

CURRICULUM VITAE

Michael D. Broda, Ph.D.

Date of Preparation: 3/12/19

Office address: 1015 West Main Street
Richmond, Virginia 23284
804.827.2629
mdbroda@vcu.edu

Teaching Website: <https://rampages.us/drstats>

EDUCATION

Ph.D. (Education Policy and Curriculum, Instruction, and Teacher Education), May 2015, Michigan State University

B.A. (History), May 2006, The College of Wooster

ACADEMIC APPOINTMENTS

Assistant Professor, Department of Foundations of Education, Virginia Commonwealth University, August 2015 - present

EMPLOYMENT AT THE K-12 PUBLIC SCHOOL LEVEL

6th Grade Teacher, KIPP Academy: Charlotte, Charlotte, NC, 2008-2009.

4th Grade Teacher, Reid Park Elementary, Charlotte-Mecklenburg Schools (NC), 2006-2008.

AREAS OF SPECIAL INTEREST

Quantitative research methods; STEM learning; multilevel modeling; social network analysis; latent variable modeling; structural equation modeling; longitudinal data analysis; experience sampling; classroom-based interventions.

BIBLIOGRAPHY

Refereed Articles:

(* denotes student co-author)

Gnilka, P.B., & **Broda, M.** (2019). Perfectionism, depression, and anxiety: Test of a social support mediation model. *Personality and Individual Differences* 139. DOI: <https://doi.org/10.1016/j.paid.2018.11.031>

Broda, M., Ekholm, E.*, Schneider, B., & Hutton, A.* (2018). Teachers' social networks, college-going practices, and the diffusion of a school-based reform initiative. *SAGE Open* (October-December), 1-17. DOI: <https://doi.org/10.1177/2158244018817397>.

Broda, M., Tucker, S., Ekholm, E.*, Johnson, T., & Liang, Q.* (2018, Online First). Small fingers, big data: Preschoolers' subitizing speed and accuracy during interactions with multi-touch technology. *Journal of Educational Research*. DOI: <https://doi.org/10.1080/00220671.2018.1486281>.

Broda, M., Yun, J., Schneider, B., Yeager, D.S., Walton, G.W., & Diemer, M. (2018). Reducing inequality in academic success for incoming college students: A randomized trial of growth mindset and belonging interventions. *Journal of Research on Educational Effectiveness*. DOI: 10.1080/19345747.2018.1429037.

Broda, M. (2016). Using multilevel models to explore predictors of high school students' nonresponse in experience sampling method (ESM) studies. *Social Science Computer Review* 35(6), 733 - 750. DOI: 10.1177/0894439316667049.

Goodwin, R., Li, W., **Broda, M.**, Johnson, H., & Schneider, B. (2016). Improving college enrollment of at-risk students at the school level. *Journal of Education for Students Placed at Risk* 21(3), 143-156. DOI: 10.1080/10824669.2016.1182027.

Schneider, B., Krajcik, J., Lavonen, J., Salmela-Aro, K., **Broda, M.**, Spicer, J., Bruner, J. Moeller, J., Linnansaari, J., Juuti, K., & Viljaranta, J. (2016). Investigating optimal learning moments in U.S. and Finnish science classes. *Journal of Research in Science Teaching* 53(3), 400-421. DOI: 10.1002/tea.21306.

Schneider, B., Saw, G., & **Broda, M.** (2016). A future for the national education longitudinal program. *AERA Open* 2(2), 1-13. DOI: 10.1177/2332858416634686.

Schneider, B., **Broda, M.**, Judy, J., & Burkander, K. (2013). Pathways to college and STEM careers: Enhancing the high school experience. *New Directions for Youth Development* 2013(140), 9-29.

Manuscripts Under Review:

Broda, M., Ekholm, E., & Zumbrunn, S. (under review). Assessing the predictive nature of teacher and student writing self-regulation discrepancy.

Broda, M., Tefera, A., & Ekholm, E. (under review). Missing the Trees for the Forest: Using Data Mining to Explore Contextual Predictors of Racial and Ethnic Disproportionality in Special Education Identification.

Dinora, P., Bogenschutz, M., & Broda, M. (accept pending revisions). Identifying Predictors for Enhanced Outcomes for People with Intellectual and Developmental Disabilities.

Ekholm, E., Zumbrunn, S., & Broda, M. (under revision). The Development of Students' Writing Feedback Attitudes in Grades 3-7.

Liu, X., Wheeler, N., Broda, M., et al. (revision under review). Relationship Satisfaction Trajectories among Low-income Ethnic Minority Couples Before and After a Relationship Education Intervention.

Zumbrunn, S., Broda, M., Varier, D., & Conklin, S. (under 2nd revision). Examining the Multidimensional Role of Self-Efficacy for Writing on Student Writing Self-Regulation and Grades in Elementary and High School.

Zumbrunn, S., Marrs, S., Broda, M., Ekholm, E., Debusk-Lane, M., & Jackson, L. (revision under review). Toward a more complete understanding of writing attitudes: A mixed methods study of elementary students.

Manuscripts in Preparation:

Broda, M., & Ekholm, E. The Formation of Learning Profiles in Context: A Multilevel Latent Profile Analysis of Math Anxiety, Math Achievement, and Math Interest in Adolescents.

Broda, M., McGinnis, H., & Chan, D. Potentially Traumatic Events and College Students' Mental Health Outcomes: Test of A Social Support Mediation Model.

FUNDED EXTERNAL RESEARCH GRANTS

U.S. Department of Education, Institute for Education Sciences, \$3,290,000 (funded), 2018-2022.

Sutherland, K., Conroy, M., and McLeod, B. (PIs)

Title: *Testing the Efficacy of BEST in CLASS-Elementary (BiC-E) Using a Multi-Site CRT.*

Role: Co-Investigator (Methodologist)

US Department of Health and Human Services, \$600,000 (*funded*), 2018 – 2020.

National Institute on Disability, Independent Living,
and Rehabilitation Research

Dinora, P. (PI)

Title: *Identifying Predictors for Enhanced Outcomes for People with I/DD*

Role: Key Personnel (Methodologist)

Mindset Scholars Network, National Study of Learning Mindsets, \$8,000 (funded), 2018-2019.

Broda, M. (PI)

Title: *The Formation of Learning Profiles in Context: A Multilevel Latent Profile Analysis of Math Anxiety, Math Achievement, and Math Interest in Adolescents.*

Role: PI

Center for Curriculum Redesign, \$125,000 (funded), 2017 – 2018.

Zumbrunn, S. (PI)

Title: *MetaScriptor: Using Mobile Technology to Assess and Increase Student Writing Metacognition, Motivation, and Performance*

Role: Co-Investigator

EXTERNAL RESEARCH GRANTS UNDER REVIEW

National Science Foundation, \$1,041,034 (submitted), 2019-2024.

Broda, M. (PI)

Title: CAREER: Using Intensive Longitudinal Research to Better Understand First-Year STEM Students Social, Emotional, and Academic Trajectories

Role: PI

National Institutes of Health, \$407,777 (submitted), 2019-2021.

Chen, C. (PI)

Title: Low Income Students Mental Health and Educational Experiences: Relations, Patterns and Context.

Role: Key Personnel (Methodologist)

American Educational Research Association, \$35,000 (submitted), 2019-2021.

Broda, M. (PI)

Title: Missing the Trees for the Forest: Using Machine Learning to Explore Contextual Predictors and Spatial Trends of Racial and Ethnic Disproportionality in Special Education Identification.

Role: PI

REFEREED PROFESSIONAL PRESENTATIONS

National Council on Family Relations, November 2018.

Relationship Satisfaction Trajectories among Low-income Ethnic Minority Couples after Intervention

(paper presentation)

Consortium for Research on Educational Assessment and Teaching Effectiveness (CREATE) Annual Conference, October 2018.

Are We Grading the "Write" Stuff? The Relationship between Teachers' Expectations, Students' Self-Regulation and Writing Achievement

(paper presentation)

International Mind, Brain, and Education Society Conference, September 2018.
Domain-general Skills in Education: Psychology, Education, and Neuroscience Perspectives.
(panel presentation)

American Psychological Association, August 2018.
Multidimensional Perfectionism, Depression, and Anxiety: Tests of a Social Support Mediation Model.
(paper presentation)

International Conference of the EARLI Special Interest Group on Writing, August 2018.
Individual differences and the development of multiple dimensions of writing self-efficacy.
(poster presentation)

American Educational Research Association, April 2018.
Small fingers, big data: Preschoolers' subitizing speed and accuracy during interactions with multi-touch technology
(roundtable presentation)

American Educational Research Association, April 2017.
Student Perceptions of Teacher and Peer Enthusiasm for Writing, Writing Attitudes, and Writing Self-Regulation: A Mixed Methods Study
(paper presentation).

American Educational Research Association, April 2016.
Using Multilevel Models to Explore Predictors of Nonresponse from Experience Sampling Method (ESM) Studies
(paper presentation)

World Education Research Association, September 2015.
Exploring the Robustness of Longitudinal Models to Variable Response Rates using the Experience Sampling Method
(paper presentation)

World Education Research Association, November 2014.
Response Rates, Attrition, and Student Participation in an Experience Sampling Method (ESM) Study: Implications for Internal and External Validity
(paper presentation)

Association for Public Policy Analysis and Management, November 2014.
From Development to Scale up: Challenges of the College Ambition Program

(paper presentation)

American Educational Research Association, April 2014.
*Examining Student Engagement in Secondary Science Classrooms
Using Innovative Smartphone Technology*
(paper presentation)

Society for Research on Educational Effectiveness, March 2014.
*Improving Postsecondary Outcomes for Low-Income
and Minority Students: The Challenges of Taking an
Intervention to Scale (paper presentation)*

Association for the Study of Higher Education, November 2013.
*The Effects of Institutional Expenditures on
Graduation Rates at Public, Four-Year Historically Black Colleges
and Universities*
(paper presentation)

American Educational Research Association, April 2013.
*Factors Influencing Teacher Retention and Participation in
Extended Professional Development: A Boolean Analysis*
(poster presentation)

American Educational Research Association, April 2013.
*High School Mathematics Graduation Requirements, Coursetaking
and Academic Outcomes*
(roundtable presentation)

Conference on Culturally Responsive Evaluation and Assessment, April 2013.
*STEM Interest, College Ambitions, and Coursetaking in Rural
Michigan (paper presentation)*

Society for Research on Educational Effectiveness, March 2013.
*Stemming the Summer "Melt": Results from an SMS (Text)-Based
Intervention to Improve Fall Enrollment Rates (paper presentation)*

American Sociological Association, August 2012.
*High School Mathematics Graduation Requirements, Coursetaking,
and Academic Outcomes (paper presentation)*

Association for Education Finance and Policy, March 2012.
*High School Mathematics Graduation Requirements
and STEM-Related Outcomes (paper presentation)*

POSTSECONDARY TEACHING EXPERIENCE

- Advanced Regression and Multivariate Statistics, Spring 2017/18/19
- Educational Statistics, Fall 2015/16/17/18
- Fundamentals of Educational Research, Spring 2016
- Hierarchical Linear Modeling, Spring 2016

MEMBERSHIPS IN ORGANIZATIONS

Professional Organizations:

American Educational Research Association, 2009 – present.

Society for Research on Educational Effectiveness, 2010 – present.

SPECIAL AWARDS, FELLOWSHIPS AND OTHER HONORS

- Charles P. Ruch Award for Excellence in Teaching, VCU School of Education, Spring 2016.
- McLeod Faculty Development Award, VCU School of Education, Spring 2016.
- Alumni Fellow, Michigan State University, College of Education, Fall 2014.
- University Distinguished Fellow, Michigan State University, 2009-2014.
- Phi Beta Kappa, inducted 2005.