



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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Upcoming Events

The 35th annual conference for 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/).

Education Research Center Awarded Grant to Evaluate College Readiness Assignments Field Test (CRAFT)

The State of Texas Education Research Center (ERC) at Texas A&M University is pleased to announce that it has been awarded a grant from the Texas Higher Education Coordinating Board (THECB) to conduct a statewide evaluation of the effectiveness of the College Readiness Assignments—project-based assignments based on the College and Career Readiness Standards, designed to assist students in achieving college readiness. Assignments have been developed for use across multiple subject areas within high schools, in developmental education settings, and with entry-level college courses. The THECB has called for a large-scale field test, the College Readiness Assignments Field Test (CRAFT), in order to determine whether the College Readiness Assignments are effective in improving the college readiness of students. Hersh Waxman, Jackie Stillisano, Beverly Alford, and Danielle Bairrington Brown are the Co-Principal Investigators.

The ERC research team will visit multiple high schools—some in lower-achieving areas within various school districts—throughout Texas for the purpose of conducting a comprehensive evaluation of the CRAFT. The evaluation will examine the efficacy of the College Readiness Assignments themselves, as well as the reliability of the field-testing. The evaluation team will also be looking at the professional development provided to teachers throughout the state; specifically, researchers will evaluate the quality and impact of professional development activities and the effectiveness of dissemination efforts.

“The College Readiness Assignments were designed to help students in Texas enhance their college and career readiness, as well as to determine the degree to which high school seniors are meeting the CCRS,” said Waxman. “This evaluation will help determine the extent to which the College Readiness Assignments have been effective at achieving these objectives.”

Systematic classroom observation, interviews, surveys, and focus groups will be used to examine four program components: (a) the planning, design, implementation, and management of the field-testing of the CRAs; (b) the partnerships between public institutions of higher education and public schools; (c) the implementation of professional development for the CRAs; and (d) the dissemination of the CRAs.

Lori Taylor Presents at January ERC Seminar

The ERC presented the 4th event of the 2010-2011 seminar series on January 26, 2011. Lori L. Taylor (associate professor in the Bush School of Government and Public Service) presented *An Insider's Guide to the Financial Allocation Study for Texas* for a group of faculty, administrators, and graduate students. Among those attending was Abelardo Saavedra, clinical professor in the Department of Educational Administration and Human Resource Development. Taylor's presentation reported on the results of the Financial Allocation Study for Texas (FAST), which was authorized by HB 3 of the 81st Texas Legislature with the goal of increasing student achievement and encouraging judicious use of public education funds. Directed by the state comptroller's office, the study was designed to detect school districts and campuses that use resource allocation practices that contribute to student academic achievement and economically effective operations and to identify areas for improvement. As part of the study, a website was developed that allows users to choose districts or campuses to compare, to group campuses and districts in a variety of ways, and to compare campuses and districts across a variety of performance indicators. The complete FAST report was released on December 8, 2010. Access to all FAST data, results, and methodologies are available to districts and other stakeholders free of charge. Both the report and the comprehensive web tool developed as part of the study are available online at www.FASTexas.org.



Abelardo Saavedra and Russell Evans were among those attending the January 26 seminar.

Tim Scott Presents at March Seminar

Tim Scott, Associate Dean for Undergraduate Programs in the College of Science and co-director of the Center for Mathematics and Science Education (CMSE), presented *The Center for Mathematics and Science Education and the AggieTEACH Program* at the March 2011 ERC Seminar. In his presentation, Scott summarized the projects and resources provided by CMSE and shared how the Colleges of Science and Education collaborate to effect pre-service teacher recruitment, retention, and preparation, as well as support inservice teacher professional development, research on teaching and learning, and education policy. CMSE sponsored opportunities include AggieTEACH, a traditional secondary science and mathematics teacher preparation program. Texas A&M University graduated 133 science and mathematics teachers and provided much needed scholarship support during the 2009-10 school year. Private donors, the U.S. Department of Education, and the National Science Foundation provide CMSE scholarships and financial aid. The CMSE webpage (<http://www.science.tamu.edu/cmse/>) provides more information about CMSE affiliated research and policy initiatives.



Tim Scott and Roger Goddard discuss the CMSE

ERC Welcomes New Graduate Research Assistants



Russell T. Evans is a third-year doctoral student in the Department of Teaching, Learning and Culture (TLAC), working towards a Ph.D. in Curriculum and Instruction with an emphasis in Teacher Education/Social Studies Curriculum. Russell earned a B.S. in Geography and an M.Ed. in Curriculum and Instruction from Texas A&M University. Before beginning his doctoral studies, Russell was a secondary social studies teacher for 3 years in Spring Branch ISD. His research interests include pre-service teacher education programs, technology incorporation in the social studies classroom, place-based education, and developing social studies curriculum. Russell serves as the Mu Chi chapter president of Kappa Delta Pi and the TLAC Graduate Student Association president.

Anna Witt Boriack is a third-year doctoral student in the Department of Teaching, Learning and Culture (TLAC), working towards a Ph.D. in Curriculum and Instruction. Anna earned a B.S. in Secondary Education with minors in Chemistry and Mathematics from Concordia University–Nebraska and a M.S. in Biochemistry from the University of Nebraska–Lincoln. Before beginning her doctoral studies, Anna taught high school science for 2 years in Lansing, IL, and high school math for 2 years in Garland ISD. Her research interests include math, science, and technology teacher preparation and the involvement of English language learners in math, science, and technology.



ERC Senior Research Associates Present Dissertation Research

In *Evaluating the Effectiveness of Mathematics, Science, and Technology Teacher Preparation Academies in Texas*, Danielle Bairrington Brown examined best practices for professional development and teacher preparation utilized by the academies, as well as the academies' strengths and weaknesses. The results of the study revealed that the 14 MSTTP academies demonstrated the following key strengths: (a) a focus on strengthening content knowledge, (b) a willingness for developing professionally committed teachers, and (c) providing funding for participants. In regard to weaknesses, the degree of program effectiveness revealed that none of the academies had fully implemented all seven goals. All 14 academies, however, struggled to accomplish two of the goals: (a) the integration of the areas of science technology and mathematics, and (b) the infusion of technology into curriculum. Finally, the findings indicate that participants felt as though the academies had improved their content knowledge and pedagogical skills.

In *Systemic Classroom Observation of the Quality of Teacher Behaviors and Student Engagement in Ethnically Diverse Pre-Kindergarten Through Second-Grade Classrooms*, Beverly Alford observed and analyzed pre-kindergarten through second-grade public school classrooms, noting child-centered and teacher-directed pedagogical approaches by simultaneously examining student behavior and activity structure, teacher instructional orientation and rationale, and overall classroom environment. Results indicated that little to no variation existed in the activities in which young children were engaged in their classrooms or in the instructional practices utilized by their early childhood teachers. Accordingly, the study revealed few differences in student behavior and teacher practices by student sex, student ethnicity, grade level, English language proficiency, and/or economic status. Instruction in these classrooms was almost entirely standardized; however, three statistically significant findings showed that (a) students taught by teachers rated as having a higher developmentally appropriate instructional practices (DAIP) score were more likely to be on-task and less likely to be off-task; (b) students taught by teachers with a higher DAIP score were significantly more likely to be working kinesthetically, answering teacher-posed questions, and freely exploring; and (c) students taught by teachers with a lower DAIP score were significantly more likely to be distracted and/or not engaged in activity.

ERC Researchers Present at 2011 AERA Conference

The ERC was well-represented at the 2011 annual conference of the American Educational Research Association, held April 8-12, 2011, in New Orleans. The following presentations were given by ERC researchers:

- *Systematic Classroom Observation in the Early Childhood Setting From a Student, Teacher, and Classroom Perspective*. **Beverly L. Alford, Yolanda N. Padrón, Kayla B. Rollins, & Hersh C. Waxman**
- *Using Classroom Observation to Investigate Productive Student Participation in Higher and Lower Performing Qatari Schools*. **Stephanie L. Knight & Dawn R. Parker**
- *Examining the Professional Development Experiences and Knowledge of Bilingual/English-as-a-Second-Language Teachers*. **Susana Elena Franco-Fuenmayor, Yolanda N. Padrón, Brooke E. Kandel-Cisco, & Hersh C. Waxman**
- *Urban High School Students' Academically Successful Learning Environment and Educational Aspirations*. **Hersh C. Waxman, Yuan-Hsuan Lee, Jacqueline Stillisano, Danielle B. Brown, Beverly L. Alford, & Kayla B. Rollins**
- *Stylized Verses Simplified Graphics: Differences in Viewers' Perception of Simulated Actions in Instructional Vignettes*. **Michelle Simms, Dennie L. Smith, Tim McLaughlin, & Irving A. Brown**
- *Computer-Assisted Instruction: Study Hall 101*. **Leanne L. Howell & Chance W. Lewis**
- *Observation of Technology Use in Middle School Classrooms*. **Hersh C. Waxman & Siwei Qi**
- *Back to the Faculty: Transition From University Department Leadership*. **Dennie L. Smith, Kayla B. Rollins, & Lana J. Smith**
- *Investigating Bilingual/English-as-a-Second-Language Teachers' Perceptions of Bilingual Programs*. **Susana Elena Franco-Fuenmayor, Yolanda N. Padrón, Brooke E. Kandel-Cisco, & Hersh C. Waxman**
- *A Statewide Evaluation of Districts' Readiness for Large-Scale Online Testing: Unique Perceptions and Challenges From Various School Districts' Lenses*. **Trina J. Davis, Jacqueline Stillisano, Hersh C. Waxman, Brooke E. Kandel-Cisco, & Judy A. Hostrup**
- *Evaluating the Effectiveness of International Baccalaureate Programs in Texas Schools*. **Jacqueline Stillisano, Hersh C. Waxman, Beverly L. Alford, Yuan-Hsuan Lee, & Kayla B. Rollins**

ERC Snapshots

Lori L. Taylor, program area leader for school finance, resources, & facilities, recently presented *An Indicator of School District Inefficiency? Exploring the 65% Solution* at the Allied Social Science Association meeting in January. The presentation was based on joint work completed with **Shawna Grosskopf** and **Kathy J. Hayes**. Taylor also presented *Closing the Gaps for English Language Learners: Measurement and Cost* at the same conference. This presentation was based on joint work completed with **Timothy Gronberg** and **Dennis Jansen**.

In February Taylor presented *Teacher-Designed Incentive Pay in Texas* to the Brazos Valley Cooperating Teacher Education Center (BVCTEC).

Congratulations to ERC researchers on the following recent publications:

Gronberg, T. J., Jansen, D. W., & Taylor, L. L. (2011). The impact of facilities on the cost of education. *The National Tax Journal*, 64(1), 193-218.

Gronberg, T. J., Jansen, D. W., & Taylor, L. L. (2011). The adequacy of educational cost functions: Lessons from Texas. *The Peabody Journal of Education: Issues of Leadership, Policy, and Organizations*, 86(1), 3-27.

Lewis, C., & Landsman, J. (Eds.). (2011). *White teachers / diverse classrooms: Creating inclusive schools, building on students' diversity, and providing true educational equity*. Sterling, VA: Stylus.

Stillisano, J. R., Waxman, H. C., Hostrup, J., & Rollins, K. B. (2011). Case studies of eight Texas schools implementing international baccalaureate programs. *Journal of Ethnographic & Qualitative Research*, 5(3), 171-185.