

**CURRICULUM VITAE**  
**J. Kyle Roberts, Ph.D.**

**I. GENERAL BIOGRAPHICAL INFORMATION**

**A. Personal Information**

**Personal**

Simmons School of Education & Human Development  
Southern Methodist University  
6401 Airline Rd Suite 301  
Dallas, TX 75205  
Phone: 214-768-2346      Email: [kylar@smu.edu](mailto:kylar@smu.edu)

**Education**

Bachelor of Science (Youth Ministry) Abilene Christian University (Abilene, Texas)	1995
Master of Religious Education Trinity Evangelical Divinity School (Deerfield, Illinois)	1997
Doctor of Philosophy (Educational Psychology) Texas A&M University (College Station, Texas) Title of Dissertation: Examining mutable reform options for urban schools with multilevel analysis in the National Educational Longitudinal Study: 88. Advisor S. L. Knight, Ph.D.	2000

**B. Appointments**

**Current Appointment**

Research Associate Professor, Department of Teaching and Learning      2023 – Present  
Simmons School of Education & Human Development  
Southern Methodist University

**Previous Appointments**

Principal Consultant in Data Science Director of Data Science for Private Sector Client Success Leader Resultant (formerly Teknion Data Solutions, Irving, Texas)	2018 – 2023
Associate Professor of Education Policy and Leadership Southern Methodist University (Dallas, Texas)	2007 – 2013
Assistant Professor of Allied Health Assistant Director for Research for the Center for Educational Outreach Baylor College of Medicine (Houston, Texas)	2005 – 2007
Assistant Professor of Educational Research	2001 – 2005

University of North Texas (Denton, Texas)	
Research Associate Center for Educational Outreach Baylor College of Medicine (Houston, Texas)	1999 – 2001
Lecturer, Department of Educational Psychology Texas A&M University	1997 – 1998
Visiting Lecturer, Department of Education Texas A&M University, Galveston Campus	1998
<b>C. Other Advanced Training/Experience</b>	
NAEP Database Use for Research and Policy Analysis National Center for Educational Statistics	2000
Multilevel and Hierarchical Linear Modeling Training done by Dr. Harvey Goldstein London Institute of Education	1999
<b>D. Other Information</b>	
<b>Honors/Awards</b>	
Outstanding Reviewer for the <i>American Educational Research Journal</i> editorial board	2005
Outstanding Student in the Field of Religious Education Trinity Evangelical Divinity School	1997
Women for ACU Scholarship Recipient Abilene Christian University	1991 – 1995
<b>Other Non-Academic Positions</b>	
Research Assistant, Center for Collaborative Learning Texas A&M University	1999
Special Needs Counselor Bryan Independent School District (Bryan, Texas)	1998
Teaching Assistant (Religious Education) Trinity Evangelical Divinity School	1996 – 1997
Research Assistant, Center for Adolescent Studies Abilene Christian University	1997; 1994-1995

## II. RESEARCH INFORMATION

## A. Publications

### Full Papers (Refereed)

Heflin, H., Platt, M., & **Roberts, J. K.** (2014). Teaching and training methods of volunteer teachers. *Christian Education Journal*, 11(1), 24-32.

Cheatham, J. P., Allor, J., & **Roberts, J. K.** (2014). How does independent practice of multiple-criteria text influence the reading performance and development of second graders. *Learning Disability Quarterly*, 37(1), 3-14.

Allor, J., Mathes, P., **Roberts, J. K.**, Cheatham, J., & Al Otaiba, S. (2013). Is scientifically based reading instruction effective for students with below-average IQs? *Exceptional Children*, 80, 287-306.

Allor, J., Mathes, P., **Roberts, J. K.**, Cheatham, J., & Champlin, T. (2010). Comprehensive reading instruction for students with intellectual disabilities: Findings from the first three years of a longitudinal study. *Psychology in the Schools*, 47(5), 445-466.

Allor, J., Mathes, P., **Roberts, J. K.**, Jones, F., Champlin, T. (2010). Teaching students with moderate intellectual disabilities to read: An experimental examination of a comprehensive reading intervention. *Education and Training in Autism and Developmental Disabilities*, 45, 3-22.

Henson, R. K. & **Roberts, J. K.** (2006). Exploratory factor analysis reporting practices in published psychological research: Common errors and some comment on improved practice. *Educational and Psychological Measurement*, 66(3), 393-416.

Moreno, N. P., **Roberts, J. K.**, Tharp, B. Z., Denk, J. P., Cutler, P. H., Thomson, W. A. (2005). Increasing student learning through space life sciences education. *Acta Astronautica*, 56, 783-791.

**Roberts, J. K.** & Herrington, R. (2005). Demonstration of software programs for estimating multilevel measurement model parameters. *Journal of Applied Measurement*, 6(3), 255-272.

Onwuegbuzie, A. J., **Roberts, J. K.**, & Daniel, L. G. (2005). A proposed new what if reliability analysis for assessing the statistical significance of bivariate relationships. *Measurement and Evaluation in Counseling and Development*, 37(4), 228-239.

Moreno, N. P., Denk, J. P., **Roberts, J. K.**, Tharp, B. Z., Bost, M., Thomson, W. A. (2004). A measure of knowledge and misconceptions regarding food and fitness among students in grades 3-7. *Cell Biology Education*, 3, 122-130.

**Roberts, J. K.** & Fan, X. (2004). Bootstrapping within the multilevel/hierarchical linear modeling framework: A primer for use with SAS and S-PLUS. *Multiple Linear Regression Viewpoints*, 30 (1), 23-34.

**Roberts, J. K.** (2004). An introductory primer on multilevel and hierarchical linear modeling. *Learning Disabilities: A Contemporary Journal*, 2(1), 30-38.

**Roberts, J. K.** & Henson, R. K. (2003). Not all effects are created equal: A rejoinder to Sawilowsky. *Journal of Modern Applied Statistical Methods*, 2(1), 226-230.

**Roberts, J. K.** & Onwuegbuzie, A. J. (2003). Alternative approaches for interpreting alpha with homogeneous subsamples. *Research in the Schools*, 10, 63-69.

**Roberts, J. K.** (2002). The importance of the intraclass correlation in multilevel and hierarchical linear modeling designs. *Multiple Linear Regression Viewpoints*, 28 (2), 19-31.

**Roberts, J. K.** & Henson, R. K. (2002). Correction for bias in estimating effect sizes. *Educational and Psychological Measurement*, 62(2), 241-253.

Smith, Q. W., Holcomb, J. D., Galvin, J., DeJong, G., DeLisa, J. & **Roberts, J. K.** (2001). The effect of changes in the health care environment on rehabilitation research: A survey of rehabilitation physicians. *Archives of Physical Medicine and Rehabilitation*, 82 (11), 1624-1629.

Smith, Q. W., Holcomb, J. D., Galvin, J. & **Roberts, J. K.** (2001). The effect of changes in the U.S. health care system on rehabilitation research: The results of a survey of rehabilitation health professionals. *Journal of Allied Health*, 20(4), 207-214.

Moreno, N. P., Chang, K., Tharp, B. Z., Denk, J. P., **Roberts, J. K.**, Cutler, P., & Rahmati, S. (2001). Teaming up with scientists: A two-year teacher-scientist partnership benefits all involved, especially students. *Science and Children*, 39 (1), pp. 42-45.

**Roberts, J. K.**, Henson, R. K., Tharp, B. Z., & Moreno, N. P. (2001). An examination of change in teacher self-efficacy beliefs in science education based on the duration of inservice activities. *Journal of Science Teacher Education*, 12(3), 199-213.

Thomson, W. A., Denk, J. P., **Roberts, J. K.**, & Martinez-Wedig, C. (2000). Producing physicians for south Texas. In J. Novosad & J. Sekul (Eds.), *South Texas Studies 2000* (pp. 14-29). Victoria, Texas: Victoria College Press.

**Other Full Papers****Refereed Articles (In Press)****Refereed Articles (Under Review)**

Nimon, K., **Roberts, J. K.**, Henson, R. *Using fit indices to holistically assess forms of predictor importance in multilevel models.*

**Abstracts**

Moreno, N., **Roberts, J. K.** & Tharp, B. Z. (2006). *Integrated Environmental Health Science Instruction Promotes Science and Language Learning in Elementary Schools.* North American Association for Environmental Education Third Annual Pre-Conference Research Symposium, Minneapolis, Minnesota, October 10, Abstracts, pp 16-17.

**Books**

Hox, J. J. & **Roberts, J. K.** (Eds.) (2011). *Handbook of Advanced Multilevel Analysis.* New York, NY: Routledge.

**Book Chapters**

Lane, F. C., Nimon, K. F. & **Roberts, J. K.** (2013). Random intercepts model of part-time employment and standardized testing using SPSS. In G. David Garson (Ed.), *Hierarchical Linear Modeling: Guide and Applications.* Thousand Oaks, CA: Sage.

Hox, J. J. & **Roberts, J. K.** (2011). Multilevel analysis: Where we were and where we are. In J. J. Hox and J. Kyle Roberts (Eds.), *Handbook of Advanced Multilevel Analysis.* New York, NY: Routledge.

**Roberts, J. K.**, Monaco, J. P., Stovall, H. & Foster, V. (2011). Explained variance in multilevel models. In J. J. Hox and J. Kyle Roberts (Eds.), *Handbook of Advanced Multilevel Analysis.* New York, NY: Routledge.

**Roberts, J. K.**, Nimon, K., & Martin, L. (2010). Hierarchical linear modeling (HLM) applications in the context of giftedness research. In B. Thompson & R. Subotnik (Eds.), *Research Methodologies for Conducting Research on Giftedness.* Washington, DC: American Psychological Association.

Henson, R. K. & **Roberts, J. K.** (2009). Use of exploratory factor analysis in published research: Common errors and some comment on improved practice. In W. P. Vogt (Ed.), *Selecting Research Methods.* London: Sage Publications.

**Roberts, J. K.** & McLeod, P. (2008). Software options for multilevel models. In A. O'Connell & B. McCoach (Eds.), *Multilevel Analysis of Educational Data.* Greenwich, CT: Information Age Publications.

**Roberts, J. K. & Herrington, R. (2007).** Demonstration of software programs for estimating multilevel measurement model parameters. In E. V. Smith & R. M. Smith (Eds.), *Rasch and Multilevel Measurement Models*. Maple Grove, MN: JAM Press

**Roberts, J. K. (1999).** Canonical redundancy (Rd) coefficients: They should (almost never) be computed and interpreted. In B. Thompson (Ed), *Advances in Social Science Methodology (Vol. 5)* (pp. 333-341). Stanford, CT: JAI Press.

#### **B. Research Support (direct costs listed)**

1. ***Bachman Early Childhood Initiative, Co-PI*** – Zero to Five Funders Collaborative, August, 2010 – August, 2014. ~**\$800,000**.
2. ***The Effect of Computer Assisted Tier 2 Assessment and Intervention as Part of a Response to Intervention Model, Co-PI*** – US Department of Education, August 1, 2009 – July 31, 2012, **\$848,904**.
3. ***Online Science Teacher Professional Development: Optimization of Asynchronous Learning Models, Co-PI*** – National Science Foundation, grant DRL – 0723433, September 1, 2007 – August 31, 2010, **\$590,044**.
4. ***The Environment as a Context for Opportunities in Schools, Research Coordinator*** – NIH/National Institute for Environmental Health Sciences, grant R25 ES10698-01, September 15, 2000 – August 31, 2007, **\$1,348,482**.
5. ***Bioscience Inspiration and Opportunities for Students, Research Coordinator*** – NIH/National Heart, Lung, and Blood Institute, grant R25 HI075747, October 1, 2003 – September 30, 2008, **\$1,340,336**.
6. ***MicroMatters, Research Coordinator*** – Science Education Partnership Award, grant R25 RR018605, July 1, 2003 – June 30, 2008, **\$1,618,008**.
7. ***Science Education Leadership Fellows Project, Research Coordinator*** – Howard Hughes Medical Institute grant, October 1, 1999 – September 30, 2003, **\$539,714**.
8. ***From Outer Space to Inner Space, Research Coordinator*** – National Space Biomedical Research Institute, grant NCC9-58, **\$226,093**.
9. ***Filling the Gaps: K-6 Science/Health Education, Research Coordinator*** – National Institutes of Health, National Center for Research Resources (NCRR) grant R25 RR13454, July 1, 1998 – June 30, 2001, **\$632,444**.
10. ***Baylor Science Leadership Program, Research Coordinator*** – National Science Foundation/Houston Independent School District subcontract.  
     June 1, 1999 – May 31, 2000, **\$185,000**  
     June 1, 2000 – May 31, 2001, **\$210,000**

11. ***Beyond Bridging the Gap: Implementing a Model for Participatory Research and Development***, Research Coordinator – U.S. Department of Education, 1996 – 1999, \$500,000.

### **C. National Participation**

#### **Journal Editorial Boards**

- 2009-2012 Editorial Board for *Annals of Dyslexia*
- 2007-2009 Editorial Board for *Educational and Psychological Measurement*
- 2003-2007 Editorial Board for *American Educational Research Journal*
- 2003-2007 Editorial Board for *Journal of Applied Educational Technology*
- 2000-2007 Editorial Board for *Research in the Schools*
- 2001-2006 Ad hoc editor for *Educational and Psychological Measurement*
- 2004-2005 Ad hoc editor for *Journal of Applied Measurement*
- 2001-2003 Ad hoc editor for *American Educational Research Journal*
- 2000-2002 Co-Editor for *Southwest Educational Research Association News*

#### **Professional Societies**

##### Membership

- American Educational Research Association
- Society for Research on Educational Effectiveness
- Southwest Educational Research Association

##### Elected Positions

- Division V Co-Chair – Society for Research on Educational Effectiveness (2007-2008)
- President – Southwest Educational Research Association (2006)
- President-Elect and Program Chair – Southwest Educational Research Association (2005)
- Board Member – Southwest Educational Research Association (2001 – 2005)
- Co-Editor – *The Southwest Educational Research Association News* (2000 – 2002)
- Webmaster – Southwest Educational Research Association (2001 – Present)
- Membership Chair – Inferential and Descriptive Bootstrapping and Resampling Special Interest Group of the AERA (2001-2002)
- President – Inferential and Descriptive Bootstrapping and Resampling Special Interest Group of the AERA (2002-2003)
- President (and founder) – Hierarchical Linear Modeling Special Interest Group of the AERA (2003-2004)

### **D. Lectures and Conference Presentations**

#### **Invited Lectures, Presentations, Research Seminars**

**Roberts, J. K.** & Saibene, P. (August, 2021). *Cybersecurity, ethics and technology*. Video presentation on Biz Pointz TV. <https://youtu.be/7Qk1fefvXE8>

Nimon, K. F. & **Roberts, J. K.** (February, 2012). *Using R for educational research: An introductory workshop to break the learning curve*. A half-day training

session presented at the annual meeting of the Southwest Educational Research Association, New Orleans, LA.

**Roberts, J. K.** (August, 2010). *Multilevel analysis of time-series data in the context of behavioral and psychological research*. Paper presented at the annual meeting of the American Psychological Association, San Diego, CA.

**Roberts, J. K.** (April, 2009). Director – *An introduction to hierarchical linear modeling with R*. A half-day training session presented at the annual meeting of the American Educational Research Association, San Diego, CA.

**Roberts, J. K.** & Nimon, K. (February, 2009). *Using software packages to conduct hierarchical linear modeling*. A training session conducted at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.

**Roberts, J. K.** & Beretvas, T. (April, 2008). Director – *An introduction to hierarchical linear modeling*. A half-day training session presented at the annual meeting of the American Educational Research Association, New York, NY.

**Roberts, J. K.** (April, 2007). *Variance accounted for measures for two-level linear models: Solving the problem of “negative variance explained.”* Keynote speaker at the annual 6th International Amsterdam Multilevel Conference, Amsterdam.

**Roberts, J. K.** (April, 2007). Director – *An introduction to hierarchical linear modeling with R*. A half-day training session presented at the annual meeting of the American Educational Research Association, Chicago, IL.

**Roberts, J. K.** (October, 2006). *Strategies for evaluating curriculum and teacher professional development programs*. Invited presentation at the NCRRE Science Education Partnership Award Annual Conference, Salt Lake City, UT.

**Roberts, J. K.** & Beretvas, S. N. (August, 2006). Director – *Multilevel and hierarchical linear modeling for psychologists*. A full-day training session presented at the annual meeting of the American Psychological Association, New Orleans, LA.

**Roberts, J. K.** & Beretvas, S. N. (April, 2006). Director – *Multilevel and hierarchical linear modeling*. A half-day training session presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

**Roberts, J. K.** & Beretvas, S. N. (February, 2006). Director – *Multilevel and hierarchical linear modeling*. A two-day training session presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.



Moreno N. P. & **Roberts, J. K.** (December, 2005). *Evaluation approaches for education partnerships*. Invited presentation at Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Moreno N. P. & **Roberts J. K.** (October, 2005). *Evaluation of K-12 science education partnerships*. Invited seminar at the Department of Veterinary Science, School of Veterinary Medicine, Texas A&M University, College Station, Texas.

**Roberts, J. K.** & Beretvas, S. N. (April, 2005). Director – *Multilevel and hierarchical linear modeling*. A half-day training session presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

**Roberts, J. K.** (April, 2005). Discussant - *Hierarchical linear modeling: SIG business meeting and invited panel discussion on software used for multilevel modeling*. Presentation at the annual meeting of the American Educational Research Association, Montreal, Canada.

Elmore, P., Cokley, K., Foster, M., Harris, K., Headrick, T., Onwuegbuzie, A., Snyder, P., Thompson, B., Kim, B., Leonard, J., **Roberts, J. K.**, & LeCompte, M. (April, 2005). Presenter - *Getting published: A panel of journal editors and emerging scholars*. A half-day training session presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Schumacker, R. & **Roberts, J. K.** (April, 2004). Co-Director - *Using S-PLUS: Basic statistics to simulations*. A one-day training session presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Elmore, P., Thompson, B., Foster, M., Harris, K., LeCompte, M., Onwuegbuzie, A., Snyder, P., Holt, J., **Roberts, J. K.**, Ferrera, S., Cokley, K., & Leonard, J. (April, 2004). Presenter - *Getting published: A panel of journal editors and emerging scholars*. A half-day training session presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Snyder, P. & **Roberts, J. K.** (July, 2003). Co-Director - *Varying units of analysis*. An invited training session at the annual meeting of the Office of Special Education Programs Research Project Directors' Conference, Washington, D. C.

Schumacker, R., Seaman, M. & **Roberts, J. K.** (April, 2003). Co-Director - *An introduction to S-PLUS 6.0 statistical software*. A one-day training session presented at the annual meeting of the American Educational Research Association, Chicago, IL.

**Roberts, J. K.** (September, 2002). *Understanding Multilevel and Hierarchical Linear Modeling*. An invited two-day training session hosted by Texas A&M University.

**Roberts, J. K.** (April, 2001). *Quantitative methods in educational research: "The earth is round,  $p \leq .05$ ."* Invited address given at the National Institute of Environmental Health Sciences, Environmental Health Sciences as an Integrative Context for Learning, annual meeting of the grant directors, Houston, TX.

### **Refereed Presentations at National Conferences**

Nimon, K., **Roberts, J. K.**, Henson, R. (August, 2013). *Using fit indices to holistically assess forms of predictor importance in multilevel models.* Paper presented at the annual meeting of the American Psychological Association, Honolulu, Hawaii.

**Roberts, J. K.** , Allor, J. & Mathes, P. (June, 2009). *Measurement solutions for continuous progress monitoring of students with moderate intellectual disabilities.* Paper presented at the annual meeting of the Society for the Scientific Study of Reading, Boston, MA.

**Roberts, J.K.** & Nimon, K. (April, 2009). *Regress: An R package for computing beta weights, structure coefficients, commonality coefficients, and families of effect sizes.* Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Allor, J.H. & **Roberts, J.K.** (April, 2008). *Results from a Longitudinal Reading Intervention Study with Students with Intellectual Disabilities.* Paper presented at the annual meeting of the Council for Exceptional Children Convention, Boston, MA.

**Roberts, J.K.** & Moreno, N. P. (April, 2008). *Teacher science education pays off over time.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

**Roberts, J. K.** (April, 2007). *Group Dependency in the Presence of Small Intra-class Correlation Coefficients: An Argument in Favor of Not Interpreting the ICC.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Denton, J. J., Davis, T. J., Smith, B. L., Beason, L., Graham, B. D., Strader, R. A. & **Roberts, J. K.** (April, 2007). *Applicant profiles for admission into and completion of an online secondary teacher certification program.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

**Roberts, J. K.** & Monaco, J. P. (April, 2006). *Effect size measures for the two-level linear multilevel model.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

St Clair, S. W. & **Roberts, J. K.** (April, 2006). *Missing data treatments at the second level of hierarchical linear models.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

**Roberts, J. K. & Moreno, N. P.** (April, 2006). *Self-efficacy instruments as retrospective measures of change: Answering plaguing questions*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

**Roberts, J. K.** (April, 2005). *Datasets illustrating specific strengths of hierarchical linear modeling*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Moreno, N. P., **Roberts, J. K.**, & Denk, J. (March, 2005). *Evaluation strategies for K-12 university partnerships*. Paper presented at the annual meeting of the National Science Teachers Association, Dallas, TX.

**Roberts, J. K. & Monaco, J. P.** (August, 2004). *Effect size measures in the hierarchical linear modeling framework*. Paper presented at the annual meeting of the American Psychological Association, Honolulu, Hawaii.

**Roberts, J. K.** (April, 2004). Chair – *Multilevel and hierarchical linear modeling*. Presentation at the annual meeting of the American Educational Research Association, San Diego, CA.

**Roberts, J. K.** (April, 2003). *What do we do with multilevel and hierarchical linear models concerning effect size reporting (a.k.a, how much is/isn't there)?* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

**Roberts, J. K. & Moreno, N. P.** (April, 2003). *Teacher self-efficacy is NOT enough!! The problem of interpreting measures of teacher self-efficacy apart from other measures of teacher performance*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Herrington, R. & **Roberts, J. K.** (April, 2003). *Robust estimates of power and effect size using the bootstrap and M-estimators*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

St.Clair, S. & **Roberts, J. K.** (April, 2003). *The nested bootstrap applied to the generalizability theory framework*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Holder, D. & **Roberts, J. K.** (June, 2002). *Web-based surveys: A comparison to paper-based tests*. Paper presented at the annual meeting of the Association for the Advancement of Computing in Education at the World Conference on Educational Multimedia, Hypermedia, and Telecommunications.

**Roberts, J. K. & Fan, X.** (April, 2002). *Bootstrapping within the multilevel/hierarchical linear modeling framework: A primer for use with MLwiN and SAS*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

**Roberts, J. K.** (April, 2002). *Development and Validation of an Instrument to Investigate Science Teachers' Perceptions of Teaching Efficacy*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

**Roberts, J. K. & Henson, R. K.** (April, 2001). *A confirmatory factor analysis of a new measure of teacher efficacy: Ohio State Teacher Efficacy Scale*. Paper presented at the annual meeting of the American Educational Research Association, Seattle. (ERIC Document Reproduction Service No. TM032791)

**Roberts, J. K. & Onwuegbuzie, A. J.** (April, 2001). *Computing statistics to investigate (and correct) alpha in the presence of homogeneous subsamples*. Paper presented at the annual meeting of the American Educational Research Association, Seattle. (ERIC Document Reproduction Service No. TM032785)

Knight, S. L., Boudah, D., & **Roberts, J. K.** (April, 1999). *The efficacy and effectiveness of collaborative research in high schools: Lessons learned*. Invited paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

### Refereed Presentations at Regional Conferences

**Roberts, J. K. & Nimon, K. F.** (February, 2012). *A software solution for conducting logistic commonality analysis*. Paper presented at the annual meeting of the Southwest Educational Research Association, New Orleans, LA.

Martin, L. & **Roberts, J. K.** (February, 2009). *Bootstrapping, jackknifing, and especially jackstrapping for resampling*. Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.

Nimon, K. & **Roberts, J. K.** (February, 2009). *A software solution for conducting canonical commonality analysis*. Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.

**Roberts, J. K.,** Cheatham, J., Martin, L., & Weiser, B. (February, 2008). *Using R to conduct exploratory data analysis*. Paper presented at the annual meeting of the Southwest Educational Research Association, New Orleans, LA.

Cheatham, J., Allor, J., & **Roberts, J. K.** (February, 2008). *Maximizing literacy outcomes for students with mental retardation*. Paper presented at the annual meeting of the Southwest Educational Research Association, New Orleans, LA.

Moreno, N. P., Tharp, B., & **Roberts, J. K.** (February, 2007). *Inquiry teaching leading to improved science achievement: Two models*. Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.

Denton, J. J., Davis, T. J., Smith, B. L., Beason, L., **Roberts, J. K.**, & Strader, R. A. (February, 2007). *Examination of applicant profiles for admission into and completion of an online secondary teacher certification program*. Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.

**Roberts, J. K.** & Henson, R. K. (February, 2006). *Bayesian methods for the calibration of  $p$ -values for testing precise null hypotheses*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.

Denton, J. J., **Roberts, J. K.**, Davis, T. J., Smith, B. L., Beason, L., & Graham, D. (February, 2006). *Comparison of factor structure and conceptual structure of intern classroom assessment instrument*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.

Denton, J. J., Davis, T. J., Smith, B. L., Beason, L., Graham, D., Strader, R. A., & **Roberts, J. K.** (February, 2006). *Examination of applicant profiles for admission into and completion of an online secondary teacher certification program*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.

Clayton, S. R., Moreno, N. P., & **Roberts, J. K.** (February, 2006). *An effective way of tracking changes in the perception of students on issues regarding nature of science and research*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.

**Roberts, J. K.**, Leach, L., McCall, C., Norris, D., & Yu, B. (February, 2004). *Current issues in item response theory*. Symposium presented at the annual meeting of the Southwest Educational Research Association, Dallas, TX.

**Roberts, J. K.**, Hernandez-Katz, M., Reed, L., Jackson, Z., Kegan, L. Perez, G., Dirk, D., & Allen, T. (February, 2004). *An introduction to analyzing national databases: Baccalaureate and Beyond, the Integrated Postsecondary Education Data System, and the national Study of Postsecondary Faculty*. Symposium presented at the annual meeting of the Southwest Educational Research Association, Dallas, TX.

**Roberts, J. K.**, Jones, J., Lowe, T., Norris, D., St.Clair, S. (February, 2003). *An introductory workshop on using S-PLUS to conduct simulations and create new statistical functions*. Presentation made at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.

**Roberts, J. K.**, Anderson, J. Bradley, T., & St. Clair, S. (February, 2003). *EFA, CFA, and G-Theory: Rightly thinking about things often “wrongly” done*. Presentation made at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.

**Roberts, J. K.**, Lane, G. R., Caldwell, S. M., & Phillips, T. P. (February, 2003). *The item response theory model for psychological measurement and applications thereof*. Presentation made at the annual meeting of the Southwest Educational Research Association, San Antonio, TX.

**Roberts, J. K.** (February, 2002). Chair – *An introduction to the use and utility of item response theory in test development*. Symposium presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.

**Roberts, J. K.** (February, 2002). Chair – *New developments in the field of psychometrics and test development*. Symposium presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.

**Roberts, J. K.** (February, 2002). *1-parameter, 2-parameter, 3-parameter, more? An empirical investigation of the pros and cons of estimating more parameters in the item response theory model*. Paper presented at the annual meeting of the Southwest Educational Research Association, Austin, TX.

**Roberts, J. K.** & Onwuegbuzie, A. J. (November, 2001). *A Monte Carlo Investigation of New Measures of Score Reliability and Homogeneity*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Little Rock, AR.

**Roberts, J. K.** (November, 2001). *Methods for correctly performing ANCOVA with multilevel analysis when the homogeneity of regression assumption is not met*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Little Rock, AR.

Onwuegbuzie, A. J., Daniel, L. G., & **Roberts, J. K.** (November, 2001). *A proposed new “what if” reliability analysis for assessing the statistical significance of bivariate relationships*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Little Rock, AR.

Henson, R. K. & **Roberts, J. K.** (February, 2001). *A meta-analytic review of exploratory factor analysis reporting practices in published research*. Paper presented at the annual meeting of the Southwest Educational Research Association, New Orleans. (ERIC Document Reproduction Service No. forthcoming)

Henson, R. K. & **Roberts, J. K.** (February, 2001). *A confirmatory factor analysis of preservice teachers’ responses to the Attitudes and Beliefs on Classroom Control Inventory*. Paper presented at the annual meeting of the Southwest Educational

Research Association, New Orleans. (ERIC Document Reproduction Service No. forthcoming)

**Roberts, J. K.** & Onwuegbuzie, A. J. (November, 2000). *Alternative approaches for interpreting alpha with homogeneous subsamples*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Bowling Green, KY. (ERIC Document Reproduction Service No. ED 448 209)

**Roberts, J. K.** (November, 2000). *The pitfalls of ignoring multilevel design in national datasets*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Bowling Green, KY. (ERIC Document Reproduction Service No. ED 448 198)

**Roberts, J. K.**, Moreno, N. P., & Henson, R. K. (November, 2000). *Self-efficacy teaching and knowledge instrument for science teachers (SETAKIST): A proposal for a new efficacy instrument*. Paper presented at the annual meeting of the Mid-South Educational Research Association, Bowling Green, KY. (ERIC Document Reproduction Service No. ED 448 208)

**Roberts, J. K.** (January, 2000). *Introduction to multilevel and hierarchical linear modeling*. Workshop presented at the annual meeting of the Southwest Educational Research Association, Dallas, TX.

**Roberts, J. K.**, Henson, R. K., Tharp, B. Z., & Moreno, N. P. (January, 2000). *An examination of change in teacher self-efficacy beliefs in science education based on the duration of inservice activities*. Paper presented at the annual meeting of the Southwest Educational Research Association, Dallas, TX.

**Roberts, J. K.** (January, 1999). *Basic concepts of confirmatory factor analysis*. Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio. (ERIC Document Reproduction Service No. ED 427 091)

**Roberts, J. K.** (January, 1999). *Canonical redundancy coefficients: They (almost never) should be computed and interpreted*. Paper presented at the annual meeting of the Southwest Educational Research Association, San Antonio.

**Roberts, J. K.** (November, 1998). *Thurstone's method of equal-appearing intervals in measuring attitudes: An old method that is not forgotten*. Paper presented at the Mid-South Educational Research Association Conference, New Orleans. (ERIC Document Reproduction Service No. ED 426 085)

**Roberts, J. K.** (January, 1998). *A review and critique of the COIN basic skills and career interest survey*. Paper presented at the annual meeting of the Southwest Educational Research Association, Houston. (ERIC Document Reproduction Service No. ED 418 124)

### **Refereed Presentations at Local Conferences**

**Roberts, J. K.** (February, 2002). *Why multilevel and hierarchical linear modeling procedures are usually vital and ordinary least squares techniques are inadequate*. Paper presented at the annual meeting of the Educational Research Exchange, University of North Texas, Denton, TX.

**Roberts, J. K.** (January, 2000). *Nested ANOVA vs. crossed ANOVA: When and how to use which*. Paper presented at the annual meeting of the Educational Research Association, College Station, TX. (ERIC Document Reproduction Service No. ED 440 112)

**Roberts, J. K.** (February, 1998). *Assessment of a moral development program: A single-case research proposal*. Paper presented at the Texas A&M Educational Research Exchange Conference.

### III. Teaching Information

#### A. Didactic Course Work

##### Courses taught at Southern Methodist University

###### Ph.D.-Level Courses

EDU 7311 – Quantitative Statistics for Educational Research (3 hours)

EDU 7312 – Intermediate Quantitative Statistics (3 hours)

EDU 7314 – Advanced Multivariate Statistics (3 hours)

EDU 7309 – Multilevel and Structural Equation Modeling (3 hours)

###### Masters-Level Courses

EDU 6304 – Interpreting Educational Research (3 hours)

##### Courses taught at University of North Texas

###### Ph.D.-Level Courses

EDER 6010 – Statistics for Educational Research (3 hours)

EDER 6020 – Research Methods (3 hours)

EDER 6220 – Classical and Modern Educational Measurement Theory (3 hours)

EDER 6230 – Advanced Research Design (3 hours)

EDER 6240 – Educational Data Processing (3 hours)

EDER 6250 – Advanced Educational Measurement Applications (3 hours)

EDER 6850 – Hierarchical Linear Modeling (3 hours)

###### Masters-Level Courses

EDER 5210 – Introduction to Educational Statistics (3 hours)

EDER 5240 – Survey Research Methods (3 hours)

EDER 5250 – Grant Proposal Writing Techniques (3 hours)

EDER 5350 – Educational Evaluation and Assessment (3 hours)

##### Courses taught at Texas A&M University

###### Undergraduate Level Courses

INST 310 – Introduction to Educational Psychology (3 hours; Texas A&M Univ.)

#### B. Non-didactic teaching

##### Graduate Student Training

2001-2002	Dae-Yeop Hwang	Dissertation Assistant Chair	Ph.D.
Spring - 2002	Ching-Fung B. Si	Dissertation Committee Member	Ph.D.



2002	Leslie Odom	Dissertation Committee Member	Ph.D.
2002-2005	Linda Dulin	Dissertation Committee Member	Ph.D.
2002	Sandra Bennett	Dissertation Committee Member	Ph.D.
2002	Jann Hebert	Dissertation Committee Member	Ph.D.
2002-2003	Randy McCamey	Dissertation Committee Member	Ph.D.
2002-2004	Florence Cox	Dissertation Committee Member	Ph.D.
2002	Reba Berryman	Dissertation Committee Member	Ph.D.
2004	Susan Frier	Dissertation Committee Member	Ph.D.
2004	Rusty Freed	Dissertation Committee Member	Ph.D.
2004-2006	Suzane St. Clair	Dissertation Chair	Ph.D.
2009-2010	Jennifer Cheatham	Dissertation Committee Member	Ph.D.
2009-2010	Beverly Weiser	Dissertation Committee Member	Ph.D.
2010-2013	Brenna Rivas	Dissertation Committee Member	Ph.D.
2010-2012	Braden Hoelzle	Dissertation Chair	Ph.D.