

Dr. Jennifer Brussow

1207 8th Ave., Apt 3L, Brooklyn, NY 11215
+1 (785) 764-6637
jbrussow@gmail.com
www.jenniferbrussow.com
<https://github.com/jenitivecase>
<https://www.linkedin.com/in/jennifer-brussow/>

IN BRIEF

Data-driven researcher, scientist, and statistician. Specialties include predictive modeling, research design and execution, data visualization, and hierarchical modeling.

RECENT WORK EXPERIENCE

Ascend Learning
Lead Data Scientist JUNE 2019 – PRESENT

I lead the simulation unit's research and data analysis efforts from R&D to stakeholder reporting. I created and implemented a research protocol to collect data on users' cognitive processes; I scrape, clean, model, and visualize resulting data to illustrate statistical relationships between simulation features and users' performance and perceptions. The results inform development, and our team now follows processes I designed to bring reliability and validity to the scoring algorithms for our branching adaptive scenarios. Once deployed, simulations generate millions of xAPI statements, which I parse with advanced SQL and R skills to create reports in R Shiny, SSRS, and Power BI.

Ascend Learning
Research Scientist/Psychometrician MAY 2017 – JUNE 2019

I developed statistical models to predict student success on Allied Health and nursing certification exams, conducted outcomes research to assemble and publish validity evidence for ATT's flagship assessments, and developed scoring QA procedures to ensure accuracy in scoring for branching simulation products. To accomplish these tasks, I wrote R, SQL, and SAS code to leverage machine learning and traditional statistical approaches, including boosted linear and logistic regressions, k-NN, decision trees, random forests, and IRT.

University of Kansas Center for Educational Testing and Evaluation
Psychometrician Assistant JANUARY 2016 – MAY 2017

I assisted with all aspects of the operational testing program. Major projects included writing R and SPSS scripts to conduct statistical analyses, automate and expand QA processes, and select relevant student profiles for standard setting. To communicate results, I wrote and edited technical manuals, whitepapers, and documentation.

University of Kansas Center for Research on Learning
Assistant Researcher FEBRUARY 2013 – JANUARY 2016

I led evaluations of K-12 educational interventions. I worked with stakeholders to create evaluation plans, evaluated professional development, and oversaw data collection. I then cleaned and analyzed the data to create evaluation reports, which I presented to stakeholders at the local, state, and federal levels.

EDUCATION

2014 – 2018 **Doctor of Philosophy**
GRADUATED WITH HONORS
Research, Evaluation, Measurement, and Statistics
University of Kansas

2009 – 2012 **Master of Arts**
English Language Studies
University of Kansas

2005 – 2009 **Bachelor of Arts**
SUMMA CUM LAUDE
English, Germanic Languages and Literature
University of Kansas

COMPUTER SKILLS

EXPERT	R, R Shiny, SQL Markdown, Microsoft Excel
INTERMEDIATE	Python, Git, Linux, HTML Power BI, SSRS, Tableau SPSS, Mplus, RStan
BASIC	SAS, CSS, \LaTeX Fortran, WINSTEPS, WinBUGS

SELECTED 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>

PEER-REVIEWED ARTICLES

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.0000000000000515

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). 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. & 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.000000000000499

PRIOR WORK EXPERIENCE

JUNE 2012 – FEBRUARY 2013

University of Kansas Center for Research on Learning
Program Assistant

FEBRUARY 2011 – FEBRUARY 2013

University of Kansas Center for Service Learning
Program Assistant

REFERENCES

Dr. William Skorupski

POSITION Distinguished Research and Data Scientist
EMPLOYER Questar
EMAIL william_skorupski@yahoo.com
PHONE +1 (201) 424-4734

Lauren O'Donnell

POSITION Product Manager, Simulation Strategy
EMPLOYER Ascend Learning
EMAIL lauren.odonnell@ascendlearning.com
PHONE +1 (516) 880-5629

Nancy Magee

POSITION Technical Project Manager
EMPLOYER Ascend Learning
EMAIL nancy.magee@ascendlearning.com
PHONE +1 (913) 406-0803

Additional references available on request

CERTIFICATIONS

2020 **Pragmatic Management Certified - Foundations & Build**
Pragmatic Institute

2020 **R Skill Certification**
LinkedIn

SELECTED PUBLICATIONS, CONT.

TECHNICAL REPORTS

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). *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: Assessment Technologies Institute.

Nash, B., Clark, A., Karvonen, M., & **Brussow, J.A.** (2016). *2016 standard setting: Science* (Technical Report No. 16-03). Lawrence, KS: University of Kansas, Center for Educational Testing and Evaluation.

Brussow, J.A., 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, Achievement and Assessment Institute.

Gaumer Erickson, A.S., **Brussow, J.A.**, & Anderson, S. (2015). *Kansas co-teaching initiative annual report* (Technical Report No. 16-04). Topeka, KS: Kansas State Department of Education.