

NOTICIAS de TODOS

News from TODOS: Mathematics for ALL

Newsletter publication funding provided by
Pearson Education

Fall 2011, Volume 7, Number 2

www.todos-math.org

IN THIS ISSUE:

- *Learning from English Learners in Mathematics: Voices Unheard, Methodologies Unused* -pp. 1, 2
- *2012 Election News*-p. 3
- *Message from President*-p. 3
- *TODOS Founding President Guest at President Obama's Advisory Commission* - p. 4
- *TODOS Members Present at NCTM Conference in Atlantic City* - p. 5
- *NCELA National Professional Development Grants focus on STEM Education* - p. 6
- *The CBMS Hosts Forum on Teaching Teachers in the Era of the Common Core* - p. 6
- *Information about TEEM journal* - p. 7
- *Why We Join TODOS* - p. 7

The mission of TODOS : Mathematics for ALL is to advocate for an equitable and high quality mathematics education for all students—in particular, Hispanic/Latino students—by increasing the equity awareness of educators and their ability to foster students' proficiency in rigorous and coherent mathematics.

Learning from English Learners in Mathematics: Voices Unheard, Methodologies Unused

by

Higinio Dominguez
Assistant Professor of Education,
Michigan State University



I want to foreground the voices of English learners both as a reliable source for learning about their mathematics (as opposed to a source of challenge to teach mathematics) and as a consideration for innovative methodological approaches that both teachers and researcher can adopt. Mathematics education research has managed to advance, at least until recent years, independently from the increasingly strong presence of English learners in mathematics classrooms. This advance suggests the need to expand our knowledge in mathematics education by including English learners. The question is how to include them. I propose the idea of listening to English learners' voices that have remained unheard in research and in instructional settings. The other part of this methodological approach has to do with how we researchers and teachers listen. I believe that if we approach listening with the idea of finding challenges, we will hear things that will differ from those associated with an approach based on learning from unheard voices. As noted by Wagner and Herbel-Eisenmann (2009), "Teachers may interpret situations thinking only of their own perspective, not considering the perspectives of their students for whom the same point may appear significantly different" (p. 9). To illustrate how students' voices can be heard and how our listening should be focused on learning from them, I report on a recent teaching-as-research project in which I collaborated with one bilingual teacher committed to understand students' ideas in mathematics. The report is based on a unit on estimation that the teacher taught for over two weeks. In the first few lessons, the teacher noticed—mainly from inspecting student work—that students were experiencing difficulties learning the estimation. She was first perplexed by this perceived difficulty, as she was expecting this content to be easy to teach and learn. She could have easily translated her perception of student difficulty

Dominguez, continued on p.2

as a challenge to explore further. Instead, this teacher reframed what she initially perceived as a challenge and decided to further her understanding of this difficulty by listening to students' perceptions. So, together we decided to interview students. These interviews, along with our analysis of student work, exemplify a methodology that is sensitive to students' voices. In our case, these methods revealed information about students' perceptions of this particular content, thus positioning us not as deciders of a challenge but as learners being informed by the students' voices. Put differently, students' perceptions helped reshape our own perceptions. The most important perceptions that we learned from students are expressed as the following three voices. Each voice is illustrated with an example of individual students' personal understandings.

VOICE 1: Our Mathematics Reflects What We Have Been Taught.

For example, when we asked a student why he had added three numbers together, instead of mediating this addition with estimation techniques, as the task required, he told us: "Pues los, tres, estos son los tres y los sumé todos, porque aquí dice, el total de millas (apunta a la palabra total). [*Well the, three, these are the three and I added all of them, because here it says the total miles (points to word total)*]."

VOICE 2: Our Language Reflects What is Valued in Our Mathematics Classroom.

Another student, a recent immigrant, reminded us of how he struggled to recognize informal language in a formal task: "...Y de primero no le entendía, después uh, lo leí más de tres veces, y me acordé de tercer grado,

cuando hicimos esto (circula "más o menos") y me acordé, uh-huh." [*At first I didn't understand, then uh, I read it more than three times, and I remembered third grade, when we did this (circles "más o menos") and that helped me remember, uh-huh*]

VOICE 3: Despite Instructional and Language Constraints, We Are Meaning-Makers.

Finally, a student made us aware of the centrality of meaning-making as she reflected on whether the technique of rounding numbers makes sense in all situations. "Pues, que a veces se tienen que hacer las dos cosas (redondear primero y luego sumar) para que salga la respuesta que, tú piensas que es. O sino, si se hace más fácil, redondear los números." [*Well, sometimes you have to do both things (rounding first and then adding) to get the answer that, you think it is. Or else, if it makes it easier, just round the numbers*].

This project is now in its second year. The teacher is still listening to students' voices and finding in these voices an infinite source of professional learning. She continues learning that her perspective is incomplete unless she listens to her students' voices.

Reference: Wagner, D. & Herbel-Eisenmann, B. (2009). Re-mythologizing mathematics through attention to classroom positioning. *Educational Studies in Mathematics*, 72, 1-15.

NOTICIAS de TODOS
Fall 2011 *Vol. 7, No. 2*

Editors: Jeanne White, Virginia Nelson, Karen Mayfield-Ingram, Luciana deOliveira
Contributors: Higinio Dominguez, Larry Lesser, Cindy Chapman, Maria Torres, Bob McDonald, Miriam Leiva, Jennifer Bay-Williams, Janie Zimmer
Please send news items to: Jeanne White at whitej521@elmhurst.edu

The publications of TODOS present a variety of viewpoints. The views expressed or implied in this publication, unless otherwise noted, should not be interpreted as official positions of TODOS.

© 2011 TODOS 501(c)(3) non-profit org

A Message from President Pro Tem

by Bob McDonald



As TODOS approaches the ninth anniversary of its formation, a look at our accomplishments seems appropriate. These can be found in the "What's New" section on our homepage. Still, there is a long way to go to provide an equitable education for ALL students. The desire to provide an equitable mathematics education for our students is the bond that holds TODOS together. TODOS does have access to some of the works from a project in which a number of our founding and charter members were involved-Equity in Mathematics Education Leadership Institute (EMELI). Julian Weissglass and a number of other educators concerned with equity led this NSF project. Julian retired recently, and he graciously provided TODOS with copies of many of the resources used at EMELI. Educators have found these to be valuable tools for self-reflection and in professional development. TODOS will be happy to provide these to members at no cost, other than shipping. TODOS is fortunate to have a strong core of members. As a young all-volunteer organization, it is crucial for our strength and growth that ALL of us do what we can to spread the word about TODOS and to help as we are able.

On behalf of José, the rest of the Board, and the students we teach, I thank you for being part of TODOS and hope that together we can continue to strive to accomplish our mission and goals.

2011 Sustaining Members

Susana Davidenko, Associate Professor at The State University of New York in Cortland, NY
member since 2003

Ksenija Simic-Muller, Assistant Professor at Pacific Lutheran University in Tacoma, WA
member since 2006

2012 Election News

by Cindy Chapman

The 2012 TODOS Elections are coming up! Mid-January to mid-February we'll be electing one new Director to the TODOS Board of Directors. The slate of two candidates will be announced early in January by the TODOS Elections Committee. This year there will be only two candidates on the slate as we are electing only one office. The TODOS By-Laws stipulate no more than two candidates may appear on a ballot for one office.

Early in January the two candidates will create their own pages on the TODOS website where they will tell you about themselves and their qualifications for Director. At that time you'll also find the ballot on the Elections page and you'll be able to vote electronically. You'll be able to browse the candidate pages, the TODOS By-Laws, and consider the current makeup of the Board before you vote.

All dues-paid members are eligible to vote, so keep your eyes open! You'll receive notification of the election on the website, the Electronic News, and by the membership list-serv. If you have any problems voting, or have questions, please contact Cindy Chapman, Chair of the Elections Committee, at elections@todos-math.org. You can also check the Elections page on the TODOS website at: www.todos-math.org/elections

2012 TODOS Election Committee:

Katie Diaz

Saul Duarte

Miriam Leiva

Debbie Trahan

Cindy Chapman, Chair

TODOS Founding President Guest at President Obama's Advisory Commission



by Miriam Leiva

The White House Initiative on Educational Excellence for Hispanic Americans was established in September 1990 by President George H.W. Bush to provide advice and guidance to the Secretary of Education on education issues related to Hispanics and address academic excellence and opportunities for the Hispanic Community. It was continued by Presidents Clinton and Bush. However, it was not until President Obama took office that this initiative was emphasized and implemented. Under the Obama administration, a Presidential Advisory Commission was established, as well as a national network of community leaders to provide real-time input and advice on the development, implementation, and coordination of education policy and programs that impact the Hispanic Community.

The Commission, chaired by Dr. Eduardo Padrón, president of Miami-Dade College, has been charged with expanding academic excellence and improving educational opportunities for Hispanics by providing advice to President Obama and Education Secretary Arne Duncan. The first meeting of the President's Advisory Commission on Educational Excellence for Hispanics was held at the White House on May 26-27. TODOS Founding President Miriam Leiva, one of the invited attendees, represented TODOS: Mathematics for All with support from Houghton Mifflin Harcourt. At this event, attended by members of Congress and other federal officials from various departments, selected commissioners were sworn in by Supreme Court Justice Sonia Sotomayor. Juan Sepúlveda, Executive Director of the White House Initiative on Educational Excellence for Hispanics, opened the meeting and presented greetings on behalf of the President. Sepúlveda is responsible for directing the efforts of the Initiative in engaging Hispanic students, parents, families,

organizations and anyone working in or with the education system in communities nationwide as active participants in improving the academic achievement of Hispanic Americans. Another key partner in this effort is colleague and TODOS member Ida R. Eblinger Kelley, Director, Hispanic Outreach & Communications, US Department of Education. She coordinates the White House efforts within the Department of Education. The second meeting, Oct. 5-6, was opened by Dr. Jill Biden, a lifelong educator and wife of Vice President Joe Biden, with brief remarks on the importance of Hispanic success in education to America's economy. At both meetings, the commissioners, led by Padrón, began discussion on what is happening and what needs to happen to support and promote educational excellence for Hispanic students. The issues discussed are based on a report from April, 2011: *Winning the Future; Improving Education for the Latino Community* http://www.whitehouse.gov/sites/default/files/rss_viewer/WinningTheFutureImprovingLatinoEducation.pdf

The catalyst and justification for current efforts are summarized by this quote from the report: "There are 50.5 million Hispanics in the United States, composing 16 percent of the total population and a significant portion of the labor force. When you add the nearly 4 million residents of Puerto Rico, the total number of Latinos surpasses 54 million. Between 2000 and 2010, the Latino population increased by 15.2 million, accounting for more than half of the 27.3 million increase in the total population of the United States. In the coming decades, Latinos will continue to drive the growth of the labor force, as they will account for 60 percent of the Nation's population growth between 2005 and 2050. In this way, Latino success in education and in the labor market is of both immediate and long-term importance to America's economy. Latinos are a young population. There are 17.1 million Latinos ages 17 and younger in the U.S., more than 23 percent of this age group. In today's American public education system, Latinos are by far the largest minority group, numbering more than

12.4 million in the country's elementary, middle and high schools. Currently, nearly 22 percent, or slightly more than 1 in 5, of all pre-K-12 students enrolled in America's public schools are Latino.

Yet, Latino students face persistent obstacles to educational attainment. Less than half of Latino children are enrolled in any early learning program. Only about half of all Latino students earn their high school diploma on time; those who do complete high school are only half as likely as their peers to be prepared for college. Just 13 percent of Latinos have a bachelor's degree, and only 4 percent have completed graduate or professional degree programs. Overall, Latinos have the lowest education attainment level of any group in the U.S. "

TODOS will continue to be involved in future meetings, work, and recommendations of the Commission and will keep members informed on all progress made.

TODOS LIVE! completed a successful inaugural season with over 250 "views" of the twelve sessions. A list of the sessions and the recordings are available on the TODOS website. We would like to thank ALL-the committee members, the speakers and the attendees-for their contributions to this successful project. TODOS is pleased to announce that TODOS LIVE! will continue for another year. We feel this is an excellent venue for sharing areas of expertise and providing information on topics of interest to TODOS members. Thanks to Conceptua® Math for providing a gift to TODOS which allows this project to continue.

The TODOS LIVE! committee hopes you will be involved by suggesting presenters and topics, viewing recorded sessions and attending new ones. Please contact Sandra Crespo crespo@msu.edu or Bob McDonald mac@todos-math.org with questions, suggestions or comments.

TODOS Members Present at the NCTM Regional Conference in Atlantic City



Linda Gojak shared her expertise in a hands-on workshop format with the presentation, *Developing Number Sense in the Primary Grades.*



Nora Ramírez shared research conducted with Sylvia Celedón-Pattichis during her presentation, *Beyond Good Teaching: Meeting the Mathematical Needs of ELLs.*

A book based on the research, *Essential Strategies for Teaching Mathematics to ELLs*, will be published by NCTM in spring 2012.

Go to www.todos-math.org and click on *List of TODOS accomplishments* under **What's New?** to see what members have been doing to further the mission of TODOS.

NCELA National Professional Development Grants Focus on STEM Education

by Jennifer Bay-Williams

The National Clearinghouse for English Language Acquisition (NCELA) recently posted the 42 grant recipients of the 2011 National Professional Development Program, which provides professional development activities intended to improve instruction for limited English proficient (LEP) students and assists education personnel working with these children to meet high professional standards. In this particular competition, priority was given to projects that focused on Science, Technology, Engineering, and Mathematics (STEM) disciplines.

Congratulations to Eliana Rojas, TODOS Board Member, for her grant at the University of Connecticut!

Projects were also funded in Arizona, California, Colorado, Connecticut, Georgia, Illinois, Indiana, Kansas, Hawaii, Maine, Maryland, Missouri, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, and Wisconsin. Find out more about the project by going to <http://www.ncelea.gwu.edu/grants/npdp/> and contacting the Principal Investigator.

TODOS Board 2011-2012

President: Jose M. Franco

President-Elect: Don Balka

Vice President: Bob McDonald

Directors: Jennifer Bay-Williams,

Marta Civil, Eliana Rojas,

Florence Glanfield, Bill Jasper

Executive Secretary:

Carol A. Edwards

The CBMS Hosts Forum on Teaching Teachers in the Era of the Common Core

by Janie Zimmer

The Conference Board of the Mathematical Sciences (CBMS) hosted its fourth National Forum in Reston, VA on October 2-4, 2011. The team representing TODOS at this FORUM were founding TODOS President Miriam Leiva, Jim Rubillo, Janie Zimmer, Suzanne Alejandre, Bob Jesberg, and Jennifer Bay-Williams.

Focusing on *The Mathematical Education of Teachers in the Era of the Common Core Standards*, the meeting continued and expanded the work begun at the three previous CBMS forums. These forums focused on the recommendations of the National Mathematics Panel Report, and then on the Common Core State Standards initiative of the National Governors Association (NGA) and the Council of the Chief State School Officers (CCSSO). The adoption of these standards by most of the states now provides an opportunity and incentive for the mathematics community to reflect on the mathematics education that teachers need if they are to be successful teachers of mathematics in the era of the Common Core State Standards. By education, CBMS means both the initial education of teachers and the career-long professional development opportunities that teachers need so that they can continue learning about mathematics and the practice of teaching math throughout their careers.

As one step in this effort, the CBMS has begun the *MET2* project, an update of its 2001 publication *The Mathematical Education of Teachers*. In early September, the CBMS will release draft recommendations and discussion drafts of the issues to be addressed in *MET2* with the intent that the Forum participants, as well as others, will provide input to inform the *MET2* document. The plenary sessions of the Forum provided participants with a better understanding of the features of emerging efforts in pre-service teacher education and professional development, which reflect the mathematical practices

and the mathematical content of the Common Core State Standards. The forum's breakout working sessions engaged participants in working toward the goal of increasing the level of engagement of college and university mathematics departments with their mathematical education colleagues and with practicing teachers in all teacher education efforts, from pre-service through career-long professional development. All who have a stake and interest in providing pre-service or continuing professional development for mathematics teachers at every level, pre-K to 12, should now be involved in this effort. The CBMS received funding for the forum from the Brookhill Foundation and the National Science Foundation (NSF).

Past TEEM Issues Accessible to ALL

by Larry Lesser

The TODOS journal Teaching for Excellence and Equity in Mathematics (TEEM) is about to publish its third issue for access by members at the TODOS website. In order to increase the visibility of TEEM so that it can have more impact on the entire mathematics education community and give more weight to authors' papers in tenure dossiers, the TODOS Board has decided to make previous issues accessible to all without a password. The latest issues, however, will continue to be available only to TODOS members, similar to a "moving wall" model used by many journal databases. Please tell your friends and colleagues who are not yet TODOS members to go to the TODOS website and check out issues 1 and 2, which will hopefully help inspire them to join TODOS so they don't have to wait a full year to see the fantastic issue #3! Now's the time to start thinking about submitting a paper for issue #4 –feel free to propose your ideas to the editors.

Teaching for Excellence and Equity in Mathematics (TEEM)

The Editors of TODOS' annual refereed journal, Teaching for Excellence and Equity in Mathematics (TEEM), invite people to submit papers any time of the year, especially during the annual submission months of April and November. You can also volunteer to review submitted articles (only one or two per year). Information about these opportunities is available at: <http://www.math.utep.edu/Faculty/lesser/TEEM.html>. Free access to TEEM is part of one's TODOS membership, but one need not be a member of TODOS to submit a paper to TEEM. The third issue of TEEM is scheduled to be published by early December, 2011.

Thinking About Why We Join TODOS

by Maria Torres

When Virginia Nelson (Oregon) was recruiting volunteers for an informational table at the Northwest Mathematics Conference in Portland, she began her message with "You know why you joined TODOS, and now we can encourage others to join!"

So why did we join TODOS?

We like the peer-reviewed resources and the choice of e-lists. We enjoy the association with others in our field. TODOS is an equitable organization. TODOS is affordable. Some of you have been charter members since 2003. Some of you retired from work and still continue with TODOS. Why? I would venture to say that it is about supporting TODOS's advocacy and outreach efforts for preservice and inservice mathematics teachers of ELLs, a student population that still needs our urgent attention. TODOS has a diverse membership, rich in culture, expertise, and experience. So do we want others to join TODOS and belong to a great network of advocates and supporters? Of course, we do. So join the more than 30 TODOS members who have already started on a personal goal of recruiting new members. Do it **TODAY!**

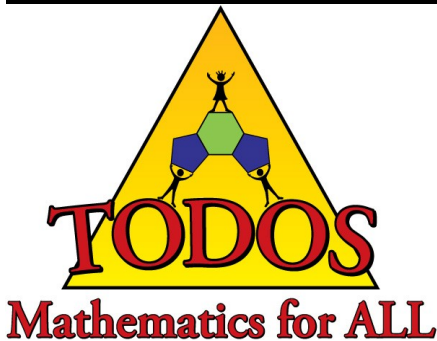


2012 TODOS Research Monograph
**Embracing Resources of Children, Families,
Communities and Cultures in Mathematics Learning**

Editors
Tonya Gau Bartell
Alfinio Flores
University of Delaware

The focus of the monograph will be on helping teachers recognize, embrace, cultivate, and build upon resources of children, families, communities, and cultures for teaching mathematics to all students. The monograph will focus on embracing resources from all groups, but especially Latinos and other groups whose resources traditionally are not recognized and used to support student mathematics learning in schools. Manuscripts should be based on research, practice informed by research, or exemplary and promising practices. Claims of authors should be supported by evidence. Manuscripts should also provide enough detail to allow others to build on this knowledge. Especially helpful are explicit hypotheses and rationales of why certain approaches were tried and why they did work.

The deadline for submission is May 15, 2012. Please send your manuscript electronically to Tonya Bartell tbartell@UDel.Edu or Alfinio Flores alfinio@udel.edu. Author information should not appear in the manuscript. Be sure to include the following information in an accompanying cover letter: Names, professional affiliations, and positions of all authors, contact information of first author (including email address, mailing address, and work phone number).



NOTICIAS de TODOS

News from TODOS: Mathematics for ALL

Newsletter publication funding provided by
Pearson Education

Fall 2011, Volume 7, Number 2

IN THIS ISSUE:

- *Learning from English Learners in Mathematics: Voices Unheard, Methodologies Unused*-pp. 1, 2
- *2012 Election News*-p. 3
- *Message from President*-p. 3
- *TODOS Founding President Guest at President Obama's Advisory Commission* - p. 4
- *TODOS Members Present at NCTM Conference in Atlantic City*- p. 5
- *NCELA National Professional Development Grants focus on STEM Education*- p. 6
- *The CBMS Hosts Forum on Teaching Teachers in the Era of the Common Core* - p. 6
- *Information about TEEM journal*- p. 7
- *Why We Join TODOS*- p. 7

The mission of TODOS: Mathematics for ALL is to advocate for an equitable and high quality mathematics education for all students — in particular, Hispanic/Latino students — by increasing the equity awareness of educators and their ability to foster students' proficiency in rigorous and coherent mathematics.