# Thomas J. Smith, Ph.D.

## **Curriculum Vitae**

# **Education**

University of Illinois (Urbana-Champaign), Ph.D., Quantitative Psychology, 2000 University of Illinois (Urbana-Champaign), M.S., Statistics, 1997 University of St. Thomas (St. Paul, MN), B.A., Psychology, 1988

### **Professional Experience**

2017-present	Presidential Teaching Professor, Northern Illinois University
2014-2017	Professor of Education, Northern Illinois University
2006-2014	Associate Professor of Education, Northern Illinois University
2000-2006	Assistant Professor of Education, Northern Illinois University
1992-2000	Teaching and Research Assistant, University of Illinois

## Grants/contracts/awards

- 2019 Best Paper Award: Adult Literacy Special Interest Group: American Educational Research Association
- 2018 American Institutes for Research. Secondary data analysis of 2013 PIAAC data. With A. Rose, M C. Smith, J. Ross-Gordon, et al. \$8000.
- 2017 Best Paper Award: National Council for Geographic Education
- 2017 Presidential Teaching Professor, Northern Illinois University
- 2016 Best Paper Award: Adult Literacy Special Interest Group: American Educational Research Association
- 2015 U.S. Dept. of Ed. (Federal). \$550,000.00. Unified English Braille Online Training. Role: Project Evaluator.
- 2014 American Institutes for Research. Secondary data analysis of 2013 PIAAC data. With M Cecil Smith, A. Rose, and J. Ross-Gordon. \$8000.
- 2009 National Center for Educational Statistics (NCES): Secondary data analysis of
  2003 National Assessment of Adult Literacy (NAAL). With M Cecil Smith.
  \$8000.
- 2009 Alyce Kramer Marcus Outstanding Educator Award.
- 2009 National Center for Educational Statistics (NCES): Secondary data analysis of
  2003 National Assessment of Adult Literacy (NAAL). With M Cecil Smith.
  \$8000.
- 2009 National Center for Educational Statistics (NCES): Secondary data analysis of 2009 Real Word Reading data. With M Cecil Smith. \$8000.
- 2008 National Center for Educational Statistics (NCES): Secondary data analysis of
  2003 National Assessment of Adult Literacy (NAAL). With M Cecil Smith.
  \$8000.

- 2008 National Science Foundation (NSF) Course, Curriculum, and Laboratory Improvement grant. *Development of a Cognitive Tutor for Training Social and Behavioral Science Students in Research Methods Fundamentals* (Co-PI with M C. Smith and W. C. Hung.). Three years, \$150,000.
- 2008 Northern Illinois University Summer Research and Artistry grant \$3000
- 2006 College of Education Instructional Support Grant (with Wei-Chen Hung, \$2000 and research assistantship)
- 2005 College of Education Scholarship Support Grant (with Wei-Chen Hung, \$2000)
- 2002 Northern Illinois University Portfolio Development Grant (workshop expenses)
- 2002 Exceptional Contributions in Teaching award (N.I.U. College of Education)
- 2002 David W. Raymond Grant for Use of Technology in Teaching (with M Cecil Smith) \$2000
- 2002 Northern Illinois University Multicultural Transformation Institute grant \$1000
- 2002 Northern Illinois University Assessment Panel Workshop grant (with Cynthia Campbell) \$700
- 2002 Northern Illinois University Summer Research and Artistry grant \$3000
- 2001 Northern Illinois University Summer Research and Artistry grant \$3000
- 2001 Faculty Summer Institute on Learning Technologies travel grant, Champaign, IL (travel and course fee provisions)

### **Professional memberships**

Association for Assessment in Counseling and Education American Educational Research Association Mid-Western Educational Research Association American Evaluation Association

### **Publications**

- Smith, T. S., Walker, D. A., Chen, H-T., & Hong, Z-R. (in press). Students' Sense of School Belonging and Attitude towards Science: A Cross-Cultural Examination. *International Journal of Science and Mathematics Education*.
- Chen, Y., Mayall, H. J., York, C. S., & Smith, T. J. (in press). Parental perception and English Learners' mobile-assisted language learning: An ethnographic case study from a technology-based Funds of Knowledge approach. *Learning, Culture, and Social Interaction, 22*, doi: 10.1016/j.lcsi.2019.100325 [Received AECT 2018 Qualitative Inquiry Award]
- Chen, Y., Smith, T. J., York, C. S., & Mayall, H. J. (in press). Google Earth virtual reality and expository writing for young English learners from a Funds of Knowledge perspective. *Computer Assisted Language Learning* DOI: <u>https://doi.org/10.1080/09588221.2018.1544151</u>
- Luo, W., **Smith, T. J.,** Whalley, K., Darling, A., Ormand, C., Hung, W-C., Chiang, J-L., Pelletier, J., & Duffin, K. (in press). Earth surface modeling for education: How

effective is it? Four semesters of classroom tests with WILSIM-GC. *British Journal of Educational Technology*.

- Walker, D. A., Reeves, T. D., & Smith, T. J. (2018). Confirmation of the Data Driven Decision-Making Efficacy and Anxiety Inventory's score factor structure among teachers. *Journal of Psychoeducational Assessment*, 36(5), 477-491.
- Pinter, E., Van Laarhoven, T., Smith, T.J., Clemens, S., DeYoung, T. (2018). A Research Summary: Career Development and Vocational Preparation in Middle and High School: A Look at What Students in Illinois Are Getting. *Illinois Alliance of Administrators of Special Education (IAASE) Newsletter*, 452(2), 4-5.
- Pinter, E., Van Laarhoven, T., Smith, T.J., Clemens, S., DeYoung, T. (2018). Career Development and Vocational Preparation in Middle/High School: What are Students in Illinois Really Getting? Scope, 51(3), 1-3.
- Hsu, P.-S., Van Dyke, M., Natividad, G., Smith, T. J. (2018). Argue like a Scientist with Technology: The effect of within-gender vs. cross-gender team argumentation on science knowledge and argumentation skills among middlelevel students. *Educational Technology, Research and Development*, 66(3), 733-766.
- Kapperman, G., Kelly, S., Kilmer, K., Smith, T. J. (2017). An assessment of the Tinder online mobile dating application applied to individuals who are visually impaired. *Journal of Visual Impairment and Blindness*, 111(4), 369-374.
- Chen, Y., Carger, C. L., & **Smith, T. J.** (2017). Mobile-Assisted narrative writing practice for young English Language Learners from a Funds of Knowledge approach. *Language Learning and Technology*, *21*(2), 28-41.
- Walker, D. A., & Smith, T. J. (2017). Computing robust, bootstrap-adjusted fit indices for use with non-normal data. *Measurement and Evaluation in Counseling and Development*, 50(1-2), 131-137.
- Hsu, P.-S., Van Dyke, M., Chen, Y., & Smith T. J. (2016). A cross-cultural study of the effect of a project-based learning environment that incorporates a graphoriented, computer-assisted application on middle school students' science knowledge and scientific argumentation. *Journal of Computer Assisted Learning*, 32(1), 51-76.
- King, C., Smith, T. J., Grandin, T., & Borchelt, P. (2016). Anxiety and impulsivity: Factors associated with premature graying in dogs. *Applied Animal Behaviour Science*, 185 (December), 78-85. Available at: http://www.appliedanimalbehaviour.com/article/S0168-1591(16)30277-5/fulltext

- Smith, T. J., Smith, M C., Rose, A. D., & Ross-Gordon, J. M. (2016). An assessment of the factor structure and factorial invariance of scores from the Readiness to Learn scale. *Journal of Learning and Individual Differences*, 49, 230-236.
- Shin, E. K., Milson, A. J., & Smith, T. J. (2016). Future teachers' spatial thinking skills and attitudes: A comparison of elementary and secondary education majors with geography majors. *Journal of Geography*, 115(4) 139-146.
- Walker, D. A., Smith, T. J. (2016). Nine pseudo R<sup>2</sup> indices for binary logistic regression models. *Journal of Modern Applied Statistical Methods*, 15(1), Article 43.
- Hsu, P.S., Chen, Y., van Dyke, M., & Smith, T. J. (2015). The effect of a graph-oriented, computer assisted, project-based learning environment on middle school students' science knowledge and argumentation skills. *Journal of Computer Assisted Learning*, 31(1) 32-58.
- Hung, W.-C., Smith, T. J., & Smith, M. (2015). Design and usability assessment of a dialogue-based cognitive tutoring system to model expert problem solving in research design. *British Journal of Educational Technology*, 46(1), 82-97.
- King, C., Buffington, L., Smith, T. J., & Grandin, T. (2014). Use of a pressure wrap (Thundershirt) as a treatment for canine anxiety. *Journal of Veterinary Behavior*, 9, 215-221.
- Smith, T. J., Pasero, S., & McKenna, C. M. (2014). Gender Effects in Student Attitude Toward Science Among Fourth- and Eighth-Grade Students in the United States. Bulletin of Science, Technology, & Society, 34(1-2), 7-12.
- Van Laarhoven-Myers, T. E., Van-Laarhoven, T. R., Smith, T. J., Johnson, H., & Olson, J. (in press). Promoting self-determination and transition planning using technology: Student and parent perspectives. *Career Development and Transition for Exceptional Individuals*.
- Smith, T. J., McKenna, C. M., Hines, E. (2014). The association of group learning with math achievement and math attitude among eighth-grade students in the U.S. *Learning Environments Research*, 17(2), 229-241.
- Rossetti, J. R., Musker, K.M., & Smith, T. J. (2014). Using findings from the Human Rights Authority Reports to inform psychiatric nursing practice. *Journal of the American Psychiatric Nurses Association*.
- Muehsler, H. E., Walker, D. A., & Smith, T. J. (2014). A Note on the Use of Cohen's *d* and Common Language Effect. *Multiple Linear Regressions Viewpoints*.

- Derby, D., & Smith, T. J. (2014). Behavioral consequences of drinking: An investigation of factorial invariance across gender. *Measurement and Evaluation in Counseling* and Development, 47(1), 52-61.
- Henry, B., Smith, T. J., & Ahmad, S. (2014). Psychometric assessment of the Behavior and Attitudes Questionnaire for Healthy Habits: Measuring parents' views on food and physical activity. *Public Health Nutrition*, 17(5), 1004-1012.
- Smith, T. J., & McKenna, C. M. (2013). A comparison of logistic regression pseudo R<sup>2</sup> indices. *Multiple Linear Regression Viewpoints*, 39(2), 17-26.
- Jung, M., Hartman, P. A., Smith, T. J., Wallace, S. R. (2013). The effectiveness of teaching number relationships in preschool. *International Journal of Instruction*.
- Piper, T. J., Radlo, S. J., **Smith**, T. J., and Woodward, R. W. (2012). Dynamic balance abilities of college males for the bench press. *Journal of Strength & Conditioning Research*.
- Kapperman, G. G., Sticken, J., Smith, T. J. (2012). Effectiveness of the BrailleNote Nemeth Code Tutorial: A follow-up study. AER Journal: Research and Practice in Visual Impairment and Blindness, 5(3), 168-174.
- Smith, T. J., McKenna, C. M. (2012). An examination of ordinal regression goodnessof-fit indices under varied sample conditions and link functions. *Multiple Linear Regression Viewpoints*, 38(1), 1-7.
- Smith, T. J., & Wallace, S. (2011). Social skills of children in the U.S. with comorbid learning disabilities and AD/HD. *International Journal of Special Education*, 26(3), 238-247.
- Smith, T. J., & McKenna, N. M. (2011). A weighted test of internal symmetry. *Journal of Applied Statistics*, 38(10), 2111-2118.
- Zebehazy, K., & Smith, T. J. (2011). An examination of characteristics related to social skill ability of youths with visual impairments. *Journal of Visual Impairment and Blindness*, 105(2), 84-95.
- Kapperman, G., Sticken, J., & Smith, T. J. (2011). The effectiveness of the Nemeth Code Tutorial for BrailleNote. AER Journal: Research and Practice in Visual Impairment and Blindness, 4(1), 22-28.
- Smith, M C., & Smith, T. J. (2010). Adults' Uses of Computer Technology: Associations with Literacy Tasks. *Journal of Educational Computing Research*, 42(4), 407-422.

- Smith, M C., & Smith, T. J. (2010). Perceived job skill limitations and participation in education and training opportunities: Differences between U.S. native-born and non-native-born individuals. *Vocations and Learning*, *3*, 55-69.
- Hung, W., Smith, T. J., Harris, M. S., & Lockard, J. (2010). Developmental research of a teachers' educational performance support system: The practices of design, development, and evaluation. *Educational Technology, Research and Development*, 58(1), 68-80.
- Henry, B. W., White, N. J., Smith, T. J., & LeDang, L. T. (2010). An Exploratory Look at Teacher Perceptions of School Food Environment and Wellness Policies. *Infant, Child, and Adolescent Nutrition, 2*(5), 304-311.
- Henry, B. W., & Smith, T. J. (2009). Evaluation of the FOCUS (Feedback on Counseling Using Simulation) instrument for assessment of client-centered nutrition counseling behaviors. *Journal of Nutrition Education and Behavior*, 42(1), 57-62.
- Henry, B. W., Duellman, M. C., & Smith, T. J. (2009). Nutrition-based standardized patient sessions increased counseling awareness and confidence among dietetic interns. *Topics in Clinical Nutrition*, 24(1), 25-34.
- Smith, T. J., & Campbell, C. (2009). The relationship between occupational values and interests. *Journal of Career Assessment*, 17(1), 39-55.
- Shumow, L., Smith, T. J., and Smith, M C. (2009). Academic and behavioral characteristics of young adolescents in self care. *Journal of Early Adolescence*, 29(2), 233-257.
- Van Laarhoven, T., Munk, D. D., Zurita, L. M., Lynch, K., & Zurita, V., Smith, T., & Chandler, L. K. (2008). The effectiveness of using video tutorials to teach preservice educators to use assistive technologies. *Journal of Special Education Technology*, 23(4), 31-45.
- Kelly, S., & Smith, T. J. (2008). The Digital Social Interactions of Students with Visual Impairments in the U.S.: Findings from the Special Education Elementary Longitudinal Study and the National Longitudinal Transition Study-2. *Journal of Visual Impairment and Blindness*, 102(9), 528-539.
- Smith, M C., & Smith, T. J. (2008). Low-education adults' participation in informal learning activities: Relationships with selected demographic characteristics. *Adult Basic Education and Literacy Journal*, 2(2), 67-73.
- Derby, D., & Smith, T. J. (2008). Exploring the factorial structure for behavioral consequences of college student drinking. *Measurement and Evaluation in Counseling and Development*, 41(1), 32-41.

- Adams, G. B., Smith, T. J., Bolt, S. E., & Nolten, P. (2007). Current educational practices in classifying and serving students with obsessive-compulsive disorder. *The California School Psychologist*, 12, 93-104.
- Smith, T. J., & Campbell, C. (2006). The structure of O\*NET occupational values. *Journal of Career Assessment 14*(4), 437-448.
- Smith, T. J., & Adams, G. (2006). The effect of comorbid AD/HD and learning disabilities on parent-reported behavioral and academic outcomes of children. *Learning Disability Quarterly*, 29(2), 101-112.
- Aurand, T., DeMoranville, C., Fredericks, E., & Smith, T. (2005). From mass customization to customization: An opportunity for entrepreneurial differentiation. *Journal of Small Business Strategy*, 15(1), 49-60.
- Smith, T. J. (2005). Ethnic and gender differences in community service participation among working adults. *Journal of Extension*, 43(2), Article 2RIB1.
- Bursuck, W. D., Smith, T., Munk, D., Damer. M., Mehlig, L. & Perry, J. (2004). Evaluating the impact of a prevention-based model of reading on children who are at risk. *Remedial and Special Education*, 5(5), 303-313.
- Armstrong, P. I., Smith, T. J., Donnay, D. A. C., & Rounds, J. (2004). The Strong ring: A basic interest model of occupational structure. *Journal of Counseling Psychology*, 51(3), 299-313.
- Derby, D., & **Smith, T. J.** (2004). The effects of a retention course on a community college's retention. *Community College Journal of Research and Practice*, 28(9), 763-773.
- Smith, T. J. & Campbell, C. (2003). Skills-based occupational representations: Implications for career counseling. *Journal of College Counseling*, 6, 134-143.
- Smith, M C., Plant, M., Carney, R. N., Arnold, C. S., Jackson, A., Johnson, L. S., Lange, H., Mathis, F. S., & Smith. T. J. (2003). Further productivity of educational psychologists in educational psychology journals, 1997-2001. *Contemporary Educational Psychology*, 28, 422-430.
- Smith, T. J. (2001). Constructing ultrametric and additive trees based upon the  $L_1$  norm. *Journal of Classification*, 18(2), 185-207.
- Smith, T. J. (2000). L<sub>1</sub> optimization under linear inequality constraints. Journal of Classification, 17, 225-242.

Smith, T. J. (1998). A comparison of three additive tree algorithms that rely on a leastsquares loss criterion. *British Journal of Mathematical and Statistical Psychology*, 51, 269-288.

### **Other publications**

- Hsu, P.-S., Van Dyke M., Lee. E. M., & Smith, T. J. (2017, June). The effect of varied gender groupings on science knowledge and argumentation skills among middle level students. In B. K. Smith, M. Borge, E. Mercier, & K. Y. Lim (Eds.), *Proceedings of the 12 the International Conference on Computer Supported Collaborative Learning* (pp. 781-782). Philadelphia, PA: International Society of the Learning Sciences.
- Hsu, P.-S., Van Dyke, M., Lee, E. M., & Smith, T. J. (2016). A cross-cultural study of the effect of a graph-oriented computer-assisted project-based learning environment on students' argumentation skill. In C.-K. Looi, J. Polman, U. Cress, & P. Reimann (Eds.), *Proceedings of the 12th International Conference of the Learning Sciences* (pp. 1183-1184). Singapore: International Society of the Learning Sciences.
- Hsu, P.-S., Van Dyke, M., Chen, Y., & Smith, T. J. (2015, June). A study of developing students' scientific argumentation skills in a computer-assisted project-based learning environment. In O. Lindwall, P. Hakkinen, T. Koschmann, P. Tchounikine, & S. Ludvigsen (Eds.), *Proceedings of the 11th International Conference on Computer Supported Collaborative Learning* (pp. 677-678). Gothenburg, Sweden: International Society of the Learning Sciences.
- Smith, T. J., & Campbell, C. (2005). Using the O\*NET Work Importance Profiler as a tool for exploring occupational values. In M. Pope & C. W. Minor (Eds.), *Experiential Activities for Teaching Career Courses and Leading Career Groups, Vol. II.*, Tulsa: OK: National Career Development Association.
- Campbell, C., Smith, T. J. (2005). Using the O\*NET to facilitate career decisionmaking: Exploring occupational requirements and characteristics. In M. Pope & C. W. Minor (Eds.), *Experiential Activities for Teaching Career Courses and Leading Career Groups, Vol. II.*, Tulsa: OK: National Career Development Association
- Rounds, J., Smith, T. J., Armstrong, P. I., & Donnay, D. A. C. (2000, August). Strong occupational classification system. Report prepared for Consulting Psychologist Press, Inc.
- Rounds, J., Armstrong, P. I., Smith, T. J., & Donnay, D. A. C. (2000). The Strong ring: A spatial model of the Strong Interest Inventory Occupations. Report prepared for Consulting Psychologist Press, Inc.

- Rounds, J., Armstrong, P. I., Smith, T. J., & Donnay, D. A. C. (2000). Comparison of current Strong Interest Inventory occupation scales to ACT and SOC classification systems: Recommendations for occupational sampling. Report prepared for Consulting Psychologist Press, Inc.
- Rounds, J., Mazzeo, S., Smith, T., Hubert, L., Lewis, P., & Rivkin, D. (1999). ONET Computerized Interest Profiler: reliability, validity, and comparability. (U.S. Department of Labor Rep. SARDC 99-5): U.S. Department of Labor.
- Rounds, J., Smith, T., Hubert, L., Lewis, P. & Rivkin, D. (1998). Development of occupational interest profiles (OIPs) for the ONET. (U.S. Department of Labor Rep. SARDC 97-2): U.S. Department of Labor.

### Presentations (refereed)

- Yun, H., Xie, Y., Smith, T. J., & Ketsman, O. (2019, April). Understanding high school students' one-to-one computing technology acceptance: Using the modified unified theory of acceptance and use of technology model. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Toronto, Canada.
- Rose, A. D., Smith, T. J., Ross-Gordon, J. M., Smith, M C., Zaretsky, J., Lopes, T., Grotlueschen, A., Fleige, M. (2019, April). *Predictors of civic engagement in the* U.S. and German: A cross-national comparison. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Toronto, Canada.
- Smith, T. J., Walker, D. A., Chen, H-T., & Hong, Z-R. (2019, April). Students' sense of school belonging as a predictor of science proficiency and attitude toward science: A comparison between Taiwan and the United States. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Toronto, Canada.
- Smith, T. J., McKenna, C. M., & Walker, D. A. (2019, April). Homework characteristics as predictors of advanced math achievement and attitude among U.S. 12<sup>th</sup> grade students. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), Toronto, Canada.
- Smith, T.J., Walker, D. A., & Chen, H-T. (2019, January). The relationship of sense of school belonging to math attitude among high school students enrolled in advanced math courses. Paper presented at the Lisbon Economics and Statistics of Education (LESE) conference, Lisbon, Portugal.

- Smith, T. J. (2018, November). Cultivating and sustaining student interest in science: A cross-cultural perspective. Keynote address presented at the International Conference on Education (ICE), Tainan, Taiwan.
- Yun. H., Xie, Y., & Smith, T. (2018, October). Secondary school students' coputer selfefficacy, computer anxiety, and attitude toward 1:1 computing technology: an extension of the UTAUT model. Paper presented at the Association for Educational Communications and Technology (AECT) International Convention, Kansas City, Missouri.
- Yun. H., Xie, Y., & Smith, T. (2018, October). Understanding high school student perceptions on 1:1 computing technology acceptance: An application of the UTAUT model. Paper presented at the Association for Educational Communications and Technology (AECT) International Convention, Kansas City, Missouri.
- Chen, Y., Mayall, H. J., York, C., & Smith, T. J. (2018, April). A Mobile-Assisted Funds of Knowledge–Featured Writing Instructional Model for iPanchitos via Google Apps for Education. Paper presented at the Annual Meeting of the American Educational Research Association, American Educational Research Association, New York, NY.
- Smith, M. C., Smith, T. J., & Walker, D. A. (2018, April). Adult skill practices: An international study of individual and contextual predictors of skill proficiency. Roundtable presentation at the Annual Meeting of the American Educational Research Association, American Educational Research Association, New York, NY.
- Chen, Y., Mayall, H. J., York, C., & Smith, T. J. (2018, April). Google Earth virtual reality: Assisted expository writing for iPanchitos from the Funds of Knowledge perspective. Paper presented at the Annual Meeting of the American Educational Research Association, American Educational Research Association, New York, NY.
- Smith, T. J., Walker, D. A., & McKenna, C. M. (2018, April). Logistic regression under sparse data conditions. Paper presented at the Annual Meeting of the American Educational Research Association, American Educational Research Association, New York, NY.
- Walker, D. A., Smith, T. J., & Smith, M. C. (2018, April). *The relationship between literacy skills and immigrant characteristic variables: A U.S. examination*. Roundtable presentation at the Annual Meeting of the American Educational Research Association, American Educational Research Association, New York, NY.

- Smith, T. J., Walker, D. A., & Chen, H-T. (2018, October). Students' sense of school belonging as a predictor of science proficiency and attitude toward science: A comparison between Taiwan and the U.S. Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Cincinnati, OH.
- Smith, T. J., & Walker, D. A. (2017, October). Student Perceptions of School Climate and Student Attitude Towards Science: A Cross-Cultural Examination. Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Evanston, IL.
- Walker, D. A., Reeves, T., & Smith, T. J. (2017, April). Confirmation of the Factor Structure of the Data Driven Decision-Making Efficacy and Anxiety Inventory (3D-MEA) Among Teachers in the Midwest. Paper presented at Annual Meeting of the American Educational Research Association, San Antonio, TX.
- Chen, Y., Mayall, H. J., York, C. S., Xie, Y., & Smith, T. J. (2017, April). *Cloud-based narrative writing practice for young English learners from a Funds of Knowledge Approach.* Paper presented at Annual Meeting of the American Educational Research Association, San Antonio, TX.
- Smith, T. J., Walker, D. A., and McKenna, C. M. (2017, April). An examination of link function choice in ordinal regression models. Paper presented at Annual Meeting of the American Educational Research Association, San Antonio, TX.
- Smith, T. J., & Walker, D. A. (2017, October). Student Perceptions of School Climate and Student Attitude Towards Science: A Cross-Cultural Examination. Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Evanston, IL.
- Smith, T. J., & Walker, D. A. (2017, October). Logistic regression under sparse data conditions. Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Evanston, IL.
- Walker, D. A., Smith, T. J., Smith, M C. (2017, October). The predictive relationship between literacy skills and background variables: A PIAAC study of U.S. immigrant participants. Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Evanston, IL.
- Hsu, P.-S., Van Dyke M., Lee. E. M., & **Smith, T. J.** (2017, June). *The effect of varied gender groupings on science knowledge and argumentation skills among middle level students*. Paper presented at the 12 the International Conference on Computer Supported Collaborative Learning, Philadelphia, PA.
- Martin, A., Reeves, T. D., Smith, T. J., & Walker, D. A. (2016, November). *Computer* proficiency for online learning: Factorial invariance of scores among teachers.

Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Evanston, IL.

- Smith, T. J., Walker, D. A., & McKenna, C. M. (2016, November). An exploration of link functions used in ordinal regression. Paper presented at the Annual Meeting of the Mid-Western Educational Research Association, Evanston, IL.
- Walker, D. A., Reeves, T. D., Smith, T. J., Sanga, I. J., & Smith, T. J. (2016, November). An evaluation of an online teaching and course development training program in Saudi Arabia. Poster presented at the Annual Meeting of the Mid-Western Educational Research Association, Evanston, IL.
- Chiang, J. L., Luo, W., Hung, W.-C., Smith, T. J. (2016, November). The effects of utilizing 3D web-based interactive earth surface modeling for science learning in higher education. Poster presented at the Asia-Pacific Educational Research Association, Kaohsiung, Taiwan.
- Chiang, J. L., Luo, W., Hung, W.-C., Smith, T. J. (2016, November). The effects of utilizing simulation to promote higher order thinking skills in a STEM classroom. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology (AECT), Las Vegas, NV.
- Hsu, P.-S., Van Dyke, M., \*Zhou, X., \*Ginting S. R., & Smith, T. J. (2016, October). A cross-cultural study of the effect of a graph-oriented computer-assisted projectbased learning environment on students' argumentation skill. Paper presented at of the annual meeting of Association for Educational Communications and Technology, Las Vegas, Navada.
- Walker, D. A., Reeves, T. D., Smith, T. J., Comber, E. M., Martin, A. L., & Summers, K. H. (2016, September). *Confirmation of the factor structure of the Data Driven Decision-Making Efficacy and Anxiety inventory (3D-MEA) among teachers in the Midwest*. Poster presented at the Illinois Education Research Council, Bloomington, IL.
- Hsu, P.-S., Van Dyke, M., Lee, E. M., & Smith, T. J. (2016, June). A cross-cultural study of the effect of a graph-oriented computer-assisted project-based learning environment on students' argumentation skill. Paper presented at of the 12th International Conference of the Learning Sciences. Singapore: International Society of the Learning Sciences. (international, refereed)
- Smith, T. J., Walker, D. A., and McKenna, C. M. (2016, November). A coefficient of discrimination for use in multinomial and logistic regression models. Paper presented at Annual Meeting of the American Educational Research Association, Washington, DC.

- Smith, T. J., Rose, A. D., Ross-Gordon, J., & Smith, M. C. (2015, April). Readiness to learn: An international study of individual and contextual predictors. Paper presented at Annual Meeting of the American Educational Research Association, Washington, DC.
- Smith, T. J., Walker, D. A., and McKenna, C. M. (2015, November). A coefficient of discrimination for use in multinomial and logistic regression models. Paper presented at the annual meeting of the Mid-Western Educational Research Association, Evanston, IL.
- Reeves, T. R., Walker, D. A., Smith, T. J., Sanga, I. (2015, Oct.). Tracking the growth of higher educators during an online teaching and course development training program. Poster presented at the Illinois Education Research Council Symposium, Lisle, IL.
- Hsu, P.-S., Van Dyke, M., Chen, Y., & Smith, T. J. (2015, June). A study of developing students' scientific argumentation skills in a computer-assisted project-based learning environment. Paper presented at 11th International Conference on Computer Supported Collaborative Learning, Gothenburg, Sweden (*in absentia*).
- Ross-Gordon, J., Rose, A. D., Smith, T. J., & Smith, M. C. (2015, April). *Readiness to learn as a predictor of participation in adult education and training activities.* Paper presented at Annual Meeting of the American Educational Research Association, Chicago, IL.
- Smith, T. J., Smith, M. C., Rose, A. D., & Ross-Gordon, J. (2015, April). An assessment of the factor structure and factorial invariance of scores from the Readiness to Learn scale. Paper presented at Annual Meeting of the American Educational Research Association, Chicago, IL.
- Smith, T. J., Smith, M. C., Rose, A. D., & Ross, J. (2014, December). Adults' Readiness to Learn as a Predictor of Literacy Skills. Paper presented at Taking the next step with PIAAC: A research-to-action conference, Arlington, VA.
- Hsu, P.-S., Van Dyke, M., Chen, Y., & Smith, T. J. (2014, November). A study of developing middle school students' science knowledge and scientific argumentation skills in a graph-based computer-assisted project-based learning environment (in absentia). Paper presented at Association for Educational Communications and Technology, Jacksonville, FL.
- Smith, T. J., Smith. M C., Rose, A., & Ross-Gordon, J. (2014, November). An assessment of factor structure and factorial invariance of scores from the Readiness to Learn scale. Paper presented at the annual meeting of the Mid-Western Educational Research Association, Evanston, IL.

- Muehsler, H. E., Walker, D. A., & Smith. T. J. (2014, November). A note on the use of *Cohen's d and common language effect*. Paper presented at the annual meeting of the Mid-Western Educational Research Association, Evanston, IL.
- Hsu, P.-S., Van Dyke, M., Chen, Y., & Smith T. J. (November, 2014). A study of developing middle school students' science knowledge and scientific argumentation skills in a graph-based computer-assisted project-based learning environment. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Jacksonville, FL. (in absentia)
- Smith, T. J., Pasero, S., & McKenna, C. M. (2014, April). Gender Effects in Student Attitude Toward Science Among Fourth- and Eighth-Grade Students in the United States. Paper presented at Annual Meeting of the American Educational Research Association, Philadelphia, PA.
- Kantner, J., McKenna, C. M., & Smith, T. J. (2013, November). *Selected predictors of success in community college developmental mathematics courses*. Paper presented at Midwestern Educational Research Association, Evanston, IL.
- Muehsler, H., Smith, T. J., & Walker, D. A. (2013, November). A conceptual framework for assessment and factors related to K-12 student achievement. Paper presented at Midwestern Educational Research Association, Evanston, IL.
- Smith, T. J., Pasero, S., & McKenna, C. M. (2013, November). Gender differences in student attitude towards science. Paper presented at Midwestern Educational Research Association, Evanston, IL.
- King, C., Buffington, L., Smith, T. J., Grandin, T. (2013). Use of a pressure wrap (*Thundershirt*) as a treatment for canine anxiety. Poster presented at the Annual Meeting of the Animal Behavior Society, Boulder, CO.
- Smith, T.J., Hung, W-C., & McKenna, C. M. (2013). Student perceptions of classroom mathematics activities: A cross-cultural examination. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Smith, T. J. & McKenna, C. M. (2012, November). Student Perceptions of Classroom Mathematics Activities: A Cross-Cultural Examination. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, Evanston, IL.
- Smith, T. J. & McKenna, C. M. (April 2012). An examination of ordinal regression goodness-of-fit indices under varied sample conditions and link functions. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, B.C., Canada.

- Smith, M C., Hung, W. C., & Smith, T. J. (April 2012). Use of a scenario-based tutorial to facilitate student proficiency in social science research methodology and attitude towards research. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, B.C., Canada.
- McKenna, C. M., & Smith, T. J. (April 2012). Relationships among attitudes, homework, and achievement among eighth grade students in the U.S. Paper presented at the Annual Meeting of the American Educational Research Association, Vancouver, B.C., Canada.
- Hertz, J. E., and Smith, T. J. (2011, November). Psychometric analysis of the perceived enactment of autonomy (PEA) scale. Poster presented at the Gerontological Society of North America 64<sup>th</sup> Annual Scientific Meeting, Boston, MA.
- Smith, T. J. & McKenna, C. M. (2011, October). An examination of goodness-of-fit indices used in ordinal regression. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, St. Louis, MO.
- Derby, D. C., & Smith, T. J. (2011, October). Behavioral consequences of alcohol: An investigation of factorial invariance across gender. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, St. Louis, MO.
- Smith, T. J., & McKenna, C. M. (2011, April). A weighted test of internal symmetry. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Smith, M C., & Smith, T. (2011, April). Decline in college graduates' literacy skills? A search for explanations. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Smith, T. J. & McKenna, C. M. (2010, October). An examination of pseudo R-square statistics under varying sample size conditions. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, Columbus, OH.
- Derby, D. C., & Smith, T. J. (2010, May). *The structure of behavioral consequences of drinking among 4-year college students*. Paper presented at the Annual Meeting of the American Educational Research Association, Denver, CO.
- Smith, T. S., & Smith, M C. (2010, May). The relationship between literacy activities and civic engagement among U.S. adults. Paper presented at the Annual Meeting of the American Educational Research Association, Denver, CO.
- Smith, T. J., & McKenna, N. M. (2010, May). *The association of group work with math proficiency and attitude among eighth-grade students in the U.S.* Paper presented

at the Annual Meeting of the American Educational Research Association, Denver, CO.

- Smith, T. J., & McKenna, C. M. (2009, October). *The effects of cooperative learning on student attitudes towards mathematics*. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, St. Louis, MO.
- Derby, D. C., & Smith, T. J. (2009, October). Behavioral consequences of drinking across College Student Populations: An examination of the two-factor model. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, St. Louis, MO.
- Hung, W. C., Smith, T. J., Smith, M C., & Adulseranee, R. (2009, October). Visual dialogue metaphor of a scenario-based simulation in research design. Paper presented at the annual meeting of the International Visual Literacy Association, Chicago, IL.
- Smith, T. J. (2009, April). The relationship of comorbid AD/HD and Learning Disabilities to social skills outcomes in children. Poster presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Smith, M. C., & Smith, T.J. (2009, April). Adults' uses of computer technology: Associations with literacy outcomes. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Smith, T. J., & Smith, M.C. (2009, April). Workplace skills and training among nonnative U.S. adults. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Smith, T. J., & Smith, M.C. (2009, April). *The literacy skills of first-generation college graduates*. Poster presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Smith, T. J., & McKenna, C. M. (2008, October). A weighted test of marginal homogeneity. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, Columbus, OH.
- Smith, T. J. (2008, October). The relationship of comorbid AD/HD and Learning Disabilities to social skills outcomes in children. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, Columbus, OH.
- Smith, T. J. & Zebehazy, K. (2008, July). A comparative examination of the sociobehavioral characteristics and skills of youth with visual impairment. Poster presented at the annual meeting of the Association for Education and Rehabilitation of the Blind and Visually Impaired, Chicago, IL.

- Smith, T. J., & Campbell (2007, October). *The relationship between occupational values and interests*. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, St. Louis, MO.
- Smith, T. J. (2007, April). Children with parent-reported AD/HD: Demographic characteristics and associations with academic and behavioral outcomes.
  Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Smith, M C., & Smith, T. J. (2007, April). Low-education adults' participation in informal learning activities: Relationships with selected demographic characteristics. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Henry, B., & Smith, T. J. (2007, April). *Evaluating a Nutrition Counseling Standardized Patient Exercise* Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Smith, T. J. (2006, October). A comparison of proximity metrics when used for developing comparable samples. Paper presented at the Annual Meeting of the Midwest Educational Research Association, Columbus, OH.
- Smith, M. C., & Smith, T. J. (2006, April). Demographic academic, and behavioral characteristics of latchkey children. Poster presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Smith, T. J., & Adams, G. (2005, October). Effect of comorbid AD/HD and learning disabilities on parent-reported behavioral and academic outcomes of children. Paper presented at the Annual Meeting of the Midwest Educational Research Association, Columbus, OH.
- Smith, T. J., & Adams, G. (2005, April). Effects of AD/HD, gender, and ethnicity on academic and social/behavioral outcomes of children. Poster presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada.
- Chandler, L., Munk, D., Cancio, E., & Smith, T. (2005, April). *Functional behavior assessment practices in Illinois Schools*. Paper presented at the annual conference of the Behavior Analysis Society of Illinois, Lisle, IL.
- Hung, W. C., Smith, M C., & Smith, T. J. (2004, October). REsearchMentor: A learnercentered design approach. Paper presented at the Annual Meeting of the Association of Educational and Technology, Chicago, IL.

- Smith, T. J. (2004, October). *Exploratory structural equation modeling*. Symposium presentation at the Annual Meeting of the Midwestern Educational Research Association, Columbus, OH.
- Smith, T. J. (2004, October). *Community service participation: A logit analysis*. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, Columbus, OH.
- Smith, T. J. (2004, October). Metric recovery under extreme data conditions: A comparison of ultrametric and additive tree strategies that minimize a leastsquares loss criterion. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, Columbus, OH.
- Smith, T. J., & Campbell, C. (2004, April). The structure of occupational values. Poster presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Smith, T. J., & Campbell, C. (2003, October). Validation and structural analysis of the Student Perception of Course Experience instrument. Paper presented at the Annual Meeting of the Midwestern Educational Research Association, Columbus, OH.
- Campbell, C., & Smith, T. J. (2003, October). *The effect of course specific factors on college students' ratings of instructors.* Paper presented at the Annual Meeting of the Midwestern Educational Research Association, Columbus, OH.
- Smith, T. J. (2003, July). *Hierarchical clustering procedures that minimize a hybrid L1/L2 loss function*. Paper presented at the International Meeting of the Psychometric Society (IMPS), Sardinia, Italy.
- Campbell, C., & Smith. T. J. (2003, April). *Student perception of course experience: Dimensional analyses.* Paper presented at the meeting of the American Educational Research Association (AERA), Chicago, IL.
- Holt, J. & Smith. T. J. (2002, October). *What to do and what not to do when teaching statistics*. Presented at the meeting of the Midwestern Educational Research Association (MWERA), Columbus, OH.
- Smith, T. J. (2002, October). Quantitative research in adult education: New developments. Presented at the 2002 Midwest Research-to-Practice Conference, DeKalb, IL.
- Bursuck, W.D., Damer, M., & Smith, T. (2002, September). Prevention of reading problems through a multi-tiered model of instruction based on behavior analytic principles of effective instruction. Presented at The Ohio State University's Third Focus on Behavior Analysis in Education Conference, Columbus, OH.

- Campbell, C., & Smith, T. (2002, July). *Integrating portfolio assessment into an educational research degree program: Initial stages*. Presented at Putting Students First: Assessing Mastery of Student Learning conference, Normal, IL.
- Smith, T. J. (2002, April). *Hierarchical and spatial models of occupational skill*. Paper presented at the meeting of the American Educational Research Association (AERA), New Orleans, LA.
- Bursuck, W. D., Munk, D., & Smith, T. (2001, October). *Inclusion and early literacy: One size does not fit all*. Paper presented at the International Conference on Learning Disabilities, Charlotte, NC.
- Smith, T. J. (2001, July). *Tree estimation based on an*  $L_1$  *loss criterion*. Paper presented at the meeting of the Psychometric Society, Osaka, Japan.
- Smith, T. J. (2001, March). A cluster-based classification of the Strong Interest Inventory occupations. Paper presented at the meeting of the American Educational Research Association (AERA), Seattle, WA.
- Smith, T. J., Rounds, J., & Armstrong, P. I. (2000, October). *The structure of occupations: Data considerations*. Paper presented at the meeting of the Midwestern Educational Research Association (MWERA), Chicago, IL.
- Smith, T. J. (1999, July). *Ultrametric clustering procedures based on an L<sub>1</sub> loss criterion*. Paper presented at the meeting of the Classification Society of North America, Pittsburgh, PA.
- Smith, T. J. (1998, June). *Holland classification of occupational units*. Paper presented at the joint meeting of the Classification and Psychometric Societies, Champaign, IL.
- Smith, T. J. (1997, June). A comparison of three additive tree algorithms that rely on a *least-squares loss criterion*. Paper presented at the meeting of the Psychometric Society, Gatlinburg, TN.

#### **Presentations (invited)**

- King, C., Gorman, R., Moscatel, S., Gallegos, D., Raison, M., Smith, T. J., Rossetti, J., Smyth, S., & Watson, J. (2018, October). A mindfulness activity increases positivity and decreases stress in the nursing workplace. Poster presented at the ECHCS VA Research Day, Aurora, CO.
- Smith. M C., Rose, A., Ross-Gordon, J., & Smith, T. J. (2014, November). *Adults' Readiness to Learn as a Predictor of Literacy Skills*. Paper presented at Taking the next step with PIAAC: A research-to-action conference. Arlington, VA.

- Hung, W. C., & Smith, T. J. (2010, May). *Engaging learners in the content areas through cartooning*. LearnIT conference, DeKalb, IL.
- Miller-Young, R., & Smith, T. J. (2006, April) Norm development of the IGDIS instrument: Initial findings. IPSA conference, St. Charles, IL.
- Smith, M C. & Smith, T. J. (2003, April). ResearchMentor: An intelligent tutorial for research design in education and the social sciences. Presented at the 2003 David W. Raymond Grant for the Use of Technology in Teaching reception, DeKalb, IL.
- Bursuck, W.D., Damer, M., Smith, T., Parker, T., Larson, P. & Robertson, J. (2002, June). Project PRIDE: Partnering with the Rockford schools to prevent reading problems. Presented at the School-University Partnership's 3rd Annual Linking Conference, Rockford, IL.
- Bursuck, W.D., Munk, D., Damer, M., & Smith, T. (2002, April). *Putting early literacy research into practice in inclusive settings*. Presented at Council for Exceptional Children Annual Convention and Expo, New York, NY.
- Bursuck, W.D., Damer, M., & Smith, T. (2001, November). *Results of Project PRIDE intervention presented to staff involved in the Project PRIDE first grade intervention*. Lewis Lemon School; Rockford Public Schools; Rockford, Illinois.