JENNIFER BRUSSOW

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EDUCATION

Doctor of Philosophy, Research, Evaluation, Measurement, and Statistics (honors), May 2018 University of Kansas, Lawrence, KS

Dissertation: Finding Item-Level Causes of Differential Item Functioning: A Hierarchical IRT Model for Explaining DIF

Advisor: Billy Skorupski

Master of Arts, English Language Studies, August 2012

University of Kansas, Lawrence, KS

Thesis: "Wundorlice hit hælep": Organization and metatextual markers in Old English recipes

Bachelor of Arts, English (honors) and Germanic Languages & Literature, May 2009 University of Kansas, Lawrence, KS

Graduated with Highest Distinction, Departmental Honors in English, Honors Program Completion, and Global Awareness Program Completion.

EMPLOYMENT HISTORY

Ascend Learning, Leawood, KS

Research Scientist, May 2017 - present

- Conceptualize and write R, SQL, and SAS code to conduct research. Assemble construct and criterion validity evidence for certification and licensure assessments by investigating factor structure, DIF, and scores' relationship to external variables
- Construct predictive models from assessment, demographic, and user behavior data using a variety of statistical approaches including regression, k-NN, and random forests
- Author peer-reviewed articles, research briefs, whitepapers, presentations, and reports to convey findings to sales representatives, product managers, nurse educators, and program administrators
- Provide guidance on research and assessment design and methodology to nurse educators, internal analysts, and project managers

University of Kansas Center for Educational Testing and Evaluation, Lawrence, KS *Psychometrician Assistant*, January 2016 – May 2017

- Wrote R and SPSS scripts to extract and clean large Dynamic Learning Maps Alternate Assessment datasets, automate and expand quality control checks on operational testing data at all stages of the testing program, and create graphical representations of data
- Assisted with the standards setting process by developing and implementing a rationale for panelist selection and writing an R program to select representative student response profiles
- Wrote and edited assessment technical manuals and reports on topics such as field test results and alternate assessment reliability evidence

University of Kansas Center for Research on Learning, Lawrence, KS

Assistant Researcher, February 2013 – January 2016

- Used Excel, SPSS, and R to tabulate, clean, and analyze quantitative data to create evaluation reports for educator professional development, educational outcomes, and project implementation for state and national government agencies
- Worked with state-level professional development providers to conceptualize, develop and implement evaluation plans; collected evaluation data on professional development sessions and school improvement metrics; and provided evaluation results to local, state, and federal stakeholders
- Researched, conceptualized, and developed psychometric measures to evaluate variables such as team functioning, coaching quality, and knowledge gain
- Researched, edited, collaboratively authored, and proofread articles on topics including special education legislation, transition practices, education reform, and postsecondary outcomes
- Conducted qualitative analyses of interviews, transcripts, and survey results and summarized findings for reports

University of Kansas Center for Research on Learning, Lawrence, KS

Program Assistant, June 2012 – February 2013

- Conducted quantitative and qualitative analyses to create evaluation reports and annual progress reports detailing the results of various professional development grants for state and national government agencies
- Researched, edited, collaboratively authored, and proofread articles on topics including special education legislation, transition practices, education reform, and postsecondary outcomes
- Handled day-to-day office duties such as scheduling, ordering supplies, and e-mailing contacts

University of Kansas Center for Service Learning, Lawrence, KS

Program Assistant and REP Coordinator, February 2011 – June 2012

- Coordinated and promoted the Research Experience Program Certification at KU through inclass presentations, faculty collaboration, and email marketing campaigns
- Raised the number of REP certifications from 40 in the 2009-2010 academic year to over 540 in the 2011-2012 academic year, a 1250% increase
- Helped launch the Arts Engagement Certification at KU by developing materials including a webpage, online application system, and event attendance FAQs for students

University of Kansas English Department, Lawrence, KS

Graduate Teaching Assistant, August 2009 – December 2011

- Taught two sections per semester of English 101 or 102, Freshman-Sophomore Composition, or English 209, Introduction to Fiction, and held office hours to work with students
- Created and administered syllabi, units, assignments, policies, and daily lesson plans using principles of pedagogical, composition, and literary theory
- Evaluated student work and assigned grades according to departmental policy

Kansas City Public Library, Kansas City, MO

Hall Center for the Humanities Intern, June 2010 – August 2010

- Wrote and submitted National Endowment for the Humanities Interpreting America's Historic Places grant proposal for "Reconnecting Communities: Kansas City Trails," an interpretive public history project
- Collaborated with scholars and used archival materials to conduct research on various aspects of the history of Kansas City
- Wrote book reviews and other press releases for upcoming Library events

University of Kansas Honors Program, Lawrence, KS

Honors Program Student Hourly, August 2008 – May 2009

Max Kade Center, University of Kansas German Department, Lawrence, KS

Webmaster/Research Assistant, May 2007 – February 2008

Andrews McMeel Publishing, Universal Press Syndicate, Kansas City, MO *Intern*, Summer 2006

Memorial Health System, Abilene, KS

Education Coordinator, May 2005 – August 2005 Representative, Patient Administration Department, February 2003 – May 2004

PUBLICATIONS

Software

Brussow, **J.A.** (2017). inspectr: Perform Basic Checks of Dataframes. R package version 1.0.0. https://CRAN.R-project.org/package=inspectr

Articles & Book Chapters

- **Brussow, J.A.**, Roberts, K. Scaruto, M., Sommer, S., & Mills, C. (2019). Concept-based curricula: A national study of critical concepts. *Nurse Educator*, *44*(1). doi: 10.1097/NNE.000000000000515
- **Brussow, J.A.** (2018). Adequate Yearly Progress (AYP). In *The Sage Encyclopedia of Educational Research, Measurement, and Evaluation*. New York: SAGE. p. 45-47. doi: 10.4135/9781506326139.n22
- **Brussow, J.A.** (2018). American Evaluation Association. In *The Sage Encyclopedia of Educational Research, Measurement, and Evaluation*. New York: SAGE. p. 73. doi: 10.4135/9781506326139.n36
- **Brussow, J.A.** (2018). Box plot. In *The Sage Encyclopedia of Educational Research, Measurement, and Evaluation*. New York: SAGE. p. 222. doi: 10.4135/9781506326139.n91
- **Brussow, J.A.** (2018). Consequential validity evidence. In *The Sage Encyclopedia of Educational Research, Measurement, and Evaluation*. New York: SAGE. p. 372-374. doi: 10.4135/9781506326139.n142
- **Brussow, J.A.** (2018). Construct-related validity evidence. In *The Sage Encyclopedia of Educational Research, Measurement, and Evaluation*. New York: SAGE. p. 387-389. doi: 10.4135/9781506326139.n147
- **Brussow, J.A.** & Dunham, M. (2018). Students' mid-program content area performance as a predictor of end-of-program NCLEX readiness. *Nurse Educator*, *43*(5). doi: 10.1097/NNE.0000000000000499.

- Gaumer Erickson, A.S., Noonan, P.M., **Brussow, J.A.**, and Supon Carter, K. (2016). Measuring the quality of professional development trainings. *Journal of Professional Development in Education*, 43(4). doi: 10.1080/19415257.2016.1179665
- Gaumer Erickson, A.S., Noonan, P.M., Zheng, C., & **Brussow, J.A.** (2015). The relationship between self-determination and academic achievement for adolescents with intellectual disabilities. *Research in Developmental Disabilities*, *36*, 45-54.
- **Brussow, J.A.**, & Noonan, P.M. (2014). Forming a Community Transition Team. In P.M. Noonan, *Transition teaming: 26 strategies for interagency collaboration*. Arlington, Virginia: Council for Exceptional Children.
- Gaumer Erickson, A.S., Noonan, P.M., **Brussow, J.A.**, & Gilpin, B. (2013). The impact of IDEA Indicator 13 compliance on postsecondary outcomes. *Career Development for Exceptional Individuals*. doi:10.1177/2165143413481497

Measures

- Noonan, P., Gaumer Erickson, A., **Brussow, J.A.**, & Langham, A. (2015). *Observation checklist for high-quality professional development in education* [Updated version]. Lawrence, KS: University of Kansas, Center for Research on Learning.
- **Brussow, J.A.**, Gaumer Erickson, A.S., Noonan, P.M., & Jenson, R. (2013). *Coaching observation checklist*. Lawrence, KS: University of Kansas, Center for Research on Learning.
- **Brussow, J.A.**, Noonan, P.M., & Gaumer Erickson, A.S. (2013). *Shared leadership measure*. Lawrence, KS: University of Kansas, Center for Research on Learning.
- Villa, R.A., Anderson, S., & **Brussow**, **J.A.** (2013). *Initial Co-Teaching Training Content Mastery Checklist*. Lawrence, KS: University of Kansas Center for Research on Learning.
- Villa, R.A., **Brussow, J.A.**, Anderson, S., & Gaumer Erickson, A.S. (2013). *Coaching satisfaction survey*. Lawrence, KS: University of Kansas Center for Research on Learning.

Technical Reports, Whitepapers, & Research Briefs

- **Brussow, J.A.** & Sinha, S. (2018). *Predictive models: Development and applications*. Leawood, KS: Ascend Learning
- **Brussow, J.A.** & Davis. C. (2018). *CCMA prep usage efficacy study*. Leawood, KS: National Healthcareer Association.
- **Brussow, J.A.** (2017). Considerations when interpreting scores from multiple test attempts. Leawood, KS: Ascend Learning.
- **Brussow, J.A.** (2017). *Lag times and score increases between multiple test attempts*. Leawood, KS: Ascend Learning.
- **Brussow, J.A.** & Mills, C. (2017). *Outcome scores: Modeling research and reporting guidelines*. Leawood, KS: Ascend Learning.
- **Brussow, J.A.** (2017). *ATI policy on the use of outcome scores*. Leawood, KS: Assessment Technologies Institute.
- Nash, B., Clark, A., Karvonen, M., & **Brussow**, **J.** (2016). 2016 standard setting: Science (Technical Report No. 16-03). Lawrence, KS: University of Kansas, Center for Educational Testing and Evaluation.
- **Brussow, J.**, Clark, A., & Karvonen, M. (2016). Summary of results from the Dynamic Learning Maps® field test teacher surveys (Technical Report No. 16-04). Lawrence, KS: University of Kansas, Center for Educational Testing and Evaluation.

- Gaumer Erickson, A.S., **Brussow**, **J.A.**, & Anderson, S. (2015). *Kansas co-teaching initiative annual report*. Topeka, KS: Kansas State Department of Education.
- Noonan, P.M., & **Brussow, J.A.** (2015). *Missouri Collaborative Work performance report* [SPDG annual performance report]. Jefferson City, MO: Missouri Department of Elementary & Secondary Education.
- Gaumer Erickson, A.S., **Brussow, J.A.**, & Noonan, P.M. (2015). *Kansas grant performance report [SPDG final performance report]*. Topeka, KS: Kansas State Department of Education
- Gaumer Erickson, A.S., **Brussow, J.A.**, & Anderson, S. (2014). *Kansas co-teaching initiative annual report*. Topeka, KS: Kansas State Department of Education.
- Noonan, P.M., & **Brussow, J.A.** (2014). *Missouri Collaborative Work performance report* [SPDG annual performance report]. Jefferson City, MO: Missouri Department of Elementary & Secondary Education.
- Gaumer Erickson, A.S., **Brussow, J.A.**, & Noonan, P.M. (2014). *Kansas grant performance report [SPDG final performance report]*. Topeka, KS: Kansas State Department of Education
- Noonan, P.M., Gaumer Erickson, A.S., & **Brussow**, **J.A.** (2013). *Missouri Integrated Model performance report* [SPDG final performance report]. Jefferson City, MO: Missouri Department of Elementary & Secondary Education. Available at www.mimschools.org.
- Gaumer Erickson, A.S., Noonan, P.M., & **Brussow, J.A.** (2013). *Kansas grant performance report [SPDG final performance report]*. Topeka, KS: Kansas State Department of Education.
- Gaumer Erickson, A.S., **Brussow**, **J.A.**, & Anderson, S. (2013). *Kansas co-teaching initiative annual report*. Topeka, KS: Kansas State Department of Education.
- Gaumer Erickson, A.S., **Brussow**, **J.A.**, & Stickle, L. (2013). *Kansas tertiary behavior supports initiative annual report*. Topeka, KS: Kansas State Department of Education.
- Noonan, P.M., & **Brussow, J.A.** (2013). *Missouri Collaborative Work performance report* [SPDG annual performance report]. Jefferson City, MO: Missouri Department of Elementary & Secondary Education.
- Gaumer Erickson, A.S., & **Brussow**, **J.A.** (2013). *Kansas grant performance report [SPDG annual performance report]*. Topeka, KS: Kansas State Department of Education.
- Noonan, P.M., **Brussow, J.A.**, & Wetta, M. (2012). *Arizona secondary transition mentor program annual report*. Lawrence, KS: University of Kansas, Department of Special Education. Available at http://www.arizonatransition.org.
- Noonan, P.M., Gaumer Erickson, A.S., & **Brussow**, **J.A.** (2012). *Missouri Integrated Model performance report [SPDG annual performance report]*. Jefferson City, MO: Missouri Department of Elementary & Secondary Education. Available at www.mimschools.org.
- Gaumer Erickson, A.S., Noonan, P.M., & **Brussow**, **J.A.** (2012). *Kansas grant performance report [SPDG annual performance report]*. Topeka, KS: Kansas State Department of Education.
- Noonan, P.M., **Brussow, J.A.**, & Wetta, M. (2012). *Missouri Integrated Model annual report*. Jefferson City, MO: Missouri Department of Elementary & Secondary Education.

PRESENTATIONS

Brussow, J.A., Skorupski, W.P., & Thompson, W.J. (2018, April). *A hierarchical IRT model for identifying group-level aberrant growth to detect cheating*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, New York, NY.

- Liu, X., Mills, C., **Brussow, J.A.**, & Chen, H. (2018, April). *Using cognitive diagnosis modeling to identify students for targeted remediation*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, New York, NY.
- **Brussow, J.A.**, Skorupski, W.P., & Thompson, W.J. (2017, September). *A hierarchical IRT model for identifying group-level aberrant growth to detect cheating*. Paper presented at the Conference on Test Security, Madison, WI.
- Karvonen, M., Swinburne Romine, R., Clark, A., and **Brussow, J.A.** (2017, April). *Promoting accurate score report interpretation and use for instructional planning*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, San Antonio, TX.
- Skorupski, W.P., **Brussow, J.A.**, and Loughran, J. (2016, April). *Simultaneous evaluation of DIF* and its sources using hierarchical explanatory models. Paper presented at the Annual Meeting of the National Council on Measurement in Education, Washington, D.C.
- **Brussow, J.A.** (2015, November). *Instructional coaching: Evaluating change in practices*. Presentation given at the American Evaluation Association Annual Conference, Chicago, IL.
- **Brussow, J.A.** (2015, September). *Kansas co-teaching: 2014-15 data in review*. Presentation given at Kansas SPDG Coaches' Update Training, Haysville, KS.
- **Brussow, J.A.** (2015, June). *Kansas co-teaching: 2014-15 data in review*. Kansas SPDG Coaches' Connect Webinar.
- **Brussow, J.A.**, Skorupski, W.P., & Loughran, J. (2015, April). *Explanatory models for understanding differential item functioning*. Paper presented at the Annual Meeting of the National Council on Measurement in Education, Chicago, IL.
- Gaumer Erickson, A.S. & **Brussow**, **J.A.** (2014, October). *Systematizing coaching: An online observation and conferencing tool*. 2014 AEA Annual Meeting, Denver, CO.
- Gaumer Erickson, A.S. & **Brussow, J.A.** (2014, June). *Kansas SPDG classroom observation tool*. Presentation given at the SPDG Evaluators' Webinar. Available at http://www.signetwork.org/event_calendar/events/1087
- Noonan, P.M. & **Brussow**, **J.A.** (2014, June). *Missouri SPDG Data Walkthrough*. Presentation given at Missouri SPDG Shared Learning, Columbia, MO.
- **Brussow, J.A.** (2013, October). *SPDG data portal tutorial*. Presentation given at Missouri SPDG Shared Learning, Columbia, MO.
- **Brussow, J.A.** (2013, July). *SPDG data portal tutorial*. Presentation given at Missouri SPDG Shared Learning, Columbia, MO.

SKILLS AND QUALIFICATIONS

- Exceptional proficiency in R programming language
- Proficiency in SAS, SQL, SPSS, Mplus, and OpenBUGS; experience with DIFAS, BILOG, and PARSCALE
- Coursework in and experience conducting statistical analyses using Item Response Theory, Bayesian Models, Structural Equation Models, Diagnostic Classification Models, Classical Test Theory, ANOVA, and Regression
- Exceptional proficiency in Microsoft Word and Microsoft Excel
- Proficiency in all standard computer programs (Microsoft Office Suite, Adobe Acrobat, Dreamweaver, Photoshop, etc.)
- Knowledge of HTML and CSS programming languages for web design
- Knowledge of FORTRAN programming language
- Fluent in German

• Experience conducting statistical, corpus-based, archival, and literary research

AWARDS AND HONORS

- AERA Division H Outstanding Publication Award, Category 1: Advances in Methodology: Nash, B., Clark, A., Karvonen, M., & Brussow, J. (2016). 2016 standard setting: Science (Technical Report No. 16-03). Lawrence, KS: University of Kansas, Center for Educational Testing and Evaluation.
- National Merit Scholar
- Dean's List (8 semesters)
- Recipient of KU School of Education, Byrd, Harold J. Otto, Rotary Club, Lions Club, FUMC, Harley S. Nelson, First National Bank, and AHS German Club Scholarships
- Valedictorian of Abilene HS Class of 2005
- Governor's State Scholar, Kansas State Scholar, and AP Scholar
- Recipient of AATG/PAD Study Trip to Germany
- Two-time Recipient of KU German Department Book Award
- Recipient of KU English Department's Outstanding Senior Award
- Phi Beta Kappa Member

OTHER INVOLVEMENT

- Graduate Organization of Educational Psychology & Research, University of Kansas;
 August 2014 present (Co-president 2015 2017)
- Graduate Committee Representative, Student Association of Graduates in English, University of Kansas; August 2010 – May 2012
- Lecturers and Readers Committee Representative, Student Association of Graduates in English, University of Kansas; August 2011 – May 2012
- Webmaster, Student Association of Graduates in English, University of Kansas;
 August 2010 July 2011

REFERENCES

William Skorupski Associate Professor KU Educational Psychology Department Known since 2013

Joseph R. Pearson Hall, Room 639 1122 W. Campus Rd. Lawrence, KS 66045 (785) 864-9700 wps@ku.edu

Amy Gaumer Erickson Associate Research Professor KU Center for Research on Learning Known since 2012

Joseph R. Pearson Hall, Room 702 1122 W. Campus Rd. Lawrence, KS 66045 (785) 864-0517 aerickson@ku.edu

Other references available upon request.

Jonathan Templin Associate Professor KU Educational Psychology Department Known since 2014

Joseph R. Pearson Hall, Room 614 1122 W. Campus Rd. Lawrence, KS 66045 (785) 864-5714 jtemplin@ku.edu