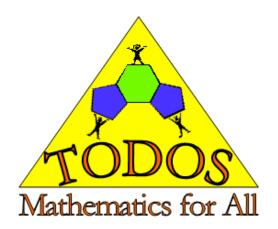
# **TODOS:** Mathematics for ALL

An Affiliate of the National Council of Teachers of Mathematics (NCTM)

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 advancing the professional growth and equity awareness of educators.

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# Bibliography of Diversity and Equity in Mathematics Education Second Edition Spring 2007

This second edition of the TODOS Bibliography of Diversity and Equity should be considered a work in progress and by no means complete.

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Chapters/Articles in Books

#### **Assessment in Mathematics Education**

#### **Journal Articles**

- Abedi, J., & Lord, C. (2001). The language factor in mathematics tests. *Applied Measurement in Education*, 14(3), 219–34.
- Gutstein, E. (2002). Math, SATs, and racial profiling. *Rethinking Schools: An Urban Educational Journal*, 16(4), 18-19.
- Lee, F.Y., et. al. (2002). Assessing the math performance of young ESL students. *Principal 81(3)*, 29-31.
- Llabre, M., & Cuevas, G. (1984). The effects of test language on mathematics achievement scores for Hispanic bilingual students. *Journal for Research in Mathematics Education*, 14, 318-24.
- Moschkovich, J.N. (1998). Rethinking authentic assessments of students' mathematical activity. *Focus on Learning Problems in Mathematics*, 20(4), 1-18.
- Tate, W.F. (1993). Advocacy versus economics: A critical race analysis of the proposed national assessment in mathematics. *Thresholds in Education, XIX*, 16-22.
- Tate, W.F. (1995). Economics, equity, and the national mathematics assessment: Are we creating a national tollroad? In E. Fennema, W. G. Secada, & L. Byrd (Eds.), *New Directions for Equity in Mathematics Education* (pp. 191-208). New York: Cambridge University Press.

#### **Chapters/Articles in Books**

- Garrison, L. (1999). Portafolio de matematicas: Using mathematics portfolios with Latino students. In L. Ortiz-Franco, N. Hernandez, & Y. De La Cruz (Eds.), *Changing Faces of Mathematics: Perspectives on Latinos and Latinas* (pp. 85-98). Reston, VA: National Council of Teachers of Mathematics.
- Lane, S., & Silver, E.A. (1999). Fairness and equity in measuring student learning using a mathematics performance assessment: Results from the QUASAR project. In A. L. Nettles & M. T. Nettles (Eds.), *Measuring up: Challenges minorities face in educational assessment* (pp. 97-120). Boston: Kluwer.

#### **Reports**

Secada, W. (1991). Evaluating the mathematics education of Limited English Proficient students in a time of educational change. ERIC Document Reproduction Services, No. 349828.

#### **Bilingual Education and Mathematics Education**

#### **Journal Articles**

- Brenner, M.E. (1998). Development of mathematical communication in problem solving groups by language minority students. *Bilingual Research Journal* 22(2-4), 149-74.
- Dawe, L. (1983). Bilingualism and mathematical reasoning in English as a second language. *Educational Studies in Mathematics*, 14, 325-53.
- Magiste, E. (1980). Arithmetic calculations in monolinguals and bilinguals. *Psychological research*, *42*, 363-73.
- Marsh L.G., & Maki, R.H. (1976). Efficiency of arithmetic operations in bilinguals as a function of language. *Memory and cognition*, *4*, 459-64.
- McClain, L., & Huang, J.S. (1982). Speed of simple arithmetic in bilinguals. *Memory & Cognition*, 10, 591-96.
- Medrano, M. (1988). The effects of bilingual education on reading and mathematics achievement: A longitudinal case study. *Equity and Excellence*, 23(4), 17-19.
- Mestre, J. Gerace, W., & Lochhead, J. (1982). The interdependence of language and translational math skills among bilingual Hispanic engineering students. *Journal of Research in Science Teaching*, 19(5), 399-410.
- Moschkovich, J. (2002). A situated and sociocultural perspective on bilingual mathematics learners. *Mathematical Thinking and Learning*, 4(2&3), 189-212.
- Moschkovich, J.N. (2007). Using two languages while learning mathematics. *Educational Studies in Mathematics*, 64 (2).
- Padilla, Amado M., & Gonzalez, R. (2001). Academic performance of immigrant and U.S.-born Mexican heritage students: Effects of schooling in Mexico and bilingual/English language instruction. *American Educational Research Journal* 38(3), 727-42.
- Paredes, S.M. (2000). How Proposition 227 influences the language dynamics of a first-and second-grade mathematics lesson. *Bilingual Research Journal*, 24(1), 179-98.
- Secada, W. (1991). Degree of bilingualism and arithmetic problem solving in Hispanic first graders. *Elementary School Journal*, *92*(2), 213-31.
- Tamamaki, K. (1993). Language dominance in bilinguals' arithmetic operations according to their language use. *Language learning*, 43(2), 239-62.

#### **Books**

Clarkson, P.C. (1991). Bilingualism and learning mathematics. Victoria, Australia: Deakin University Press.

#### **Chapters/Articles in Books**

- De Avila, E. (1988). Bilingualism, cognitive function, and language minority group membership. In R. Cocking and J. Mestre (Eds.), *Linguistic and Cultural Influences on Learning Mathematics* (pp. 101-21). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Moschkovich, J.N. (2000). Learning mathematics in two languages: Moving from obstacles to resources. In W. Secada (Ed.), *Changing the Faces of Mathematics (Vol. 1): Perspectives on multiculturalism and gender equity* (pp. 85-93). Reston, VA: NCTM.
- Moschkovich, J.N. (2002). A situated and sociocultural perspective on bilingual mathematics learners. In N. Nassir and P. Cobb (Eds.), *Mathematical Thinking and Learning*, *4*(2&3) (pp. 189-212). Special issue on Diversity, Equity, and Mathematical Learning.
- Moschkovich, J.N. (2007). Bilingual mathematics learners: How views of language, bilingual learners, and mathematical communication impact instruction. In N. Nassir and P. Cobb (Eds.), *Diversity, Equity, and Access to Mathematical Ideas*. New York: Teachers College Press.
- Secada, W.G., & De La Cruz, Y. (1996). Teaching mathematics with understanding to bilingual students. In J. L. Flores (Ed.), *Binational Programs Meeting the Needs of Migrant Students: A Handbook for Teachers and Administrators* (pp. 285-308). ERIC Clearinghouse on Rural Education and Small Schools.

#### **Reports**

Moschkovich, J. (2001). Models of learning mathematics in bilingual classrooms: Learning vocabulary, understanding multiple meanings, and participating in mathematical ways of talking. Available: http://peabody.vanderbilt.edu/depts/tan...ed/EquityProj/Redings/Moschkovich.html.

#### World Wide Web Resources

Center for Bilingual Education and Research (CBER) <a href="http://www.asu.edu/educ/cber">http://www.asu.edu/educ/cber</a>

*Educación Matemática*, a scholarly journal published by Grupo Editorial Iberoamerica <a href="http://www.engrupo.com.mx/gei/pubper.htm">http://www.engrupo.com.mx/gei/pubper.htm</a>

Search engine for mathematics education articles in Spanish <a href="http://redalyc.uaemex.mx/redalyc/src/inicio/ResBusAre.jsp">http://redalyc.uaemex.mx/redalyc/src/inicio/ResBusAre.jsp</a>

*Xixim*, on-line journal <a href="http://www.uaq.mx/matematicas/redm/redm.html">http://www.uaq.mx/matematicas/redm/redm.html</a>

#### Cultural, Political, and Social Context of Mathematics Education

#### **Journal Articles**

- Abreu, G. (1995). Understanding how children experience the relationship between home and school mathematics. *Mind, Culture, and Activity*, *2*: 119-42.
- Adler, J. (1995). Dilemmas and a paradox Secondary mathematics teachers' knowledge of their teaching in multicultural classrooms. *Teaching and Teacher Education*, 11(3), 263-74.
- Atweh, B., Bleicher, R.E., & Cooper, T.J. (1998). The construction of the social context of mathematics classrooms: A sociolinguistic analysis. *Journal for Research in Mathematics Education*, 29(1), 63-82.
- Bishop, A.J. (1988). The interactions of mathematics education with culture. *Cultural Dynamics*, *I*(2), 145-57.
- Brenner, M.E. (1998). Adding cognition to the formula for culturally relevant instruction in mathematics. *Anthropology and Education Quarterly*, 29(2), 214-44.
- Brenner, M.S. (1998). Meaning and money. *Educational Studies in Mathematics*, *36*, 123-55.
- Carraher, T. N., Carraher, D. W., & Schliemann, A. D. (1985). Mathematics in the streets and in the schools. *British Journal of Developmental Psychology*, *3*, 21-29.
- Civil, M. (2002). Culture and mathematics: A community approach. *Journal of Intercultural Studies*, 23, 133-48.
- Cuevas, G. (1995). Review of multiplication rap. *Teaching Children Mathematics*, *September*, 56.
- Gerdes, P. (1988). Culture and geometric thinking. *Educational Studies in Mathematics*, 22, 137-62.
- González, N., Andrade, R., Civil, M., & Moll, L.C. (2001). Bridging funds of distributed knowledge: Creating zones of practices in mathematics. *Journal of Education for Students Placed at Risk*, 6, 115-32.

- Gutstein, E., Lipman, P., Hernández, P., & de los Reyes, R. (1997). Culturally relevant mathematics teaching in a Mexican American context. *Journal for Research in Mathematics Education*, 28(6), 709-37.
- Ho, C., & Fuson, K. (1998). Children's knowledge of teen quantities as tens and ones; comparisons of Chinese, British and American kindergartners. *Journal of Educational Psychology*, *90*(3), 536-44.
- Joseph, G.G. (1987). Foundations of Eurocentrism in mathematics. *Race & Class*, 28(3), 13-28.
- Khisty, L. L., (1996). Making mathematics multicultural with meaning and empowerment. *Journal of Educational Issues of Language Minority Students*, 17(3),49-64.
- Lipka, J. (1994). Culturally negotiated schooling: Toward a Yup'ik mathematics. *Journal of American Indian Education*, 33(3), 14-30.
- Lesser, L. (2000). Reunion of broken parts. Experiencing diversity in algebra. *Mathematics Teacher*, 93(1), 62-67.
- Malloy, C.E., Jones, M.G. (1998). An investigation of African American students' mathematical problem solving. *Journal for Research in Mathematics Education*, 29(2), 143-63.
- Silver, E.A., Ghousseini, H., Gosen, D., Charalambous, C., & Strawhun, B.T.F. (2005). Moving from rhetoric to praxis: Issues faced by teachers in having students consider multiple solutions for problems in the mathematics classroom. *Journal of Mathematical Behavior*, 24, 287-301.
- Sleeter, C.E. (1997). Mathematics, multicultural education, and professional development. *Journal for Research in Mathematics Education*, 28(6), 680–96.
- Tate, W.F., Ladson-Billings, G., & Grant, C.A. (1993). The Brown decision revisited: Mathematizing social problems. *Educational Policy*, *3*, 255-75.
- Weissglass, J. (1996). Transforming schools into caring learning communities: The social and psychological dimensions of educational change. *Journal for a Just and Caring Education*, *2*(2), 175-89.

#### **Books**

Ascher, M. (1992). Mathematics elsewhere: An exploration of ideas across cultures. Princeton University Press.

- Atweh, W., Forgasz, H. & Nebres, B. (2001). Sociocultural research on mathematics education: An international perspective. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bishop, A.J. (1988). Mathematical enculturation: A cultural perspective on mathematics education. Dordrecht: Kluwer Academic Publishers.
- Cocking, R. and Mestre, J. (Eds.) (1988). Linguistic and cultural influences on learning mathematics. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Edwards, C.A. (Ed.) (1999). Changing the faces of mathematics: Perspectives on Asian Americans and Pacific Islanders. Reston, VA: NCTM.
- Hanks, J.E., & Fast, G.R. (Eds.) (2002). Perspectives on Indigenous people of North America. Reston, VA: NCTM.
- Lave, J. (1988). Cognition in practice: Mind, mathematics, and culture in everyday life. New York: Cambridge University Press.
- Lerman, S. (Ed.) (1994). Cultural perspectives on the mathematics classroom. Dordrecht: Kluwer Academic Publishers.
- Mellin-Olsen, S. (1987). The politics of mathematics education. Dordrecht: Reidel.
- Nieto, S. (2003). Affirming diversity: The sociopolitical context of multicultural education. New York, NY: Addison Wesley Longman.
- Orr, E.W. (1987). Twice as less: Black English and the performance of Black students in mathematics and science. New York: W. W. Norton.
- Ortiz-Franco, L., Hernandez, N., & De La Cruz, Y. (Eds.) (1999). Changing the faces of mathematics (Vol. 4): Perspectives on Latinos. Reston, VA: NCTM.
- Saxe, G. (1991). Culture and cognitive development: Studies in mathematical understanding. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Secada, W.G. (Series and volume 1 Ed). (1999-2001). Changing the faces of mathematics (6 vols). Reston, VA: NCTM.
- Secada, W.G. (Ed.) (2000). Perspectives on multiculturalism and gender equity. Reston, VA: NCTM.
- Strutchens, M., Johnson, M., & Tate, W.F. (Eds.) (2000). Changing the face of mathematics: Perspectives on African Americans. Reston, VA: NCTM.

#### **Chapters/Articles in Books**

- Burton, L. (1994). Whose culture includes mathematics? In S. Lerman (Ed.), *Cultural Perspectives on the Mathematics Classroom*. Dordrecht: Kluwer Academic Publishers.
- Civil, M. (2002). Everyday mathematics, mathematicians' mathematics, and school mathematics: Can we bring them together? In M. Brenner & J. Moschkovich (Eds.), *Everyday and Academic Mathematics in the Classroom*. Journal of Research in Mathematics Education Monograph #11 (pp. 40-62). Reston, VA: NCTM.
- Khisty, L. & Viego, G.(1999). Challenging conventional wisdom: A case study. In L. Ortiz-Franco, N. Hernandez, & Y. De La Cruz (Eds.) *Changing the Faces of Mathematics: Perspectives on Latinos and Latinas*. Washington, DC: NCTM.
- Lipman, P. and Gutstein, E. (2004). The politics and policies of education for cultural assimilation. In P. Lipman, (Ed.), *High-Stakes Education: Inequality, Globalization, and Urban School Reform* (pp. 105-137). New York: Routledge.
- Ortiz-Franco, L., & Flores, W. (2001) Sociocultural considerations and Latino mathematics achievement: A critical review. In B. Atweh, H. Forgasz, and B. Nebers (Eds.), *Sociocultural Research in Mathematics Education: An International Perspective*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Pinxten, R. (1994). Anthropology in the mathematics classroom. In S. Lerman (Ed.), *Cultural Perspectives on the Mathematics Classroom*. Dordrecht: Kluwer Academic Publishers.
- Tate, W.F. (1994). Diversity, reform, and professional knowledge of teachers: The need for multicultural clarity. In D. B. Aichele (Ed.), *Professional Development for Teachers of Mathematics* (pp. 55-66). Reston, VA: NCTM.
- Tate, W.F., Ladson-Billings, G., & Grant, C.A. (1996). The Brown decision revisited: Mathematizing social problems. In M. J. Shujaa (Ed.), *Beyond Desegregation: The Politics of Quality in African-American Schooling* (pp. 29-50). Thousand Oaks, CA: Corwin.

#### Proceedings, Policy Briefs, and Magazine Articles

Morales, H., Khisty, L.L., Chval, K. (2003). Beyond discourse: A multimodal perspective of learning mathematics in a multilingual context. In S. Dawson, (Ed.). *Proceedings of the 27<sup>th</sup> Conference of the International Group for the Psychology of Mathematics Education*, Honolulu, HI: University of Hawaii.

Olsen, J. (2006). A guide for integrating issues of social, political, and economic justice into mathematics curriculum. Available on-line from Radical Math Web site, <a href="http://www.radical\_math.org">http://www.radical\_math.org</a>.

#### World Wide Web Resources

Center for Research on Education, Diversity & Excellence http://www.crede.ucsc.edu/

### **Equity, Empowerment, and Social Justice in Mathematics Education**

#### **Journal Articles**

- Bartell, T. & Meyer, M. (In press). Exploring the equity principle in the mathematics classroom. *Mathematics Teacher*.
- Gerdes, P. (1985). Conditions and strategies for emancipatory mathematics education. *For the Learning of Mathematics*, *5*(*1*).
- Gutstein, E. (2001). Math, maps, and misrepresentation. *Rethinking Schools: An Urban Educational Journal*, 15,(3), 6-7.
- Gutstein, E. (2003). Home buying while brown or black: Teaching mathematics for racial justice. *Rethinking Schools: An Urban Educational Journal*, 18(1), 35-37.
- Gutstein, E. (2003). Teaching and learning mathematics for social justice in an urban, Latino school. *Journal for Research in Mathematics Education*, *34*(1), 37-73.
- Khisty, L. L. and Chval, K. (2002). Pedagogic discourse: Its role in equity and mathematics learning. *Mathematics Education Research Journal*, 14,(3),4-18.
- Ladson-Billings, G. (1997). It doesn't add up: African American students' mathematics achievement. *Journal for Research in Mathematics Education*, 28(6), 697–708.
- Lesser, L. (in press). Critical values and transforming data: Teaching statistics for social justice. *Journal of Statistics Education*.
- Lesser, L. (in press). Using 'objects' to object to objectification. *Teaching Tolerance*.
- Planas, N. & Civil, M. (2002). Understanding interruptions in the mathematics classroom: Implications for equity. *Mathematics Education Research Journal*, *14*(3), 169-89.
- Tate, W.F., & Rousseau, C. (2003). No time like the present: Reflecting on equity in school mathematics. In *Theory into Practice*, 42 (3), 210-216.

Weissglass, J. Ripples of hope: Building relationships for educational change. Santa Barbara, CA: National Coalition for Equity in Education.

#### **Books**

- Cheek, H., Cuevas, G., Jacobs, J., Knight, G., & Taylor, R. (1983). Handbook for conducting equity activities in mathematics education. Reston, VA: NCTM.
- Cuevas, G., & Driscoll, M. (Eds.) (1993). Reaching all students with mathematics. Reston, VA: NCTM.
- Gutstein, Eric. (2005). Rethinking mathematics: Teaching social justice by the numbers. Milwaukee: Rethinking Schools, Ltd.
- Jacobs, J.E., Becker, J.R., Gilmer, G.F. (Eds.) (2001). Perspectives on gender. Reston, VA: NCTM.
- Moses, R.P., & Cobb Jr., C.E. (2001). Radical equations: Math literacy and civil rights. Boston: Beacon Press.
- Secada, W.G., Fennema, E., and Byrd, L. (Eds.) (1995). New directions for equity in mathematics education. New York: Cambridge University Press.

#### **Chapters/Articles in Books**

- Diversity in Mathematics Education Center for Learning and Teaching publication (in press). Prioritizing equity in the work of mathematics education. In F. Lester (Ed.), *Second Handbook of Research on Mathematics Teaching and Learning*.
- Cuevas, G. (1995). Empowering all students to learn mathematics. In I. Carl (Ed.), Seventy-Five years of Progress: Prospects for School Mathematics. Reston, VA: NCTM.
- Gutstein, E. (2000). Increasing equity: Challenges and lessons from a state systemic initiative. In W. G. Secada (Ed.), *Changing the Faces of Mathematics: Perspectives on Multiculturalism and Gender Equity* (pp. 25-36). Reston, VA: National Council of Teachers of Mathematics.
- Kitchen, R.S. (2004). Making equity and multiculturalism explicit to transform the culture of mathematics education. In A.J. Rodriguez, & R.S. Kitchen (Eds.), *Preparing Mathematics and Science Teachers for Diverse Classrooms: Promising Strategies for Transformative Pedagogy* (pp. 33-60). Mahwah, NJ: Lawrence Erlbaum Associates.

- Malloy, C.E. (2002). Democratic access to mathematics through democratic education. In L. D. English, (Ed.), *Handbook of International Research in Mathematics Education*. Mahwah, NJ: LEA Associates.
- Roy, F.M. (2000). Technology and equity: A consistent vision for school mathematics? In W.G. Secada (Ed.), *Changing the Faces of Mathematics* (pp. 37-46). Reston, VA: National Council of Teachers of Mathematics.
- Secada, W. (1995). Social and critical dimensions for equity in mathematics education. In W. Secada, E. Fennema, & L.B. Adajian (Eds.), *New Directions for Equity in Mathematics Education*, (pp. 146-164). New York, NY: Cambridge University Press.
- Secada, W.G., (1999). Abandoning hierarchies, abandoning dichotomies. In L. Burton (Ed.), *Learning Mathematics: From Hierarchies to Networks* (pp. 83-87). London: Falmer.
- Secada, W.G., & Berman, P.W. (1999). Equity as a value-added dimension in teaching for understanding in school mathematics. In E. Fennema and T.A. Romberg (Eds.), *Classrooms that Promote Student Understanding in Mathematics* (pp. 33-42). Mahwah, NJ: Lawrence Erlbaum.
- Tate, W.F. (1996). Mathematizing and the democracy: The need for an education that is multicultural and social reconstructionist. In C. Grant & M.L. Gomez (Eds.), *Campus and Classroom: Making School Multicultural* (pp. 185-201). Columbus, OH: Merrill Publishing.
- Tate, W.F. (1997). Brown, Sputnik, and mathematics reform: Lessons from the past. In C. Teddlie & K. Lomotey (Eds.), *Readings on Equal Education: Forty Years after the Brown Decision: The Current and Future Sociological Implications of School Desegregation* (pp. 251-264). New York: AMS.
- Tate, W.F., & Rousseau, C. (2002). Access and opportunity: The political and social context of mathematics education. In L. English (Ed.), *International Handbook of Research in Mathematics Education* (pp. 271-300). Mahwah, New Jersey: Lawrence Erlbaum.
- Tate, W.F. (2005). School mathematics and African American students: The need to revisit opportunity-to-learn standards. In M.C. Brown & R.R. Land (Eds), *The Politics of Curriculum Change*. Peter Lang.
- Weissglass, J. (2000). No compromise on equity in mathematics education: Developing an infrastructure. In W. Secada, (Ed.), *Changing the Faces of Mathematics*. Reston, VA: National Council of Teachers of Mathematics.

#### Reports

- Bohl, J. (1999). Teaching mathematics for American democracy project. Madison, WI: University of Wisconsin-Madison.
- Lee, O., Secada, W., Kitchen, R., Roy, F., & Dantley, S. (2003). Teachers' conceptions and practices in mathematics and science instruction for culturally and linguistically diverse elementary students. Report to the National Science Foundation from the Urban Institute, Washington, DC.

#### **Proceedings, Policy Briefs, and Magazine Articles**

Khisty, L.L. (1994). On the social psychology of mathematics instruction: Critical factors for an equity agenda. In J.P. da Ponte and J. Matos (Ed.), *Proceedings of the Eighteenth Annual Conference of the International Group for the Psychology of Mathematics Education*, *3*, 89-96. Lisboa, Portugal: Universidade de Lisboa.

#### **Dissertations**

Gau, T.R. (2005). Learning to teach mathematics for social justice. Dissertation Abstracts International, 66 (08), p. 2871.

#### World Wide Web Resources

The National Coalition for Equity in Education, University of California, Santa Barbara <a href="http://ncee.education.ucsb.edu/">http://ncee.education.ucsb.edu/</a>

# **English Language-Learners, ESL and LEP Students in Mathematics Education**

#### **Journal Articles**

- Bresser, R. (February 2003). Helping English-Language Learners develop computational fluency. *Teaching Children Mathematics*, 9 (6), 294-99.
- Chamot, A. U., Dale, M., O'Malley, J. M., Spanos, G. A. (1992). Learning and problem solving strategies of ESL students. *Bilingual Research Journal*, *16*(*3-4*), 1-16.
- Cuevas, G. (1984). Mathematics learning in English as a second language. *Journal for Research in Mathematics Education*, 15, 134-44.
- Cuevas, G. (1991). Developing communication skills in mathematics for students with limited English proficiency. *Mathematics Teacher*, *84*, 186-89.

- Dixon, J. K. (1995). Limited English proficiency and spatial visualization in middle school students' construction of the concepts of reflection and rotation. *Bilingual Research Journal*, 19(2), 221-47.
- Garrison, L. (1997, November). Making the NCTM standards work for emergent English speakers. *Teaching Children Mathematics*, *4*(*3*),132-38.
- Kimball, M.H. (1990). How can we best help ESL students? *Mathematics Teacher*, 83, 604-05.
- Lee, H., et. al. (January 2004). Limited-English-Proficient (LEP) students and mathematical understanding. *Mathematics Teaching in the Middle School*, *9*(5), 269-72.
- McCargo, C. (Fall 1999). Addressing the needs of English-language learners in science and math classrooms. *ERIC Review*, 6(2), 52-4.
- Moschkovich, J.N. (1999). Supporting the participation of English language learners in mathematical discussions. *For the Learning of Mathematics*, 19(1), 11-19.
- Setati, M. (1998). Code-switching and mathematical meaning in a senior primary class of second language learners. *For the Learning of Mathematics*, 18(1), 34-40.
- Wang, J., & Goldschmidt, P. (1999). Opportunity to learn, language proficiency, and immigrant status effects on mathematics achievement. *The Journal of Educational Research*, 93(2), 101-11.

#### **Books**

- Adler, J. (2001). Teaching mathematics in multilingual classrooms. Dordrecht, The Netherlands: Kluwer Academic Press.
- Coggins, D., Kravin, D., Coates, G. D., Carroll, M. D. (2007). English Language Learners in the mathematics classroom. Thousand Oaks, CA: Corwin Press.
- Cummins, J. (2003). Supporting ESL students in learning the language of mathematics: Issues and trends. Chicago, IL: Pearson/Scott Foresman.

#### **Dissertations**

Hansen-Thomas, H. (2005). Learning to use math discourse in a standards-based, reformoriented middle school classroom: How Latina/o ELLs become socialized into the math community of practice. Unpublished dissertation, The University of Texas at San Antonio.

#### **Chapters/Articles in Books**

- Corasaniti, T.D., & Cuevas, G. (1987). Mathematics and English as a second language. In J. Crandall (Ed.), *ESL through Content Instruction: Mathematics, Science, and Social Studies*. Englewood Cliffs, NJ: Prentice Hall.
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.), *Schooling and Language Minority Students: A Theoretical Framework* (pp. 3-49). Los Angeles: Evaluation, Dissemination and Assessment Center, California State University, Los Angeles.
- Garrison, L. and Mora, J.K. (1999). Adapting mathematics instruction for English-language learners. In L. Ortiz-Franco, N. Hernandez, & Y. De La Cruz (Ed.), *Changing Faces of Mathematics: Perspectives on Latinos and Latinas* (pp. 35-48). Reston, VA: NCTM.
- Moschkovich, J.N. (in press). Beyond words to mathematical content: Assessing English Learners in the mathematics classroom. In A. Schoenfeld (Ed.), *Assessing Mathematical Proficiency*. New York: Cambridge University Press.

#### **Reports and Teacher Guides**

- Cuevas, J.A. (1996). Educating Limited-English Proficient students: A review of the research on school programs and classroom practices. Far West Laboratory for Educational Research and Development.
- Jasper, B., Huber, J. et al. (2005). Teachers guide to teaching mathematics for English language learners. Retrieved on-line, February 8, 2007, from <a href="http://www.education.txstate.edu/epic/mellwebdocs/MELLtgpt123.htm">http://www.education.txstate.edu/epic/mellwebdocs/MELLtgpt123.htm</a>

#### **World Wide Web Resources**

Directory of ESL Programs in the United States <a href="http://www.globalstudy.com/embark/us/">http://www.globalstudy.com/embark/us/</a>

ESL Magazine <a href="http://www.eslmag.com">http://www.eslmag.com</a>

Texas State University System Mathematics for English Language Learners (MELL) <a href="http://www.tsusmell.org/productsforeducators.html">http://www.tsusmell.org/productsforeducators.html</a>

#### **Ethnomathematics**

#### **Journal Articles**

- D'Ambrosio, U. (1985). Ethnomathematics and its place in the history and pedagogy of mathematics. *For the Learning of Mathematics*, *5*(1), 44-48.
- Duane E. Schindler, D. D. (1985). Language, culture, and the mathematics concepts of American Indian learners. *Journal of American Indian Education*, 24(3).
- Lesser, L. (2006). Book of numbers: Exploring Jewish mathematics and culture at a Jewish high school. *Journal of Mathematics and Culture*, *1*(1), 8-31.

#### **Books**

- Ascher, M. (1991). Ethnomathematics: A multicultural view of mathematical ideas. Pacific Grove, CA: Brooks/Cole Publishing Company.
- D'Ambrosio, U. (1985). Socio-cultural bases for mathematics education. Brasil: Unicamp.
- Gerdes, P. (1999). Geometry from Africa: Mathematical and educational explorations. Washington, DC: The Mathematical Association of America.
- Pinxten, R., Soberon, E., & van Dooren, I. (1987). Towards a Navajo Geometry. Gent: KKI Publishers.
- Powell, A., & Frankenstein, M. (1997). Ethnomathematics: Challenging Eurocentrism in mathematics education. Albany, NY: State University of New York Press.
- Zaslavsky, C. (1973). Africa counts. Westport, Connecticut: Lawrence Hill & Company.

#### World Wide Web Resource

"Geometry step-by-step from the Land of the Incas," retrieved on-line from <a href="http://agutie.homestead.com/Files/geometry\_inca\_awards.htm">http://agutie.homestead.com/Files/geometry\_inca\_awards.htm</a>.

# **Language and Communication in Mathematics Education**

#### **Journal Articles**

Aiken L. (1971). Verbal factors and mathematics learning: A review of research. *Journal for Research in Mathematics Education*, 305-31.

- Anhalt, C., Ondrus, M. & Horak, G. (in press). Issues of language: Insights from middle school teachers' participation in a mathematics lesson in Chinese. *Mathematics Teaching in the Middle School*, Reston, VA: NCTM.
- Barwell, R. (2003). Patterns of attention in the interaction of a primary school mathematics student with English as an additional language. *Educational Studies in Mathematics*, *53* (1), 35-59.
- Cuevas, G., & Beech, M. (1984). A second language approach to mathematics skills: Application for limited-English proficient students with learning disabilities. *Learning Disabilities Quarterly*, *6*, 489-95.
- Greenwald, S. (2000). The use of letter writing projects in teaching geometry. *Primus*, 10(1), 1-14.
- Gutiérrez, R. (2002). Beyond essentialism: The complexity of language in teaching mathematics to Latina/o students. *American Educational Research Journal*, *39*, 1047-1088.
- Herbel-Eisenmann, B. A. (2002). Using student contributions and multiple representations to develop mathematical language. *Mathematics Teaching in the Middle School* 8(2) 100–05.
- Kitchen, R.S. (2004). Challenges associated with developing discursive classrooms. *Mathematics Teacher*, *97(1)*.
- Lager, C.A. (2006). Types of mathematics-reading interactions that unnecessarily hinder algebra learning and assessment. *Reading Psychology*, 27 (2-3), 165-204.
- MacGregor, E.P. (1999). An exploration of aspects of language proficiency and algebra learning. *Journal for Research in Mathematics Education*, 30(4), 449–67.
- Miller, L.D. (1993). Making the connection with language. *Arithmetic Teacher*, 40, 311-16.
- Moschkovich, J.N. (in press). Examining mathematical discourse practices. *For the Learning of Mathematics*.
- Ortiz-Franco, L. (1990). Interrelationships of seven mathematical abilities across languages. *Hispanic Journal of Behavioral Sciences*, *12*, 299-312.
- Roberts, T. (1998). Mathematical registers in aboriginal languages. For the Learning of Mathematics, 18,(1), 10-16.

- Schleppegrell, M.J. (in press). The linguistic challenges of mathematics teaching and learning. *Reading and Writing Quarterly*. Available on-line (in press), http://sitemaker.umich.edu/soe/az\_info/da.data/670749/People\_Download\_4/schleppegrell\_r\_w\_q.doc
- Setati, M., & Adler, J. (2001). Between languages and discourses: Code switching practices in primary classrooms in South Africa. *Educational Studies in Mathematics*, 43, 243-69.
- Silbey, R. (2003). Math out loud! Heard the word? Talking and writing about math boosts understanding in a big way. *Instructor*, 112(7), 24.
- Tuiren, A & Lipkin, L. (Spring 2003). Watch your language! Recommendations to help students communicate mathematically. *Reading Improvement*, 40(1), 3.
- Wakefield, D.V. (Spring 2000). Math as a second language. *The Educational Forum*, 64(3), 272-79.
- Wilde, S. (1991). Learning to write about mathematics. Arithmetic Teacher, 38(6), 38-43.

#### Books

- Bickmore-Brand, J. et al (1993). Language in mathematics. Porstmouth, NH: Heinemann.
- Durkin, K. and Shire, B. (1991). Language in mathematical education. Great Britain: Open University Press.
- Ellerton, N.F., & Clements, M.A. Mathematics in language: A review of language factors in mathematics learning. Victoria, Australia: Deakin University Press.
- Schwartzman, S. (1994). The words of mathematics: An etymological dictionary of mathematical terms used in English. Washington, D.C.: Mathematical Association of America.

#### **Dissertation Abstracts**

- Lager, C. (2002). Etching a 21<sup>st</sup> century rosetta stone for K-12 mathematics: Unlocking the language of mathematics to ensure our English learners acquire Algebra. University of California, Los Angles. Dissertation Abstracts.
- Pimm, D. (1987). Speaking mathematically: Communication in mathematics classrooms. London: Routledge & Kegan Paul.

#### **Chapters/Articles in Books**

- Brenner, M.E. (1994). A communication framework for mathematics: Exemplary instruction for culturally and linguistically diverse students. In B. McLeod (Ed.). *Language and Learning: Educating Linguistically Diverse Students*, (pp. 233-67). Albany: SUNY Press.
- Charbonneau, M. P., & John-Steiner, V. (1988). Patterns of experience and the language of mathematics. In R. R. Cocking, & J. P. Mestre (Eds.), *Linguistic and Cultural Influences on Learning Mathematics* (pp. 91-100). Hillsdale, NJ: Lawrence Erlbaum Associates
- Cocking, R., & Chipman S. (1988). Conceptual issues related to mathematics achievement of language minority children. In R. Cocking and J. Mestre (Eds.), *Linguistic and Cultural Influences on Learning Mathematics*. Hillsdale, NJ, Lawrence Erlbaum.
- Cocking, R., & Mestre, J. (1988). Considerations of language mediators of mathematics learning. In R. Cocking and J. Mestre (Eds.), *Linguistic and Cultural Influences on Learning Mathematics*. Hillsdale, NJ, Lawrence Erlbaum.
- Cuevas, G. (1983). Language proficiency and the development of mathematical concepts in Hispanic primary school students. In T.H. Escobedo (Ed.), *Early Childhood Bilingual Education: A Hispanic Perspective* (pp. 148-63). New York, NY: Teachers College Press.
- Cuevas, G. (1985). Mathematics education in a second language: An instructional and teacher education model. In S. Jaeger (Ed.), *Issues in Language Development* (pp. 91-96). Rosslyn, VA: InterAmerica Research Associates, Inc..
- Cuevas, G. (1989). Mathematics: Are you speaking my language? In R. Cocking and J. Mestre (Eds.), *Review of Linguistic and Cultural Influences on Learning Mathematics*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Cuevas, G. (1990). Increasing the achievement and participation of language minority students in mathematics education. In T.J. Cooney and C.R. Hirsch (Eds.), *Teaching and Learning Mathematics in the 1990s: 1990 Yearbook of the National Council of Teachers of Mathematics*. Reston, VA: National Council of Teachers of Mathematics.
- Dale, T. C., Cuevas, G. J. (1992). Integrating mathematics and language learning. In P. A. Richard-Amato & M. A. Snow (Eds.), *The Multicultural Classroom: Readings for Content-Area Teachers*. White Plains, NY: Longman.
- Durkin, K. & Shire, B. (1991). Lexical ambiguity in mathematical contexts. In K. Durkin and B. Shire (Eds.). *Language in Mathematical Education* (pp. 71-84). Great Britian: Open University Press.

- Khisty, L.L. (1995). Making inequality: Issues of language and meanings in mathematics teaching with Hispanic students. In W. Secada, E. Fennema, & L. Adajian (Eds.), *New Directions for Equity in Mathematics Education*. Cambridge University Press.
- Khisty, L.L. (1996). Children talking mathematically in multilingual classrooms: Issues in the role of language. In H. Mansfield, N. Pateman, & N. Bednarz (Eds.), *Mathematics for Tomorrow's Young Children: International Perspectives on Curriculum*. Boston, MA: Kluwer Academic Publishers.
- Mestre, J.P. (1988). The role of language comprehension in mathematics and problem solving. In R.R. Cocking and J.P. Mestre, (Eds.) *Linguistic and Cultural Influences on Learning Mathematics: The Psychology of Education and Instruction*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Myers, D.E., Milne, A.M. (1988). Effects of home language and primary language on mathematics achievement: A model and results for secondary analysis. In R.R. Cocking and J.P. Mestre, (Eds.) *Linguistic and Cultural Influences on Learning Mathematics: The Psychology of Education and Instruction*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Pilar, R. (1999). Spanish-English language issues in the mathematics classroom. In N.G. H. Luis Ortiz-Franco, & Y. De La Cruz (Ed.), *Changing the Faces of Mathematics* (Vol. Perspectives on Latinos, pp. 23–34). Reston, VA: National Council of Teachers of Mathematics.
- Saxe, G. (1988). Linking language with mathematics achievement. In R. Cocking and J. Mestre (Eds.) *Linguistic and Cultural Influences on Learning Mathematics* (pp. 259-93). Hillsdale, NJ: Lawrence Erlbaum.
- Spanos, G., Rhodes, N., Dale, T., & Crandall, J. (1988). Linguistic features of mathematical problem solving. In R. Cocking and J. Mestre (Eds.), *Linguistic and Cultural Influences on Learning Mathematics* (pp. 221-40). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Spanos, G. & Crandall, J. (1990). Language and problem solving: Some examples from math and science. In A. M. Padilla, H. H. Fairchild, & C. M. Valadez (Eds.), *Bilingual Education: Issues and Strategies* (pp. 157-170). Beverly Hill, CA: Sage.

#### Proceedings, Policy Briefs, and Magazine Articles

Khisty, L.L. (2001). Effective teachers of second language learners in mathematics. In M. van den Heuvel-Panhuizen, (Ed.). *Proceedings of the 25<sup>th</sup> Conference of the International Group for the Psychology of Mathematics Education*, 225-232. Utrecht, The Netherlands: The Freudenthal Institute, Utrecht University.

Lager, C.A. (2004). Unlocking the language of mathematics to ensure our English learners acquire algebra. University of California All Campus Consortium on Research for Diversity, Retrieved on-line from <a href="http://ucaccord.gseis.ucla.edu/publications/pubs/pb-006-1004.pdf/">http://ucaccord.gseis.ucla.edu/publications/pubs/pb-006-1004.pdf/</a>

#### **World Wide Web Resources**

Center for Applied Linguistics <a href="http://www.cal.org/">http://www.cal.org/</a>

#### Mathematics Education in the Urban Classroom or School

#### **Journal Articles**

- Fuson, K., Smith, S., & Lo Cicero, A.M. (1997). Supporting Latino first graders' tenstructured thinking in urban classrooms. *Journal for Research in Mathematics Education*, 28(6), 738-66.
- Secada, W.G. (1996). Urban students acquiring English and learning mathematics in the context of reform. *Urban Education*, *30*, 422-48.
- Silver, E. A., & Stein, M. K. (1996). The QUASAR project: The "revolution of the possible" in mathematics instructional reform in urban middle schools. *Urban Education*, *30* (4), 476-521.
- Tate, W.F. (1994). Mathematics standards and urban education: Is this the road to recovery? *Educational Forum*, *58*, 380-90.
- Tate, W.F. (1996). Urban schools and mathematics reform: Implementing new Standards. *Urban Education*, *30*, 371-78.

#### **Books**

- Campbell, P. F., & Silver, E. A. (1999). *Teaching and learning mathematics in poor communities*. Reston, VA: NCTM.
- Cox, G., Cuevas, G., Rudnick, J., & Strong, D. (1980). Mathematics in urban school teaching. Reston, VA: NCTM.

#### **Chapters/Articles in Books**

Secada, W.G., Cueto, S., & Andrade, F. (2003). Opportunity to learn mathematics among Aymara-, Quechua-, and Spanish-speaking rural and urban, fourth and fifth graders in Puno, Peru. In L. Burton (Ed.), *Which Way Social Justice in Mathematics Education?* Greenwish, CT: Greenwood Publishing.

Webb, N., Heck, D., & Tate, W. (1996). A case study of the Urban Mathematics Collaborative. In S. A. Raizen & E. D. Britton (Eds.), *Case Studies in U.S. Innovations in Mathematics Education* (pp. 245-360). Dordrecht, The Netherlands: Kluwer.

#### **Parental Involvement in Mathematics Education**

#### **Journal Articles**

- Anhalt, C., Allexsaht-Snider, M. & Civil, M. (2002). Middle school mathematics classrooms: A place for Latina parents' involvement. *Journal of Latinos and Education*, 1(4), 255-62.
- Peressini, D.D. (1998). The portrayal of parents in the school mathematics reform literature: Locating the context for parental involvement. *Journal for Research in Mathematics Education*, 29(5), 555–82.

#### **Chapters/Articles in Books**

- Civil, M. (2001). Adult learners of mathematics: Working with parents. In G. E. FitzSimons, J. O'Donoghue, D. Coben (Eds.), *Adult and Lifelong Education in Mathematics* (pp. 201-10). Melbourne, Vic. Australia: Language Australia.
- LoCicero, A. M., K.C.F., Allexsaht-Snider, M. (1999). Mathematizing children's stories, helping children solve word problems, and supporting parental involvement. In L. Ortiz-Franco, Y. De La Cruz (Eds.), *Changing the faces of mathematics* (Vol. Perspectives on Latinos). Reston, VA: National Council of Teachers of Mathematics.

#### Proceedings, Policy Briefs, and Magazine Articles

Civil, M. (1999). Parents as resources for mathematical instruction. In M. van Groenestijn & D. Coben (Eds.), *Mathematics as part of lifelong learning* (*Proceedings of the fifth international conference of Adults Learning Maths - A research forum*, pp.216-222. London, UK: Goldsmiths College.

# Pedagogy, Curriculum, and Standards in Mathematics Education

#### **Journal Articles**

Boaler, J. (2002). Learning from teaching: Exploring the relationship between reform curriculum and equity. *Journal for Research in Mathematics Education*, 33(4), 239-258.

- Brenner, M. E., Herman, S., Ho, H-Z., & Zimmer, J. M. (1999). Cross-National comparisons of representational competence. *Journal for Research in Mathematics Education*, 30(5), 541-57.
- Brenner, M., & Moschkovich, J. (2002). Everyday and academic mathematics: Implications for the classroom. Monograph Number 11 in the series published by the *Journal for Research in Mathematics Education*.
- Civil, M. & Kahn, L. (2001). Mathematics instruction developed from a garden theme. *Teaching Children Mathematics*, 7, 400-05.
- D'Ambrosio, B.S. (1991). The modern mathematics reform movement in Brazil and its consequences for Brazilian mathematics education. *Educational Studies in Mathematics*, 22, 69-85.
- Edwards, L.D. (May 2003). Collaborative problem solving in mixed-language groups. *Teaching Children Mathematics*, *9*(*9*), 534-38.
- Gandara, P. (2006). Strengthening the academic pipeline leading to careers in Math, Science and Technology for Latino students. *Journal of Hispanic Higher Education*, (5), 222. Also available on-line from http://jhh.sagepub.com/cgi/content/abstract/5/3/222.
- Khisty, L.L. (2002). Mathematics learning and the Latino student: Suggestions from research for classroom practice. *Teaching Children Mathematics*, 9, (1), 32-35.
- Moschkovich, J.N. (1996). Moving up and getting steeper: Negotiating shared descriptions of linear graphs. *The Journal of the Learning Sciences*, 5(3), 239-77.
- Moschkovich, J.N. (1998). Resources for refining conceptions: Case studies in the domain of linear functions. *The Journal of the Learning Sciences*, 7(2), 209-37.
- Schoenfeld, A. (2002). Making mathematics work for all children: Issues of standards, testing, and equity.
- Silver, E.A. (2000). Improving mathematics teaching and learning: How can principles and standards help? *Mathematics Teaching in the Middle School*, 6 (1), 20-23.
- Tate, W.F. (1995). Returning to the root: A culturally relevant approach to mathematics pedagogy. *Theory into Practice*, *3*, 166-73.
- Tate, W.F. (1995). School mathematics and African American students: Thinking seriously about opportunity-to-learn standards. *Educational Administration Quarterly*, 31, 424-48.

Weissglass, J., & Heckman, P. (1994). Contextualized mathematics instruction: Moving beyond recent proposals. For the Learning of Mathematics, 14(1), 29-33.

#### **Books**

- Boaler, J. (2002). Experiencing school mathematics: Traditional and reform approaches to teaching and their impact on student learning. Mahweh, New Jersey: Lawrence Erlbaum Associates.
- Davis, P.J., & Hersh, R. (1980). The mathematical experience. Boston: Birkhauser.
- Ernest, P. (1991). The philosophy of mathematics education. London: Falmer Press.
- Frankenstein, M. (1989). Relearning mathematics. A different third R-Radical maths. London: Free Association Books.
- Gamoran, A., Anderson, C.W., Quiroz, P.A., Secada, W.G., Williams, T., & Ashman, S. (2003). Transforming teaching in math and science. New York: Teachers College Press
- National Research Council (2001). Educating teachers of science, mathematics and technology: New practices for the new millennium. Washington, DC: National Academy Press.
- Nicholds, E.D., & Schwartz, S.L. (1993). Mathematics dictionary and handbook. Honesdale, PA: Schwartz Publishing.
- Rodriguez, A.J. & Kitchen, R.S. (Editors) (2005). Preparing mathematics and science teachers for diverse classrooms: Promising strategies for transformative pedagogy. Mahwah, NJ: Lawrence Erlbaum Associates.
- Senk, S., & Thompson, D.R. (Eds.) (2002). Standards-based school mathematics curricula: What are they? What do students learn? Mahwah, NJ: Lawrence Erlbaum Associates.
- Skovsmose, O. (1994). Towards a philosophy of critical mathematics education. Dordrecht, Kluwer.
- Tymoczko, T. (1986). New directions in the philosophy of mathematics. Boston: Birkhauser.

#### **Chapters/Articles in Books**

- Civil, M.& Andrade, R. (2002). Transitions between home and school mathematics: Rays of hope amidst the passing clouds. In G. de Abreu, A.J. Bishop, N.C. Presmeg (Eds.), *Transitions between Contexts of Mathematical Practices* (pp. 149-69). Dordrecht: Kluwer.
- Kahn, L. & Civil, M. (2001). Unearthing the mathematics of a classroom garden. In E. McIntyre, A. Rosebery, & N. González (Eds.) *Classroom Diversity: Connecting School to Students' Lives* (pp. 37-50). Portsmouth, NH: Heinemann.
- Khisty, L.L. (1997). Making mathematics accessible to Latino students: Rethinking instructional practice. In J. Trentacosta and M. Kenney (Eds.), *Multicultural and Gender Equity in the Mathematics Classroom: The Gift of Diversity*, 97th Yearbook of the National Council of Teachers of Mathematics. Washington, D.C.: National Council of Teachers of Mathematics.
- Kitchen, R.S. & Lear, J.M. (2000). Mathematizing Barbie: Using measurement as a means for girls to analyze their sense of body image. In W. Secada, (Ed.), *Changing the Faces of Mathematics* (pp. 67-74). Reston, VA: National Council of Teachers of Mathematics.
- Lesser, L.M., & Blake, S. (2006). Mathematical power: Exploring critical pedagogy in mathematics and statistics. In C. Rossatoo, R.L. Allen, & M. Pruyn (Eds.), *Reinventing Critical Pedagogy: Widening the circle of Anti-Oppression Education* (159-173). New York: Rowman & Littlefield.
- Malloy, C.E. & Jones, M.G. (2002). An investigation of African-American students' mathematical problem solving. In J. Sowder & B. Schappelle (Eds.), *Lessons Learned for Research* (pp. 191-196). Reston, VA: NCTM.
- Moore, J. (2004). Transformative mathematics pedagogy: From theory to practice, research, and beyond. In A.J. Rodriguez, & R.S. Kitchen (Eds.), *Preparing Mathematics and Science Teachers for Diverse Classrooms: Promising Strategies for Transformative Pedagogy* (pp. 185-204). Mahwah, NJ: Lawrence Erlbaum Associates.
- Moschkovich, J.N. (1999). Understanding the needs of Latino students in reform-oriented mathematics classrooms. In L. Ortiz-Franco, N. Hernandez, and Y. De La Cruz (Eds.), *Changing the Faces of Mathematics (Vol. 4): Perspectives on Latinos*. Reston, VA: NCTM.
- Moschkovich, J.N. (2002). An Introduction to examining everyday and academic mathematical practices. In M. Brenner & J. Moschkovich (Eds.), Everyday and academic mathematics: Implications for the classroom. *Journal for Research in Mathematics Education* (pp. 1-11), Monograph Number 11.

- Porter, A. (1990). Good teaching of worthwhile mathematics to disadvantaged students. In M. S. Knapp & P. M. Shields (Eds.), *Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom Vol. II*, (pp. V1-V22). Washington, DC: U.S. Department of Education. Office of Planning, Budget & Evaluation.
- Silver, E.A. (1996). Moving beyond learning alone and in silence: Observations from the QUASAR project concerning some challenges and possibilities of communication in mathematics classrooms. In L. Schauble, & R. Glaser (Eds.), *Innovations in Learning: New Environments for Education* (pp. 289-325). Mahwah, NJ: Lawrence Erlbaum Associates.

#### Reports

- Civil, M., Andrade, R., González, N. (2001). Linking Home and School: A Bridge to the Many Faces of Mathematics (BRIDGE). Santa Cruz, CA: Center for Research on Education, Diversity & Excellence.

  [http://www.crede.ucsc.edu/research/md/intro4 2.shtml].
- Cuevas, G., Dale, T., Tokar, R., Richardson, G., & Willetts. (1988). Strategies for integrating language and content instruction in mathematics. Washington, DC: Center for Applied Linguistics.
- Tate, W. F. (1998). More coursework benefits all students. *WCER Highlights*, 10(1), 1, 2, 5. (Adapted from Journal for Research in Mathematics Education, 28(6), December 1997).

#### **Proceedings, Policy Briefs, and Magazine Articles**

- Bishop, A., & Abreu, G. (1991). Children's use of outside-school knowledge to solve mathematics problems in-school. In F. Furinghetti (Ed.), Proceedings of the Fifteenth International Conference for the Psychology of Mathematics Education 1, 128-135. Assisi, Italy.
- Civil, M., Planas, N., & Fonseca, J.D. (2000). La atención a la diversidad en el aula de matemáticas: Hacia una participación pedagógica y matemática [Paying attention to diversity in the mathematics classroom: Towards pedagogical and mathematical participation]. *Uno: Revista de Didáctica de las Matemáticas*, 23, 29-42.
- D'Ambrosio, U. (1983). Successes and failures of mathematics curricula in the past two decades: A developing society viewpoint in a holistic framework. *Proceedings of the Fourth International Congress of Mathematical Education*, pp. 362-364, Boston.
- Khisty, L.L., (1997). Change in mathematics education: Rethinking systemic practice. In E. Pehkonen (Ed.), *Proceedings of the Twenty-first Annual Conference of the International Group for the Psychology of Mathematics Education.* 3, 129-135. Lahti, Finland: University of Helsinki.

Khisty, L.L. (1998). Talking math: Proposal for school change. In A. Olivier and K. Newstead (Eds.), *Proceedings of the Twenty-second Annual Conference of the International Group for the Psychology of Mathematics Education*. 1, 97-104. Stellenbosch, South Africa: University of Stellenbosch.

#### **World Wide Web Resources**

Eisenhower National Clearinghouse <a href="http://goenc.com/">http://goenc.com/</a>

EQUALS, Lawrence Hall of Science, University of California, Berkeley <a href="http://equals.lhs.berkeley.edu/">http://equals.lhs.berkeley.edu/</a>

Fundacion Cientec

http://www.cientec.or.cr/

History of Mathematics:

http://www-groups.dcs.st-and.ac.uk/~history/Indexes/HistoryTopics.html

The K-12 Mathematics Curriculum Center http://www2.edc.org/mcc/

The Math Learning Center <a href="http://www.mathlearningcenter.org/">http://www.mathlearningcenter.org/</a>

MATHCOUNTS Home Page

http://www.mathcounts.org/

Mathematical Association of America

http://www.maa.org/

Math Forum

http://mathforum.org/dr.math/

National Academy of Sciences

http://www.nas.edu

National Council of Teachers of Mathematics

http://www.nctm.org

National Science Foundation

http://www.nsf.gov/

Problem Solving Activities from Canada

http://www.stfx.ca/special/mathproblems/welcome.html

Project 2061 of the American Association for the Advancement of Science <a href="http://www.project2061.org/">http://www.project2061.org/</a>

ShowMe Center Home

http://www.showmecenter.missouri.edu/showme/Curricula.htm

Sociedad Andaluza de Educación Matemática Thales (SAEM Thales), Sevilla <a href="http://hales.cica.es/documentos/estandares.pdf/">http://hales.cica.es/documentos/estandares.pdf/</a>

Sociedad Argentina de Educación Matemática (Soarem) <a href="http://www.soarem.org.ar/">http://www.soarem.org.ar/</a>

Sociedad Canaria "Issac Newton" de Profesores de Matemáticas, Canary Islands <a href="http://www.sinewton.org/">http://www.sinewton.org/</a>

Sociedad Chilean de Educación Matemática (SEIEM) <a href="http://www.sochiem.cl/sochiem2006/index.php">http://www.sochiem.cl/sochiem2006/index.php</a>

Sociedad Española de Investigación en Educación Matemática (SEIEM) http://www.ugr.es/~seiem/

Society for Advancement of Chicanos and Native Americans in Science <a href="http://www.SACNAS.org/">http://www.SACNAS.org/</a>

Third International Mathematics and Science Study (TIMSS) <a href="http://timss.bc.edu/">http://timss.bc.edu/</a>

U.S. Department of Education <a href="http://www.ed.gov/index.jhtml">http://www.ed.gov/index.jhtml</a>

# **Professional Development in Mathematics Education**

#### **Journal Articles**

Mestre, J., & Gerace, W. (1986). A study of the algebra acquisition of Hispanic and Anglo ninth graders: Research findings relevant to teacher training and classroom practice. *NABE Journal*, 10, 137-67.

#### **Books**

Stein, M. K., Smith, M. S., Henningsen, M. A., & Silver, E. A. (2000). Implementing standards-based mathematics instruction: A casebook for professional development. New York: Teachers College Press.

#### **Chapters/Articles in Books**

- Dunn, T.K. (2004). Engaging prospective teachers in critical reflection: Facilitating a disposition to teach mathematics for diversity. In A.J. Rodriguez, & R.S. Kitchen (Eds.), *Preparing Mathematics and Science Teachers for Diverse Classrooms: Promising Strategies for Transformative Pedagogy* (pp. 143-60). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ensign, J. (2004). Helping teachers use students' home cultures in mathematics lessons: Developmental stages of becoming effective teachers of diverse students. In A.J. Rodriguez, & R.S. Kitchen (Eds.), *Preparing Mathematics and Science Teachers for Diverse Classrooms: Promising Strategies for Transformative Pedagogy* (pp. 225-42). Mahwah, NJ: Lawrence Erlbaum Associates.
- Leonard, J., & Dantley, S.J. (2004). Breaking through the ice: Dealing with issues of diversity in mathematics and science education courses. In A.J. Rodriguez, & R.S. Kitchen (Eds.), *Preparing Mathematics and Science Teachers for Diverse Classrooms: Promising Strategies for Transformative Pedagogy* (pp. 87-118). Mahwah, NJ: Lawrence Erlbaum Associates.
- Reyes, S., Capella-Santana, N. & Khisty, L. L. (1998). Prospective teachers constructing their own knowledge in multicultural education. In M.E. Dilworth and M. Michael-Bandele (Eds.), *Consideration of Culture in Teacher Education: An Anthology on Practice*. Washington, DC: American Association of Colleges for Teacher Education.
- Secada, W.G., & Adajian, L., (1997). Mathematics teachers' change in the context if their professional communities. In E. Fennema and B.S. Nelson (Eds.), *Teachers in Transition: Mathematics and Reform* (pp. 193-219). Mahwah, NJ: Lawrence Erlbaum.

#### **Race and Class in Mathematics Education**

#### **Journal Articles**

- Frankenstein, M. (1990). Incorporating race, class and gender issues into a critical mathematical literacy curriculum. *Journal of Negro Education*, *59*, 336-347.
- Kitchen, R.S. (2003). Getting real about mathematics education reform in high poverty communities. For the Learning of Mathematics, 23(3), 16-22.
- Lubienski, S.T. (2000). Problem solving as a means toward mathematics for all: An exploratory look through a class lens. *Journal for Research in Mathematics Education*, *31(4)*, 454-82.

- Reyes, L., & Stanic, G. (1988). Race, sex, socioeconomic status and mathematics. *Journal for Research in Mathematics Education*, 19(1), 26-43.
- Tate, W.F. (1994, February). Race, retrenchment, and the reform of school mathematics. *Phi Delta Kappan*, 75, 477-85.
- Tate, W.F. (1997). Race-Ethnicity, SES, gender, and language proficiency trends in mathematics achievement: An update. *Journal for Research in Mathematics Education*, 28(6), 652-79.

#### **Books**

- Kitchen, R.S., DePree, J., Celedón-Pattichis, S., & Brinkerhoff, J. (2006). Mathematics Education at Highly Effective Schools that Serve the Poor: Strategies for Change. Mahwah, NJ: Lawrence Erlbaum Associates.
- Mellin-Olsen, S. (1987). The politics of mathematics education. Dordrecht: Kluwer Academic Publishers.

#### **Book Chapters**

- Gutstein, E. (2004). Driving while black or brown: The mathematics of racial profiling. In J. Masingila (Ed.), *Teachers Engaged in Research: Inquiry into Mathematics Practice in Grades 6-8*. Reston, VA: NCTM.
- Oakes, J. (1990). Opportunities, achievement, and choice: Women and minority students in science and mathematics. In C.B. Cazden (Ed.), *Review of Research in Education*, *16*, 153-222. Washington, DC: American Educational Research Association.
- Secada, W.G. (1992). Race, ethnicity, social class, language, and achievement in mathematics. In D.A. Grouws (Ed.), *Handbook of Research on Mathematics Teaching and Learning*. New York: Macmillan Publishing Co., Inc.
- Strutchens, M. E., & Silver, E. A. (2000). NAEP findings regarding race/ethnicity: Students' performance, school experiences, and attitudes and beliefs. In E.A. Silver & P.A. Kenney (Eds.), *Results from the Seventh Mathematics Assessment of the National Assessment of Educational Progress* (pp. 45-72). Reston, VA: NCTM.