

Education Research as a Catalyst for Improving Policy and Practice



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Upcoming ERC Seminar

"An Exploratory Study of 'Inclusion' in Two Urban School Districts: A Study Funded by the Kellogg Foundation"

Presented by Jean Madsen and Mario Torres
March 24, 2015 from 12:30-1:30 PM in EDCT614

ERC Awarded Grant to Evaluate Reasoning Mind Programming

The Education Research Center at Texas A&M University (ERC at TAMU) is pleased to announce that it has received a \$150,000 grant to conduct an independent evaluation of Reasoning Mind programming in Texas schools. Reasoning Mind is a non-profit organization that was designated as a Technology-Based Supplemental Mathematics Instruction Pilot Program by the Texas Education Agency (TEA) for Grades 2-5. Hersh Waxman, Jackie Stillisano, and Yeping Li will be principal investigators for the study. Additional ERC researchers involved include Anna Boriack, Kim Wright, and Kayla Rollins.

Reasoning Mind partners with schools in Texas and other states to help provide students in early grades with a focused and rigorous mathematics curriculum. The program offers a comprehensive digital math education system that is aligned with Common Core State Standards and Texas Essential Knowledge and Skills (TEKS), individualized online learning designed to engage students, and customized professional development and in-class support for teachers in Grades 2 through 6.

"This independent evaluation will provide insight into the effectiveness of the Reasoning Mind program in using individualized technology to increase students' mathematics achievement and algebra-readiness," said Waxman. "Research has indicated that algebra is one of the best predictors of academic achievement, and Reasoning Mind's focus on algebra readiness is a promising component of the program." Li addressed how the work of Reasoning Mind is addressing the challenge of engaging students in mathematics, noting, "How to engage students in learning math with a rigorous and coherent curriculum has long been a great challenge to mathematics teachers and educators. This project allows us to learn more about the potential of Reasoning Mind program in addressing this challenge with technology."

For additional information, please contact Hersh Waxman at hwaxman@tamu.edu, Jackie Stillisano at jstillisano@tamu.edu, or Yeping Li at yepingli@tamu.edu.

ERC Presents Second Seminar for 2014-2015



The ERC held the second event in its 2014-2015 seminar series on November 19, 2014. Marlon James, assistant professor in the Department of Teaching, Learning and Culture and assistant director of the Center for Urban School Partnerships, presented *Poverty and Possibility: An Autoethnography of Assets and Strengths in Diverse Communities*. James's presentation detailed the use of autoethnography as an emerging research methodology, in which allows

researchers themselves become integral to the topic being studied as they seek to tell their own story within the context of a research topic, such as social injustice or poverty. Through sharing his own experience of growing up in poverty in Chicago, James brought attention to issues facing preservice teachers and teacher educators, such as common stereotypes of ethnic minority children with regard to socioeconomic status and the importance of teachers identifying and using their students' cultural assets in instruction.

ERC Welcomes New Intern and Undergraduate Student Research Assistant



Matthew Eтчells is a new ERC intern and a second-year doctoral student in the Department of Teaching, Learning, and Culture (TLAC), working towards a Ph.D. in Curriculum and Instruction. Matthew earned a B.A. in Performing Arts with a minor in Education from Chester University, England; a Post Graduate Certificate in Education (PGCE) from Aberystwyth University, Wales; and a M.Ed. in International Management and Policy from the British University in Dubai (BUiD), United Arab Emirates. Prior to beginning his doctoral studies, Matthew's experiences included Head of Drama, Head of English, Academic Quality Controller (AQC), Head of International Recruitment, and teacher of primary English and social studies. His research interests include shadow education, the Enlightenment, and informal learning spaces.

Ethan Vieira, the new ERC undergraduate research assistant, is currently a freshman aerospace engineering student in the Dwight Look College of Engineering. Although he has lived in Texas for three years, Ethan was born in Olathe, Kansas, where his interests in programming, sports, and science developed into ambitions that he is currently pursuing.



ERC Hosts Invited Seminar on Secondary Data Analysis

The Education Research Center and the Recruiting, Preparing, and Retaining Excellent Teachers for High Needs Schools in Texas Project recently held an invited seminar on using secondary data analyses for teacher education research. Dr. Emiel Owens, Professor of Educational Administration and Foundations at Texas Southern University, conducted the seminar utilizing data from the Schools and Staffing Survey (SASS) from the National Center for Education Statistics (NCES). Dr. Owens was President of the American Educational Research Association's Special Interest Group on the Advanced Studies of National Databases, and he shared his experiences using secondary data analyses with the seminar participants. TLAC doctoral students and ERC graduate research assistants, Kenneth Fleming and Luke Lyons attended the seminar and had the opportunity to analyze SASS data for their research studies that they presented at the annual meeting of the Southwest Educational Research Association in February.



ERC to Evaluate Stephen F. Austin State University STEM Academy Project

The Education Research Center at Texas A&M University (ERC at TAMU) is pleased to announce that it recently received a contract to conduct a formative evaluation of the new Stephen F. Austin (SFA) State University STEM Academy. Jackie Stillisano and Hersh Waxman will be the principal investigators for the study. Additional ERC researchers involved include Kim Wright and Anna Boriack.

Designed as a partnership among SFA State University, Nacogdoches Independent School District, and Lufkin Independent School District, the SFA STEM Academy seeks to provide a seamless matriculation into undergraduate STEM majors for participants, through a cohort model that involves students in research experiences with SFA faculty. The Academy will engage academically capable high school students in real-world applications of science and mathematics through hands-on research experiences and support from academy master teachers, SFA faculty, and peer mentors.

"This external evaluation will provide formative information regarding the development and implementation of this innovative STEM school-within-a-school concept, as well as feedback for incremental change and improvement," said Stillisano. "The study will help determine the extent to which the SFA STEM Academy is effective in achieving its Year 1 goals, objectives, and outcomes and will provide valuable information about a model of STEM education in Texas high schools that has potential to be transferable, replicable, and scalable."

For additional information, please contact Jackie Stillisano at jstillisano@tamu.edu, or Hersh Waxman at hwaxman@tamu.edu

ERC Graduate Research Assistant Defends Dissertation

Nancy Weber, ERC Graduate Research Assistant, successfully defended her multiple article dissertation, *The Role of Teacher Education in the Development of First-Year Teachers' Pedagogy and Self-Efficacy for Instructional Practices and Technology Integration*, on Tuesday, January 27th. Her committee chair was Dr. Hersh Waxman of TLAC, and her committee members were Dr. Larry Kelly and Dr. Dennie Smith of TLAC and Dr. Hector Rivera of EPSY. For her dissertation research, Nancy used a combination of self-report surveys and multiple classroom observation instruments to examine first-year secondary teachers' self-efficacy for general teaching practices, behaviors, student interactions, and overall classroom environment characteristics, as well as their self-efficacy for integrating technology into instruction and use of technology to support teaching and learning.



Future Leaders Seminar Series Presentation by ERC Graduate Research Assistant



This spring, the Texas A&M University College of Education and Human Development is hosting its first Future Leaders Seminar Series. Held throughout the semester, each series event will include a presentation from a doctoral student in each department. The participants are nominated by the faculty members in their respective departments. On February 13th, Nancy Weber, ERC graduate research assistant and TLAC graduate student, was the first presenter in the series. Nancy's lecture centered around her dissertation research, specifically the use of multiple classroom observation instruments to examine first-year secondary teachers' classroom environments, behaviors, and interactions with students. Several faculty members, students, and staff from the College of Education and Human Development were in attendance.

Recent ERC Presentations and Publications

- Hodges, T. S., McTigue, E. M., Weber, N. D., Douglass, A. G., & Wright, K. L. (2014, June). *Examining effective teacher modeling in preservice teacher education courses*. Presented at the Mixed Methods International Research Association Conference, Boston, MA.
- Taylor, L. L. (2014, July). *Are charters the best alternative? A cost frontier analysis of alternative education campuses in Texas*. Presented at the Western Economic Association Meeting, Denver, CO.
- Taylor, L. L. (2014). Comparable wage index. In D. J. Brewer & L. O. Picus (Eds.), *Encyclopedia of Education Economics and Finance*. Thousand Oaks, CA: Sage.
- Taylor, L. L. (2014). *Preschool for all? Simple keys to maximizing return on investment and avoiding unintended consequences*. Retrieved from <http://bush.tamu.edu/mosbacher/takeaway/PreK%20Takeaway.pdf>
- Taylor, L. L., Gronberg, T., Jansen, D., & Karakaplan, M. (2014). *Anticipating the consequences of school district consolidation in major metropolitan areas: A simulation based on cost function analysis*. Available at http://tea.texas.gov/Reports_and_Data/Program_Evaluations/Research_Reports/Program_Evaluation_Research_Reports/
- Taylor, L. L. (2014). Comparable wage index. In D. J. Brewer & L. O. Picus (Eds.), *Encyclopedia of Education Economics and Finance*. Thousand Oaks, CA: Sage.
- Taylor, L. L., & Perez, P. C. (2014). Deregulation. In D. J. Brewer & L. O. Picus (Eds.), *Encyclopedia of Education Economics and Finance*. Thousand Oaks, CA: Sage.
- Weber, N. D., & Waxman, H. C. (2014). Systematic classroom observations of first-year teacher interns' pedagogical technology integration in secondary schools. *The Texas Forum of Teacher Education*, 4, 63-84.
- Weber, N. D., Waxman, H. C., & Kelly, L. J. (2014, October). *Classroom instruction differences between novice and veteran secondary school teachers*. Presented at the Teacher Education Conference of the Consortium for State Organizations of Texas Teacher Education, Austin, TX.