for all students, in particular Latino/Hispanic student, by advancing the professional growth and equity awareness of educators.