

# NOTICIAS de TODOS

News from TODOS: Mathematics for ALL www.todos-math.org

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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 students,
by increasing the equity
awareness of educators
and their ability to foster
students' proficiency in
rigorous and coherent
mathematics.

# Framing Equity: Helping Students "Play the Game" and "Change the Game"

By Rochelle Gutiérrez

"Equity" is a hot topic in mathematics education these days. However, for many people, addressing equity issues rarely moves beyond the goal of closing the achievement gap (Gutiérrez, in press). For me, equity is ultimately about the distribution of power-power in the classroom, power in future schooling, power in one's everyday life, and power in a global society (Gutiérrez, 2002). I draw on the idea that equity must be framed with both dominant and critical definitions. In working with teachers, I have found it useful to explicate four key dimensions (Access, Achievement, Identity, and Power) and to highlight the relationships and tensions between them. Let me explain.

Access relates to the resources that students have available to them to participate in mathematics, including such things as: quality mathematics teachers, adequate technology and supplies in the classroom, a rigorous curriculum, a classroom environment that invites participation, and infrastructure for learning outside of class hours. The Access dimension reflects the idea that students are affected by their "opportunity to learn." However, a focus on access is a necessary but insufficient approach to equity, in part because it fails to redress past injustices. Besides giving students necessary resources, we also care about student outcomes, or what I categorize as Achievement. This dimension is measured by tangible results for students at all levels of mathematics, including such things as participation in a given class, course taking patterns, standardized test scores, and participation in the math pipeline (e.g., majoring in mathematics in college, having a math-based career). Moving from mere access to achievement is important when considering that there are serious economic and social consequences for not having enough math credits to graduate from high school, not scoring high enough on a standardized achievement test to gain acceptance to college, or not being able to major in a math-based field that can confer a higher salary and prestige in society.

However, because many students find themselves down playing some of their personal, cultural, or linguistic capacities in order to participate in the classroom or the math pipeline and because some groups of students historically have experienced greater discrimination in schools, issues of *Identity* are also important to consider. For many mathematics educators, attending to students' identities means focusing on students' pasts (e.g., including the contributions of their ancestors). But, the identity dimension also concerns itself with a balance between self and others in a modern global society and acknowledges ways students are racialized (Martin, 2007). It includes whether students have opportunities to draw upon their cultural and linguistic resources (e.g., other lan-

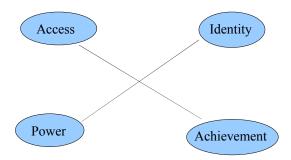
(Gutiérrez, continued on page 2)

(Gutiérrez, continued)

guages and dialects, algorithms from other countries, different frames of reference) when doing mathematics, paying attention to the contexts of schooling and to whose perspectives and practices are "socially valorized" (Abreu & Cline, 2007; Civil, 2006). The goal is not to replace traditional mathematics with a predefined "culturally relevant mathematics" in an essentialistic way, but rather to strike a balance between opportunities to reflect on oneself and others as part of the mathematics learning experience.

The Power dimension takes up issues of social transfor-

# **Dimensions of Equity**



mation at many levels. This dimension could be measured in voice in the classroom (e.g., who gets to talk, who decides the curriculum) (Morales, 2007; Zevenbergen, 2000; Adler, 1998), opportunities for students to use math as an analytic tool to critique society (e.g., exploring "risk" in society) (Mukhophadyay & Greer, 2001; Skovsmose & Valero, 2001; Gutstein, 2006), alternative notions of knowledge (D'Ambrosio, 2006), and rethinking the field of mathematics as a more humanistic enterprise (Gutiérrez, 2002).

Access and Achievement can be thought of as comprising the dominant axis, preparing students to participate economically in society and privileging a status quo. The dominant axis, where access is a precursor to achievement, measures how well students can play the game called mathematics. Identity and Power make up the critical axis. The critical axis, where identity can be seen as a precursor to power, ensures that students' frames of reference and resources are acknowledged in ways that help build critical citizens so that they may change the game. All four dimensions are necessary if we are to have true equity. Learning dominant mathematics may be necessary for students to be able to critically analyze the world, while being able to critically analyze the world may provide entrance into dominant mathematics. It is not enough to learn how to play the game; students must also be able to change the game.

As educators, we need to be clear on our stance--that we are advocates for our students to do both. Doing so requires situating ourselves in the tensions that exist in this work.

This equity diagram seeks not to simplify the complexity but rather to offer a useful "mapping space" for ideas when trying to reflect on one's practice. As a researcher, it is useful for me to see the kinds of approaches that teachers and families take to address equity. Take, for example, the issue of "power." While teachers in interviews may say they "want to empower students," they almost always mean it only as it relates to achievement, not with respect to helping students reach personal goals of excellence that may intersect with the doing of mathematics (e.g., helping their communities solve a local problem).

I am not implying that at the heart of all teachers' equity agendas is Access and/or Achievement while it is Identity and/or Power for most marginalized students and their families. Many educators already embrace the idea that students need to see themselves reflected in the curriculum and be offered opportunities to develop further agency in the world. My experience in working in urban communities is that some marginalized families do <u>not</u> want their students to develop "agency" in the ways that critical researchers seem to think is important, as they worry that it will take away from schools giving their students the tools to excel in school, or they feel they are already doing this "critical" work with their children at home.

As a researcher dedicated to equity, I attempt to situate myself in "Nepantla," the crossroads of these tensions, to highlight the phenomena at hand. Being able to name the dimensions helps us move toward highlighting tensions between the dimensions so that we might be more reflective about how we can successfully balance attending to them all.

**Rochelle Gutiérrez** (<u>rgutirrz@uiuc.edu</u>) is at University of Illinois at Urbana-Champaign, and her research focuses on equity in mathematics education, race/class/language issues in teaching and learning, effective teacher communities, and social justice.

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# President's Corner: Some Parting Thoughts: Celebrating FIVE years of TODOS



By Miriam A. Leiva

In February 2003, eight colleagues met in Phoenix to discuss forming an organization with a focus on mathematics education <u>and</u> equity for ALL students, with particular emphasis on Hispanic – Latino populations as described in our Mission Statement:

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 students, by increasing the equity awareness of educators and their ability to foster students' proficiency in rigorous and coherent mathematics.

Five years later the results are tangible and extraordinarily successful.

(Leiva, continued on page 4)

(Leiva, continued)

In April 2008, Nora Ramirez, TODOS President-Elect, will assume the presidency and, thus, in this final column as president, I will outline and celebrate those accomplishments with you by highlighting them. These could not have happened without the support and efforts of our members. In the past 5 years we have had over 200 members volunteers who have made these endeavors possible.

As you read the summary of our accomplishments, keep in mind our goals for members as described in one of our information flyers about TODOS Member Benefits:

#### We serve educators by:

- working towards equity awareness for educators and students, and identifying barriers that limit access and achievement in mathematics education for all students.
- promoting research and dissemination of knowledge about the effective teaching and learning of mathematics.
- providing grants to attend conferences and professional development opportunities in areas such as curriculum, instruction, assessment, culture and language.
- supporting programs that will increase the number of highly qualified teachers from traditionally underrepresented groups, especially Latino/Hispanics.

We encourage you to join us in ensuring broader opportunities in mathematics education for all of our students.

#### Your membership includes:

- Participation in our e-mail list serve and discussion board with opportunities to address issues, and share resources and best practices with colleagues nationally and internationally;
- Current news, employment and funding updates, publications, and notices related to mathematics education, in particular education of Latino/Hispanic students;
- Annual membership meetings, sessions, programs, and receptions at national and regional conventions;
- An opportunity to serve on action and leadership committees, contribute to the future of our organization, and build support for improving mathematics achievement for all students.

TODOS has delivered, and in most instances exceeded, on our promises through the following services and benefits to members since 2003.

**Publications**: We have informed and supported our members through our publications:

- Newsletter: **Noticias**, twice a year
- Bibliography of Diversity and Equity in Mathematics Education, First Edition: 2004, Second Edition: 2007
- Research Monograph, 2008 (in press, delivery by summer 2008)
- Promoting High Participation and Success in Mathe-

- matics by Hispanic Students: Examining Opportunities and Probing Promising Practices. Funded by the National Education Association
- Research, Practice, and Technology Monograph: Lessons from Research and Practice, TODOS and TI, (to appear in 2009). Funded by Texas Instruments

<u>Electronic Links:</u> We connect, inform, and promote dialogues and discussions through the electronic mail and the TODOS website to:

- Disseminate information on Mathematics Teaching and Learning, in the framework of equity, culture, and language
- Pose questions, encourage dialogues, and provide a forum for concerns, responses, reactions, and success stories
- Provide information on current issues and events in mathematics education and equity, professional opportunities, and other topics for members.
- Manage and upkeep the TODOS website, www.todosmath.org

**Conferences:** We promote professional and leadership development for members through participation and TODOS participation and presentations at:

- State, Region, National conferences by sponsoring a Conference Within a Conference, TODOS Speaker Strands, and Members' Meetings
- Other TODOS conference events such as TODOS Awards Receptions and Member Receptions
- International partnerships such as ICME 11, Monterrey, Mexico (July 2008), and Conferencia Interamericana de Educación Matemática XII, Querétaro, México (June 2007)
- Research Conference: <u>From Research To and From Practice (in planning)</u>

<u>Awards</u>: We honor and support members and their students through various award programs based on achievement, such as:

- The Iris Carl Equity and Leadership Award to honor individuals for their contribution to mathematics and equity
- The Duke Energy Foundation Travel Scholarships/ Awards to travel to national meetings of NCTM, NCSM
- Professional and Leadership Development Awards to support members' expenses to attend other meetings or programs to enhance their knowledge, such as graduate programs, NCSM Leadership Academy, and other conferences
- Student and Teacher Awards, National, State and Regionals, to recognize selected students and their students with gifts and awards

**TODOS Schools**: We support and collaborate with selected schools, their teachers and administrators, and match them with research scholars to learn more about what works and to fund or promote professional interventions and activities. There are currently two TODOS schools:

Navajo Elementary School, Albuquerque, NM Atkinson Middle School, Phoenix, AZ

#### Collaboration and Communication in the Community:

TODOS has participated in various activities to link and enhance our presence within the education community through actively participating in such activities as NCTM Equity Summit, 2008, National Mathematics Panel, 2006-2008, Social Justice Conference, 2007, TESOL Annual Conference, 2007, 2008, Collaboration with sponsors and funders such as the NCSM, NEA, NCTM, WME, NASGEm, and publishers of mathematics materials

The activities describe above have brought together hundreds of TODOS members, infused our organization with thousands of dollars to fund our projects, and continue to support our efforts. I am proud of what TODOS has accomplished. The last five years have seen growth from 8 members to around 1,000; it has seen funding go from 0 dollars to over \$250,000 in total donations from funders. Let us rejoice in the successes as we look forward to the future.

I have been honored to have been your president from 2003 to 2008, and look forward to our continued collaboration and work with TODOS.

### TODOS BOARD ENGAGES IN STRATEGIC PLANNING

By Nora Ramirez, President-Elect

The TODOS Board of Directors, under the leadership of Miriam Leiva, has initiated a strategic planning process to guide the work of the Board and the direction of TODOS. The four strategic priorities, aligned to the goals of TODOS are:

- 1. Providing professional growth opportunities.
- 2. Developing the leadership capacity of the membership.
- 3. Providing resources that link the effective connections between research and practice.
- 4. Informing and engaging the community to advocate for an equitable and high quality mathematics education for all students.

Each strategic priorities has SMART goals (Specific, Measurable, Achievable, Realistic and Timebound) and identifies persons responsible, a timeframe, a measure of achievement and resources required. This allows the organization to focus its work and continually access progress towards the goals.

Tim Kanold, President of NCSM, facilitated the initial planning process at a spring 2007 meeting in Dallas, which was hosted by the Houghton Mifflin Harcourt Company. TO-DOS owes a debt of gratitude to Tim for the time, effort and commitment to the mission of TODOS. Individuals from other organizations (NCTM, AMTE, NCSM, BBA, and NASGEm) who were also members of TODOS were asked to participate and inform the planning process based on their experiences and expertise.

# **Understand the Concepts in Mathematics and Then Learn New Vocabulary**

By Deandrea L. Murrey

Many believe that students learning English will do well in a mathematics classroom because mathematics is not a subject dependent on language proficiency. However, students from various language backgrounds may be learning English at the same time that they are learning new concepts in mathematics taught through English. Further, students are also learning the academic language of mathematics. Mathematics teachers need to provide students learning English language with support to make mathematics content accessible, while providing explicit language instruction (Rothenberg & Fisher, 2007). While many teachers think introducing new mathematics vocabulary before a lesson is essential, it is most effective to introduce new vocabulary after students have learned the concept and can associate the new word with the known concept (Garrison and Mora, 2003).

In the mathematics classroom that supports English language learners, instruction must include English Language Development (ELD) through the principles of language acquisition. The principles of language acquisition include:

- 1. Comprehensible input: so students are able to understand what they are hearing and what they are reading,
- 2. Contextualized instruction: where English is learned in the context of mathematics.
- 3. Meaningful engagement: where mathematics instruction provides students with authentic opportunities to listen, speak, read, and write about mathematics
- 4. Low anxiety environment: so students have access to the mathematics content and feel comfortable participating in classroom activities and discourse.

Comprehensible input was considered by Krashen (1981) to be the first step in developing language proficiency. This does not mean that teachers should simplify language and language structure. The goal is to support the learner. The NCTM states that, "All students should have the opportunity and the support necessary to learn significant mathematics with depth and understanding" (2000, p. 50). Teachers must teach the academic language of mathematics for both known and unknown concepts. Vocabulary for unknown concepts should be introduced during the context of the mathematics lesson, not before.

For example, the objective for this lesson is for middle school students to gain a conceptual understanding of the sum of the measures of the angles of a triangle.

**Triangle Investigation** 

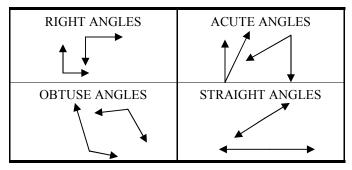
- 1. Measure the angle to the right.
- 2. Please copy one of each type

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(Murrey, continued)

of angles below into your notebook.

3. Write a definition for each type of angle based on your measurements



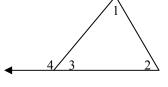
4. Each group member should draw a triangle. One member should draw a triangle that includes a right angle. One member should draw a triangle that includes an acute angle and one member should draw a triangle that includes an obtuse angle. Label each angle of your triangle 1, 2, and 3.

#### 5. Fill in the chart below:

Triangle	Angle 1's measure	Angle 2's measure	Angle 3's measure	Sum of the measures of the angles of the triangle
Right				
Acute				
Obtuse				

- 6. What conjecture can you make about the sums of the measures of the angles of a triangle?
- 7. Can you draw a triangle that includes a straight angle? Why or why not?

EXTENSION: Extend one side of your triangle and measure the exterior angle. What conjecture can you make about the measure of this angle?



Compare your answer with members of your group.

Vocabulary development becomes an important part of the lesson. Students participate in the acquisition of language through the context of mathematics. The students are given an opportunity to explore, discuss and share definitions. Class definitions are added to a word wall (a word wall is a collection of vocabulary words, their definitions and a picture posted on a wall in the classroom). The following is a description of teacher and student actions and the principles of language acquisition that supports English language learners.

**Teacher actions** Students are placed in groups of 4 to 5 to support their academic needs. For example, a student who is learning English might be in a group with students that are proficient in English. Include a student who speaks the first language of the student learning English, if possible. Also, students of different ability levels are in each group so they can support each other.

**Teacher actions:** Teacher reads the directions for number 1 aloud, slowly with pauses, pointing to the picture of the angles and holding up the protractor. The teacher asks students to reword the problem and define angle, a known concept.

**Student actions:** Students work in groups to reword the problem and define angle. The class shares the rewording of the problem and decides on a definition for angle.

**Teacher action:** The word angle, with the definition and picture, is written on a card and placed on a word wall. The students are asked to measure the angle in number 1. The teacher circulates and observes students measuring the angle. This is a good time for the teacher to assess if students know how to measure an angle using a protractor. If students are not being successful, stop the lesson and ask the class to tell you how to measure an angle with a protractor. A student should demonstrate the steps on the overhead or on the board as they are being given orally.

**Student actions:** Students measure the angle. Students read, listen, talk and write about the problem in their groups.

**Teacher actions:** Teacher asks for the measure of the angle and writes the measure with the symbol for degree on the board. She also writes the word degree. Teacher tells groups to go on to tasks numbers 2 and 3. Teacher reminds students to read the task aloud, say it in their own words and decide what to do next, as a group, before doing the task. Teacher circulates around the room asking questions to assist students with the task of measuring angles and defining the words. The teacher is doing a formative assessment, checking for understanding.

**Student actions**: Students read directions, reword the tasks, discuss what to do and complete tasks. Students read, listen, talk and write about the problem in their groups.

**Teacher actions:** Teacher asks for a whole class discussion of acute, obtuse, right and straight angles. Teacher may ask questions to guide student understanding. For example, which angle is larger? Can an obtuse angle be one hundred eighty degrees? Teacher posts the words on the word wall with the discovered definitions. Teachers reads the next tasks aloud, number 4-7, pointing to the triangle and asking students to describe the next task in their own words. The word triangle, a known concept, and the definition are discussed and the definition is added to the word wall.

**Student actions:** Students work within their groups to solve the problems. Each student must write the solutions with explanations.

**Teacher actions:** Teacher circulates around the room asking questions to assist students with the task of completing the problems. The teacher is checking for understanding. Teacher may bring the group back to a whole group discus-

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sion if it is necessary to clarify the problem or what is expected. Teacher will give each group a piece of poster paper. Groups will have time to write their work on the paper. Each group will present their findings. Each student must say something. Groups that finish early may begin the extension activity.

**Student actions:** As a group, students will write their solutions and conjectures on poster paper and decide on how to present the problem. Groups will present solutions.

#### Principles of Language Acquisition:

- Comprehensible input is established when the teacher presents the problem both orally and in written form and gives students an opportunity to reword and discuss. The task reworded and discussed gives opportunity for students to understand the problem. This provides access for all students. Comprehensible input is promoted as students learning English will be supported by peers and will have an opportunity to practice language in small groups as well as with the class. Further, comprehensible input is accomplished because students learning English will learn the vocabulary of known concepts in the context of the problem and the vocabulary of new concepts through exploration.
- Students are receiving contextualized instruction. They are learning English in the context of problem solving in mathematics.
- Allows for meaningful engagement in the second language. The teacher is scaffolding (providing support) the concept of angle measurement, which may be familiar to the students, but will be an important concept in further activities. The students are engaged in the problem solving activity.
- Creates a low anxiety environment because students learning English will be supported by peers while working in small groups. Students can practice what they will say before the whole class discussion. The teacher sets the norms for the behavior and levels of respect of the class.

In a mathematics classroom, students should be given daily opportunities to discuss, defend, present and ask questions. Students who are English language learners must have opportunities to listen, speak, read and write about mathematics. Activities in mathematics must provide students with "authentic" use of language (Rothenberg & Fisher, 2007). The National Council of Mathematics (2000) states that "excellence in mathematics education requires equity--high expectations and strong support for all students" (p. 11). Students who are English language learners are learning mathematics through instruction in English, requiring that they learn the language of mathematics while learning English. New vocabulary should be introduced only after the mathematical concept is understood. Mathematics teachers must keep in mind that they are not only teaching mathematics, but also assisting in language

acquisition.

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Deandrea Murrey (dmurrey@csudh.edu) was a mathematics teacher before she became an assistant professor of teacher education at California State University, Dominguez Hills. Her current research interest is the improvement of mathematics education in urban communities.

#### **TODOS BOARD MEMBERS**

President, **Miriam Leiva**, Professor Emerita, UNC Charlotte,

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Finance, **Susie Håkansson**, Director, California Math Project UCLA, CA

Research and Publications, **Richard Kitchen**, University of New Mexico, CEMELA PI, NM

Member Services, **Bob McDonald**, Mathematics Teacher, Atkinson Middle School, Phoenix, AZ

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## A Tribute to Miriam Leiva Founding President

Miriam Leiva, Distinguished Professor of Mathematics Emerita at the University of North Carolina at Charlotte, has provided insightful leadership at the cutting-edge of mathematics education for many years and continues to make exemplary contributions in the pursuit of high quality mathematics education for all students. In particular, as founding president of TODOS: Mathematics for ALL, her current focus is the mathematics education of Latino/Hispanic students. Late last fall, the editors of *Noticias* put out a call to a few members (because of space limitations) asking for "a few sentences discussing Miriam's greatest impacts." There was nearly 100% return rate. We have included these responses verbatim and thank those who contributed.

Miriam Leiva is my friend. She has been more than a professional within the field of mathematics education. She has made more than a mark in the field. Miriam is a presence everywhere she goes. When I think of TODOS, I see Miriam Leiva. I see arms waving to make a point. I see and hear the passion she brings to always, always, always articulating the absolute necessity of a full mathematics education for ALL students. We are all fortunate to know her and to be influenced by her every day. Thank you Miriam. We love you.

#### -Francis "Skip" Fennell, President, NCTM

Dr. Leiva has made numerous contributions especially in promoting excellence in mathematics education for all students. She has exerted profound influence on teachers by her love of teaching, her commitment to teachers, and her deep desire to lead children to a rich experience in mathematics. While this is not easily quantifiable, she has been recognized by a number of organizations with their highest awards. She gives presentations at every opportunity that promote student achievement of Latino/Hispanic students. She serves as a role model for ELL students, having come to the United States at the age of 13 with no prior knowledge of the English language. According to the archives of the MAA, she is the first Hispanic-American woman to earn a doctorate in mathematics/mathematics education.

#### -Carol Edwards, TODOS Board Member

Miriam has been a driving force in in the growth of TO-DOS. Her dedication, energy, expertise and passion have helped put TODOS in a strong position as an organization. One of the side benefits of being involved with TO-DOS is all of the wonderful people I have gotten to know, and Miriam is certainly at the top of that list. I am honored to have her as a friend.

**-Bob McDonald**, TODOS Membership, Mathematics Teacher

Miriam stands out as a beacon of energy and commitment to Latinos in education. For those who have seen her presentations, her smile alone is enough to light up a room. In her work with TODOS Mathematics for All, she has the incredible ability to not only recruit others to the cause, but also inspires those of us who are already doing this work to reach to new levels of collaboration and sharing of ideas. When I think of Miriam, I think of someone who "embodies" the idea she is trying to promote in TODOS--excellence and inclusion.

-Rochelle Gutiérrez, University of Illinois at Urbana-Champaign

### **Results of the 2008 TODOS Election**

By Ed Dickey

Chair Nominations and Elections Committee

The Nominations and Elections Committee is pleased to report that **Tod Shockey** has been elected to serve as **Vice-President**. Dr. Shockey is an Associate Professor of mathematics education at the University of Maine and active in the professional development of teachers working with Native American learners. José Franco completes his term as TODOS Vice-President.

Luis Ortiz-Franco was elected to serve in the office of Member-at-Large over the next 3 years. He fills the office currently held by Carol Edwards who completes her term. Dr. Ortiz-Franco is a Professor of mathematics at Chapman University in Orange, CA, and a longstanding advocate for equity and high-quality education for all students, particularly Latinos.

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 office on April 9 at the TODOS Board of Directors meeting in Salt Lake City.

The Nominations and Elections Committee thanks members for reviewing the candidates and voting. For the first time, this year's TODOS election was conducted electronically. We were pleased to have 98 members vote in this election, an increase of 31% from last year when the election was conducted by mailing.

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 2009, TODOS will elect a new President-Elect and another Memberat-Large and later this year the committee will place a call for nominees.

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Miriam Leiva is a no nonsense person who has worked diligently to establish TODOS. This is a lasting legacy and our thanks go to her.

#### -Johnny Lott, Past President, NCTM

Dr. Miriam Leiva is a "can-do" person. As the inaugural president of TODOS, she magnificently orchestrated the formation of a new organization that in only a few short years has become the primary advocate for Latino/a students in mathematics education in the U.S. I have been continually inspired by Miriam's broad vision and contagious enthusiasm for an organization that was desperately needed. I know many others have also been deeply affected and moved by her tireless efforts to initiate TODOS. Without a doubt, part of Miriam's legacy after her role with TODOS changes (she'll always be a mover/shaker in TODOS) will be the impact she's had on so many others to demonstrate through her actions and words what can be done to make a difference in the achievement and learning of Latino/a students in mathematics.

#### -Richard Kitchen, University of New Mexico, CEMELA

Dr. Miriam Leiva has been an exemplary teacher of students, teachers, and even her own colleagues. Her knowledge of effective techniques for teaching elementary and middle grades mathematics would fill volume after volume of mathematics literature. There are countless math educators, including myself, who owe her a great debt because of her expertise and guidance over the years. I am proud to have her as a friend and colleague. Dr. Leiva is equally talented and skilled as a leader. Her organizational skills are considerable and she has always been willing to share those skills with the mathematics education community. As the inaugural president of TODOS, she has provided exactly the vision and direction that has given TODOS great status and position within the mathematics education world over its beginning years of incorporation. We all have benefited from her leadership and great energy. Congratulations, Miriam, on reaching this impressive milestone in your stellar career.

### -Lee Stiff, Past President, NCTM

My words and phrases for Miriam are radiance, commitment, passion, patience, devoted to all children's learning mathematics, empathic, charismatic, authentic, diplomatic, listener, bright, kind, eloquent, and gracious. I salute her as founder and first TODOS President. Miriam was also present for the founding of the Journal of Mathematics and Culture. So many children, particularly those who are marginalized, adults, scholars, and practitioners, benefit from Miriam's selflessness and generosity pursuing equity and social justice in education, mathematics education, especially.

#### -Rick Silverman, University of Northern Colorado

When you want an example of a charismatic mathematician who is a also a beautiful person, there is no better choice than Miriam Leiva. Miriam is an inspirational and dedicated educator who invests her energy and knowledge of teaching and learning in every project she leads. As president of TO-

### Electrónico TODOS

By Bob MacDonald

TODOS is pleased to have our new web service up and running. There are a number of features that you can only access when you "login" as a member. These include past issues of Noticias, the bulletin board discussion areas, an electronic version of the Bibliography of Diversity and Equity in Mathematics Education, and the Member Directory. There are plans to expand the members' area to include other features that will be useful to educators.

A random password was assigned to you when the system went online. If you have lost the information that was sent to you, go to the login page and click on "forgot your password". Enter your email address. Your username and password will be sent to you via e-mail. If you experience problems, please contact me at mac@todos-math.org. Once you login, you will notice that the Member tab in the banner has expanded selections. Under the FAQ section, our wonderful webmaestra, Suzanne Alejandre, has provided instructions on how to access and edit your "profile" - the information in the database. When you go to the profile, please check to see that you mailing address is correct, and make any needed changes. The system provides two forms of Electronic Communication: E-lists and "Blasts".

Currently there are two E-lists, the members and the digest. The member's list comes out as e-mail is sent, and the digest is a compilation of the e-mails of the week. Members who did not login, were subscribed to the members list. Subscription preferences can be changed in your profile.

At the current time these lists are tomamembers@memberclicks.com and tomadigest@memberclicks.com. We are working on getting the "toma" changed to TODOS. If you have spam filters you may need to have e-mail from memberclicks.com accepted. If your e-mail is through an institution and you have not been receiving any info from the E-List, you may need to contact your IT department.

"Blasts" are a format TODOS will use to send out periodic information. This method will also be used to send out a new electronic publication that is in the planning stages. If you see that the e-mail has your name inside of it, is has been sent through this means. You can unsubscribe from Blasts at the bottom of the message, but doing so will keep you from receiving further emails sent through this means.

Since the beginning of TODOS, many people have asked if they could join or renew online. I am now happy to say that the answer is YES. A link to the membership renewal form can be found on the login page and you can pay your dues using Visa or Master Card.

The Board is excited about the possibilities of the new system and hope that you will browse through the members' area as time permits.

(Tribute continued on page 10)

(Tribute, continued)

DOS, she has been challenging her colleagues to do their best in promoting equity in mathematics education for all students. Miriam has been influential in this particular effort in every state, regional, and national organization to which she belongs. Miriam also epitomizes the word, friend. Having Miriam as your friend is a gift for which we are forever grateful. Miriam, your friends applaud you in admiration and pride!

#### -Shirley Frye, Past President, NCTM

Miriam Leiva serves as an inspiration to all educators but particularly those interested mathematics and the plight of children marginalized by mainstream society. Most impressive to me is the spirit and energy Miriam consistently brings to everything she does. Over my 20 years of working with her in our home states, the Carolinas, I have witnessed first-hand a kind and generous woman who holds no pretense. Whether it's visiting a teacher's classroom at a small rural school or addressing a distinguished audience at a national conference, Miriam brings the same passion and commitment. Of all her many wonderful traits, the one that I most admire is her deep knowledge of and genuine passion for mathematical content knowledge. You always witness this in her writing and her talks. Miriam wants to provide every learner with the opportunities that were afforded to her: a loving family, great teachers, and excellent schools. She works tirerlessly to help those who might not have been as fortunate as she to achieve to their highest potential. NCTM missed the opportunity to have Miriam Leiva serve as its President, but TODOS has benefited tremendously from Miriam's vision and leadership. Because of Miriam Leiva, TODOS is on a strong foundation for future growth that will allow the organization to influence the success of all learners. It is our duty as members and colleagues to honor Miriam's legacy by realizing the vision of TODOS. -Ed Dickey, University of South Carolina

Dr. Miriam Leiva has been an inspiration to all of us in the mathematics community. She has boundless energy, compassion, and commitment to supporting children and young people of all ages in learning mathematics. Her passion for an equitable world has led to her role in establishing TODOS and her serving as its President. All you have to do to be inspired by her is attend one of her TODOS presentations. Her love for mathematics, equity, learning and teaching come through. Actually, all you have to do is have a conversation with her to feel a sense of renewal to making a difference in the lives of students and teachers of mathematics! I feel incredible fortunate to be able to call Miriam a friend as well as a mathematics education colleague. She became the Head of the Teacher Preparation unit at NSF immediately after me. I asked her to come early and get up to speed before I left. Getting up to speed took on new meaning. She immediately went to work contributing ideas about how we could improve the enterprise. It was a special time for me to get to work with Miriam on a daily basis. I can think of few others who have had such influence on teachers of mathematics over such a long career. She is extraordinary in her passion, her ideas, and her willingness to give of herself to others. As I listen to her in filled to capacity ballrooms across the nation, I see a person who has contributed her heart and her passion to educating the nation about her single-minded commitment—excellent mathematics education for ALL children. She brings honor to TODOS in the same way that she brings great visibility for the mission of TODOS. The field is greatly enhanced by her contributions and, in particular, by her love of teachers, children, and teaching mathematics. She sets a bar we all strive to reach.

#### -Glenda Lappan, Past President, NCTM

As I think of Miriam Leiva's work as a mathematics educator, I am reminded of the philosophy of education espoused by the French writer Anatole France who said: "nine-tenths of education is encouragement." At an academic level, Miriam has significantly advanced the discipline of mathematics education through her research and writings. At a personal level, through her caring leadership, she has encouraged many of us to fulfill personal and professional goals. In this sense, Miriam has been an educator to us all. In the time that I have known Miriam, she has always expressed a desire to see ALL students reach their maximum learning potential in mathematics. She has continuously strived for effective efforts in teacher preparation, curriculum development, and educational programs that help children become mathematically literate. I can speak for those of us who have been 'touched' by her wisdom and guidance Miriam has been both a professional inspiration and a role model. I believe that Miriam, in her role as TODOS founding president, has brought to a high level of recognition the needs of underrepresented students in general, and Latino students in particular. Under her leadership, critical issues concerning the mathematics education of these groups are being addressed in substantive and practical ways.

#### -Gilbert Cuevas, University of Miami

It is through her vision of closing the achievement gap and relentless dedication and passion to promote access to mathematics for all students, particularly Hispanic/Latino students, that has brought TODOS from its inception in 2003 to its current national prominence of 800 members with TODOS strands at many local, regional, and national conferences. She was instrumental in securing funds to provide incentives for Hispanic/Latino students through the TODOS Student Awards, and to provide incentives for teachers of Hispanic/ Latino students to attend conferences and to develop their own leadership abilities through the TODOS Teacher Awards. Wherever she goes, she always finds a way to promote TODOS. She represented TODOS at the National Math Panel meetings and organized all of the TODOS presenters at the various National Math Panel meetings these last two years to insure that the message of achievement for all students is heard. If Miriam had her way, the mission and goals of TODOS would be infused in every classroom nationally and internationally. It is because of Miriam Leiva's efforts

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that TODOS is where it's at today. Thanks Miriam for your contributions to mathematics education and to TODOS in particular.

-Susie Håkansson , TODOS Board Member

Miriam is my kind of dynamic, inclusive leader. She attracts and motivates to action we who strive to continuously improve the mathematical education and attainment of Latino students – especially English Learners. She helped create TODOS to bring us together and connect us to each other. Let's honor Miriam by strengthening and extending our network.

-Carl Lager, University of Califormia, Santa Barbara

What words can I say about Miriam Leiva, my good friend and valued colleague? Let me begin by noting that she has a distinguished record of leadership, service and achievement in mathematics education. Miriam has exerted significant influence not only through her authorship of books, articles and speeches but also, and perhaps more importantly and impressively, through her actions as an inspirational role model for countless professionals in our field. And her stewardship of TODOS has been nothing short of miraculous building the organization from a dream shared with a few other visionary folks to a powerful national presence in a very short time! Using a combination of intelligence, perceptiveness, diligent persistence, passionate commitment, personal charm, along with her ability to inspire others, Miriam has assembled the human and financial resources needed to make the organization an amazing success in a very short period of time. She has recruited talented people from across North America, and beyond, to support the work of TODOS to improve mathematics education for all children. Miriam, my words are inadequate to express the gratitude we all feel and the debt we owe you for all that you have done.

-Ed Silver, University of Michigan

# Honoring Jose Franco: An outstanding leader, a friend and indispensable colleague

By Miriam Leiva

For the past five years, Jose Franco has capably served our organization as a board member, a founding member, Chair of the Programs Committee, and as our first elected Vice-President from 2006-2008. His contributions to TODOS are many and of the highest caliber.

Jose is the Director of EQUALS, a national mathematics and science education project based at the University of California Berkeley. In that role, he serves on numerous national boards, is the principal investigator on several projects, and serves on committees for other national organizations. He is a well-known presenter including being a featured speaker at a recent NCTM national meeting. A former elementary and

middle school teacher, Jose exemplifies *Equity in Mathematics Education* in his experience, actions, and accomplishments.

In 2005, a TODOS member wrote to nominate him for the position of Vice-President and said:

Jose has been a leader in the organization, one who works with others well, who responds to needs by initiating appropriate responses, who volunteers to do the work both big and small, who invites others to participate and motivates them to collaborate, who shares and gives credit to others instead of accepting it for himself. He is also a good problem solver and an indispensable colleague... I observe what leaders contribute to our organization and I cannot think of a more qualified individual to serve as VP.

His term as Vice President ends in April of this year. He has served us well, and will continue to do so in the future. He currently chairs the Projects Committee and the TODOS School Committee. He is committed to carry on with his service to our organization.

We are grateful to Jose Franco for his leadership, vision, and outstanding contributions to our organization.

### Duke Energy Foundation Scholarship Award Winners

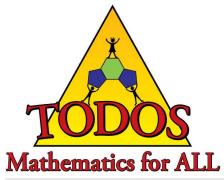
By William Jasper

Thanks to the fantastic generosity of the Duke Energy Foundation, TODOS is able to award five scholarships of up to \$1400 for educators to attend the national mathematics conferences in Salt Lake City in April. The five winners are:

- 1. Julie Block, an 8th grade algebra teacher at John Glenn Middle School of International Studies in Indio, California.
- 2. Cherry Klock, a 1st grade teacher at Holiday Park Elementary School in Phoenix, Arizona.
- 3. Miguel Ramos, a 7th grade mathematics teacher at Kenneth White Junior High School in Mission, Texas.
- 4. Kathy Wilkerson, a 7th grade mathematics teacher at South Tama Middle School in Toledo, Iowa.
- 5. Elaine Woolsey, a mathematics coach at Armada Elementary School in Moreno Valley, California.

We wish to give special thanks to Regeana Phillips and Hilary Davidson, our contacts at the Duke Energy Foundation, for their continued support of our TODOS mission.

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# NOTICIAS de TODOS

News from TODOS: Mathematics for ALL www.todos-math.org

Newsletter publication funding provided by Peason Scott Foresman and Peason Prentice Hall

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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 students, by increasing the equity awareness of educators and their ability to foster students' proficiency in rigorous and coherent mathematics.