



State of Texas
Education Research Center
at Texas A&M University

ERC Update

Education Research as a Catalyst for Improving Policy and Practice

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Miner P. Marchbanks III

Education Research Center to Evaluate Mathematics, Science, & Technology Teacher Preparation Academies

The State of Texas Education Research Center at Texas A&M University (ERC) is pleased to announce that it has been awarded a \$180,000 grant from the Texas Higher Education Coordinating Board (THECB) to conduct a program evaluation of a THECB-funded educator quality project, the Math, Science, and Technology Teacher Preparation (MSTTP) Academies. Jackie Stillisano, Hersh Waxman, Danielle Bairrington Brown, and Kayla Rollins are the Co-Principal Investigators.

The purpose of the MSTTP Academies is to improve the instructional skills of certified teachers and to train students enrolled in undergraduate and master's degree teacher preparation programs to perform at the highest levels in mathematics, science, and technology. The goal of this program is to increase effective teaching by increasing the number of Texas teachers who are Master Teachers or who have their Master's of Education degree in mathematics, science, or technology. It is anticipated that academy participants will be better able to prepare students to be college ready in these important fields upon high school graduation.

"The THECB has been charged with ensuring the quality of teacher education at Texas institutions of higher education," said Stillisano. "This evaluation will focus on a program specifically designed to improve teacher education in the areas of mathematics, science, and technology." Researchers from the ERC will develop rubrics and protocols to collect and examine data related to 19 MSTTP Academies at 15 different universities in the state, including University of Texas, Texas A&M University, University of Texas at El Paso, Texas A&M Corpus Christi, and University of Texas at Tyler.

Outstanding Turnout for ERC's First 2011-2012 Seminar



Mary Margaret Capraro shares a description of validity from a recent research article.

The ERC presented the 1st event of its 2011-2012 seminar series on October 11, 2011. Drs. Robert and Mary Margaret Capraro (Department of Teaching, Learning, and Culture) presented *Estimating Validity During the Instrument Design Phase* for a group of approximately 40 faculty, administrators, and graduate students. The Capraros' presentation included information on types of validity including external, internal, construct, and content validity. Criteria for choosing reviewers and raters for test validity were also covered. The criteria include persons who are knowledgeable about the area but not experts, stakeholders but not potential participants, and interested others who possess the

necessary skills to understand the construct. The presentation also included information on two projects with which the Capraros are currently involved. The Association of Middle Level Educators (AMLE) survey is ready to be sent out to a panel of reviewers, and the Rutgers University Math Engagement Structures Inventory (RUMESI) is still under development.



An overflow crowd attended the October 11th ERC seminar.

Upcoming Events

The 35th annual conference of the Southwest Educational Research Association (SERA) will be held in New Orleans on February 1-4, 2012. More information can be found at the SERA website (www.sera-edresearch.org/).

The annual conference of the American Educational Research Association (AERA) will be held in Vancouver, British Columbia, on April 13-17, 2012. More information can be found on the AERA website (<http://www.aera.net/>).

ERC Welcomes New Program Area Leader in Curriculum and Instruction



Dr. Dennie L. Smith, professor in Teaching, Learning, and Culture, has joined the ERC as the new program area leader for Curriculum and Instruction. Smith has teaching interests that include instruction, curriculum, social science education, and creativity; his research interests include the study of the impact of school culture on learning and the application of interactive learning models (simulations) on student and adult learning. He has been principal investigator in a variety of research and service projects related to teacher education and is the author and/or co-author of a number of research publications, books, book chapters, technical reports, and video productions. Smith has conducted over 900 seminars and consultancies with education, business, and government. He is currently conducting research related to the workforce of department heads and the professional transitions in their work and is planning a professional leave to continue his research on department head decision making.

Marchbanks Presents at November ERC Seminar



Marchbanks presents at the November 15th ERC Seminar.

The ERC presented the 2nd event of its 2011-2012 seminar series on November 15, 2011. Trey Marchbanks (associate research scientist in the Public Policy Research Institute) presented *Breaking Schools' Rules: A Statewide Study of How School Discipline Relates to Students' Success and Juvenile Justice Involvement* for a group of faculty, administrators, and graduate students. Among those attending was Jim Scheurich, professor in the Department of Educational Administration and Human Resource Development.

Marchbanks' presentation reported on the results of a statewide study on the long term outcomes of school discipline. The study was a partnership between the Public Policy Research Institute at Texas A&M and the Council of State Governments Justice Center. This study followed more than 900,000 middle and high school students over 6-year period, using data from both the Texas Education Agency and the Texas Juvenile Probation Commission. One finding of the study was that almost 60% of students in the public school system experienced some form of suspension or expulsion in middle or high school. Also, suspension and expulsion were associated with negative outcomes, such as being held back a grade or dropping out of school. Finally, it was found that schools have varying levels of discipline. The report, which includes more findings, is available online at <http://ppri.tamu.edu/breaking-schools-rules>



Marchbanks addresses a question posed by a seminar participant.

ERC Welcomes New Interns

Melike Unal-Gezer is third-year doctoral student in Curriculum and Instruction with an English as a Second Language (ESL) emphasis. She currently serves as a teaching assistant in the Department of Teaching, Learning, and Culture, designing and administering two undergraduate, interdisciplinary courses to prepare students in ESL methods and assessment. Unal-Gezer earned her B.A. with honors in English Language Teaching (ELT) in Turkey and completed her M.A. in General Linguistics at California State University, Long Beach on a Fulbright Scholarship. After the completion of her M.A., Unal-Gezer worked as a Turkish lecturer at Yale University in the Department of Near Eastern Languages and Civilizations where she designed and offered Turkish courses at various levels and worked with the Council for the Middle Eastern Studies at Yale University to promote the Turkish program.



Emin Kilinc is a third-year doctoral student in the Department of Teaching, Learning, and Culture, pursuing his Ph.D. in Curriculum and Instruction with an emphasis in Social Studies Education. He currently serves as a graduate assistant in Culture and Curriculum. Kilinc's research interests include social studies teacher education, civics, history of education, and professional development of preservice teachers. Before entering the doctoral program at Texas A&M, Kilinc was a social studies teacher for 6 years in Turkey. He completed his B.S and M.S. degrees in Social Studies Education from Selcuk University in Turkey.

ERC Senior Research Associate Presents Dissertation Research

In *Classroom Observations of Instructional Practices and Technology Use by Elementary School Teachers and Students in an Ethnically-and Economically-Diverse School District*, Kayla Braziel Rollins observed pre-kindergarten through fifth-grade public school classrooms to examine differences among instructional practices and technology use by teachers, students, and the overall classroom. Results indicated that teachers were primarily observed using technology to present material in a whole class setting using direct instruction. Overall, students were not frequently observed using technology. When students were using technology, it was almost exclusively for basic skills/drill/practice. Learner-centered instruction occurred less than 6% of the time; however, unlike previous studies, no statistically significant differences were found in relation to the extent of teacher technology use and classroom instructional practices. On the other hand, students observed in classrooms where teachers used technology to a great extent were found to be on task significantly more than were students in classrooms where technology was only used a moderate amount or not used at all. This is a positive finding concerning technology use and its potential impact on student engagement; however, only 15% of teachers were observed integrating technology to a great extent. The results of the present study suggest that technology, for the most part, has not been adequately implemented into the observed classrooms. This is due to the overall low frequency of technology integration and the lack of higher-level instructional strategies being used with technology.



Happy Holidays from the ERC

ERC Snapshots

Jacqueline Stillisano, together with **Hersh Waxman** and Melanie Woods, gave a presentation on November 3 at the annual conference of the American Evaluation Association in Anaheim, California. The presentation, entitled *Using Mixed Methods to Evaluate a Program Designed to Develop Turnaround Leaders in Texas Schools*, was attended by approximately 35 evaluation practitioners, academics, and graduate students.

Smith, Rollins, Smith Article Published:

Dennie Smith—along with Kayla Rollins and Lana Smith—recently published an article in *Innovative Higher Education* entitled *Back to the Faculty: Transition for University Department Leadership*. *Innovative Higher Education* is published online and in hard copy. The journal features articles providing descriptions and evaluations of current innovations and new ideas with relevance for action beyond the immediate context in higher education. It also focuses on the effect of such innovations on teaching and students.

Taylor contributes to Wyoming legislative committees.

Lori L. Taylor prepared two policy briefs and made multiple presentations to Wyoming legislative committees regarding adjustments to the Wyoming school finance formula for inflation and regional differences in teacher salaries.

One policy brief, titled *External Cost Adjustments for the Wyoming School Funding Model*, explains the use of external cost adjustments and can be found at the following URL: http://legisweb.state.wy.us/2011/Interim%20Studies/Taylor_ExternalCostAdjustments2011Final.pdf

The second policy brief, titled *Updating the Wyoming Hedonic Wage Index*, uses regional cost adjustments to update the 2005 Wyoming Hedonic Wage Index. This paper can be found at the following URL: http://legisweb.state.wy.us/2011/Interim%20Studies/Taylor_UpdatingTheWyomingHedonicWageIndexFinal.pdf