#### CURRICULUM VITAE

#### MATTHEW L. BERNACKI

Associate Professor of Learning Sciences and Psychological Studies School of Education, University of North Carolina – Chapel Hill

#### **CONTACT INFORMATION**

Peabody Hall CB 3500 Web: ed.unc.edu/people/matt-bernacki/

Chapel Hill, NC 27599 scholar.google.com/citations?user=730bDQkAAAAJ&hl=en/

Office: (919) 843-5550 OrcidID: 0000-0003-1279-2829

mlb@unc.edu

#### **EDUCATION**

## Ph.D. 2010, Educational Psychology

**Temple University** 

Dissertation: The influence of self-regulated learning and prior knowledge on knowledge acquisition in computer-based learning environments

## M.S.W. 2006, Social Administration (Management & Planning)

**Temple University** 

Fieldwork: Philadelphia Safe & Sound, Bartram High School Beacon Program (children and family services; violence reduction, afterschool, literacy)

## M.S. 2003. Experimental Psychology

Saint Joseph's University

Thesis: Exploring the impact of service-learning on moral development and moral orientation

### B.S. 2002, Psychology (Faith-Justice, English)

Saint Joseph's University

#### PROFESSIONAL EXPERIENCE

Associate Professor of Learning Sciences and Psychological Studies	2022 to present
School of Education, University of North Carolina, Chapel Hill	
Assistant Professor of Learning Sciences and Psychological Studies	2018 to 2022
School of Education, University of North Carolina, Chapel Hill	
Assistant Professor of Educational Psychology	2013 to 2018
College of Education, University of Nevada Las Vegas	
Postdoctoral Research Associate	2010 to 2013

LearnLab: Learning Research & Development Center, University of Pittsburgh and Human Computer Interaction Institute, Carnegie Mellon University

#### **HONORS**

**Kinnard White Endowed Scholar,** 2024 to present, School of Education, University of North Carolina at Chapel Hill

**K-CLUB Faculty**, January 2024 to December 2025, Department of Education and Brain and Motivation Research Institute (bMRI), Korea University

**Distinguished International Professor,** June 2023 to December 2025. Faculty of Economic and Social Sciences, Hector Research Institute for Education Sciences and Psychology, University of Tübingen

**Donald and Justeen Tarbet Distinguished Scholar,** 2021 to 2024, School of Education, University of North Carolina at Chapel Hill

- STEM For All Video Showcase, Facilitator's Choice Award, National, 2021, with Candace Walkington; https://stemforall2021.videohall.com/presentations/1917
- **Bill & Melinda Gates Foundation ACAO Digital Faculty Fellow**, with Provost Diane Chase, 2017-18, University-wide, University of Nevada, Las Vegas (UNLV)
- Collaborative Group Award; The Learning TAGs Project, College of Education, 2018, UNLV
- Distinguished Contributor Best Teaching Practice Expo, University-wide, 2017, 2018, UNLV
- Scholarship of Teaching and Learning Award, University-wide, 2017, UNLV
- **Best Student Paper Award 1<sup>st</sup> Place**, 2017 College of Education Division, Graduate & Professional Student Association Annual Conference, UNLV. Awarded to Graduate Student Mentee Rachel Part for "Establishing the Invariant Natures and Exploring the Variable Relations of Value and Cost."
- Best Student Poster Award 1<sup>st</sup> Place, 2017 College of Education Division, Graduate & Professional Student Association Annual Conference, UNLV. Awarded to Graduate Student Mentee Lucie Vosicka for "How precisely do logged events represent students' learning processes?: Aligning students' reports with resource use."
- **NASA Mentor Protégé of the Year Award,** 2017 Award to UNLV & Teledyne Brown Engineering for instructional design project for International Space Station payload delivery engineers (co-PI).
- Public Sector Innovation Awards (Mission Award), 2016, Splunk, Inc. (software company)
- Distinguished Research Award, 2016, College of Education, University of Nevada, Las Vegas
- College Policy Fellow, 2016, UNLV College of Education, University of Nevada, Las Vegas
- **Best Student Poster Award 1<sup>st</sup> Place**, 2016 College of Education Division, Graduate & Professional Student Association Annual Conference, UNLV. Awarded to Graduate Student Mentee Michelle Dominguez for "Using Learning Management System Data to Predict STEM Achievement: Implications for Early Warning Systems"
- Best Student Poster Award Runner Up, 2016 College of Education Division, Graduate & Professional Student Association Annual Conference, UNLV. Awarded to Graduate Student Mentee Rachel Part for "Motivation Under the Microscope: A Microgenetic Examination of Motivation to Learn Mathematics"
- Outstanding Author Contribution 2015, Emerald Literati Network Awards for Excellence for book chapter "Motivating students by 'personalizing' learning around individual interests: a consideration of theory, design, and implementation issues."
- **Graduate Student Paper Award** 2011, American Educational Research Association, Studying and Self-Regulated Learning Special Interest Group
- **Best Dissertation Award** 2010, Temple University, College of Education
- **Graduate Student Seminar Scholarship** 2010, AERA Division C (Learning & Instruction)
- Presidential Fellowship 2006, 2009, Temple University
- **Graduate Student Award** 2007 & 2008, International Association for Research on Service Learning & Community Engagement
- Sigma Xi Research Award 2002, Saint Joseph's University

(in reverse chronological order) \* - graduate student; \*\* - undergraduate (at time of initial submission)

Journal Articles

- 52. Sung, H., **Bernacki, M.L.**, Greene, J.A., Yu, L. & Plumley, R. D. (2024). Beyond Frequency: Using Epistemic Network Analysis and Multimodal Traces to Understand Temporal Dynamics of Self-Regulated Learning. *Journal of Science Education Technology*. https://doi.org/10.1007/s10956-024-10164-2
- 51. **Bernacki, M. L.,** Yu\*, L., Kuhlmann, S.L., Plumley\*, R.D., Greene, J.A., Duke\*, R. F., Freed\*, R., Hollander-Blackmon\*, C. & Hogan, K.A. (in press). Using Multimodal Learning Analytics to Validate Digital Traces of Self-Regulated Learning in a Laboratory Study and Predict Performance in Undergraduate Courses. *Journal of Educational Psychology*. DOI: 10.1037/edu0000890.
- 50. Plumley\*, R. D., **Bernacki, M. L.,** Greene, J., Kuhlmann, S., Raković, M., Urban\*, C. J., Hogan, K. A., Lee\*, C., Panter, A. T., & Gates, K. M. (2024). Co-designing enduring learning analytics prediction and support tools in undergraduate biology courses. *British Journal of Educational Technology*. DOI: 10.1111/bjet.13472
- 49. Kuhlmann, S. L., Plumley\*, R., Evans\*\*, Z., **Bernacki, M.** L., Greene, J. A., Hogan, K. A., ... & Panter, A. (2024). Students' active cognitive engagement with instructional videos predicts STEM learning. *Computers & Education*, 105050. <a href="https://doi.org/10.1016/j.compedu.2024.105050">https://doi.org/10.1016/j.compedu.2024.105050</a>.
- 48. Zhang, L., Carter, R. A., Greene, J. A., & **Bernacki, M. L.** (2024). Unraveling Challenges with the Implementation of Universal Design for Learning: A Systematic Literature Review. *Educational Psychology Review*, *36*(1), 35. <a href="https://doi.org/10.1007/s10648-024-09860-7">https://doi.org/10.1007/s10648-024-09860-7</a>
- 47. Walkington, C., **Bernacki, M.L.,** Vongkulluksn, V., Greene, M., Darwin, T., Leyva, E., Istas, B., Hunnicutt, J., Washington, J., & Wang, M. (2024). The Effect of an Intervention Personalizing Mathematics to Students' Career and Popular Culture Interests on Math Interest and Learning. *Journal of Educational Psychology*. https://doi.org/10.1037/edu0000840
- 46. Kuhlmann, S.L. **Bernacki, M.L.**, Greene, J.A. (2023). A multimedia learning theory-informed perspective on self-regulated learning. *New Directions for Teaching and Learning*, *174*, 17-23. https://doi.org/10.1002/tl.20544.
- 45. **Bernacki, M.L.,** Cogliano, M.C., Kuhlmann, S.L., Utz, J. C., Strong, C., Hilpert, J. C., & Greene, J.A. (2023). Relations between undergraduates' self-regulated learning skill mastery during digital training and biology performance. *Metacognition and Learning*, *18*, 711-747. https://doi.org/10.1007/s11409-023-09356-9
- 44. Hilpert, J. C., Greene, J.A., & **Bernacki, M. L.** (2023). Leveraging complexity frameworks to refine theories of engagement: advancing self-regulated learning in the age of artificial intelligence. *British Journal of Educational Technology*, 54(5), 1204-1221. doi.org/10.1111/bjet.13340
- 43. Greene, J. A., **Bernacki, M. L.**, Plumley\*, R. D., Kuhlmann, S. L., Hogan, K. A., Evans, M., Gates, K. M., & Panter, A. T. (2023). Investigating bifactor modeling of biology undergraduates' task values and achievement goals across semesters. *Journal of Educational Psychology*, *15*(6), 836–858. doi.org/10.1037/edu0000803
- 42. Kuhlmann, S.L., **Bernacki, M.L.,** Greene, J.A., Hogan, K., Evans, M., Plumley, R.D., Gates, K., & Panter, A. (2023). How do students' achievement goals relate to learning from well-designed instructional videos and subsequent exam performance? *Contemporary Educational Psychology*, 73. doi.org/10.1016/j.cedpsych.2023.102162.

- 41. Mefferd, K. C. \* & **Bernacki, M.L.** (2022). Tracing undergraduate science learners' digital cognitive strategy use and relation to performance. *Journal of Science Education and Technology*. doi.org/10.1007/s10956-022-10018-9
- 40. Metcalf, L.\*, **Bernacki, M. L.**, & Bernacki, L.E. (2022). How do digital textbook platforms promote active learning in undergraduate biology courses? *Journal of Research on Science Teaching*. DOI:10.1002/tea.21845
- 39. Walkington, C., **Bernacki, M.L.**, Wang, M., Istas, B., & Greene, M. (2022). Posing Mathematics Problems about STEM Careers: Problem Quality, Scaffolds, and Problem Solving. *Journal of Mathematical Education in Science & Technology*. <a href="https://doi.org/10.1080/0020739X.2022.2128458">https://doi.org/10.1080/0020739X.2022.2128458</a>
- 38. Arizmendi\*, C. J., **Bernacki, M. L.**, Raković, M., Plumley, R. D.\*, Urban, C. J.\*, Panter, A. T., Greene, J. A. & Gates, K. M. (in press). Predicting student outcomes using digital logs of learning behaviors: Review, current standards, and suggestions for future work. *Behavior Research Methods*, 55, 3026-3054 doi.org/10.3758/s13428-022-01939-9
- 37. Cogliano, M.C., **Bernacki, M.L.** Hilpert, J.C., & Strong (2022). A Self-Regulated Learning Analytics Prediction-and-Intervention Design: Detecting and Supporting Struggling Biology Students. *Journal of Educational Psychology* 114(8), 1801–1816. doi.org/10.1037/edu0000745
- 36. Huang, X.\*, **Bernacki, M.L.**, Ho, D. & Hong, W. (2022). Examining the role of self-efficacy and online metacognitive monitoring behaviors in undergraduate life science education. *Learning and Instruction*, 80, doi.org/10.1016/j.learninstruc.2021.101577
- 35. Raković, M., **Bernacki, M.L**. Greene, J. A, Plumley\*, R. D., Hogan, K. A., Gates, K. M., & Panter, A.T. (2022). Examining the critical role of evaluation and adaptation in self-regulated learning. *Contemporary Educational Psychology, 68, 102027.* doi.org/10.1016/j.cedpsych.2021.102027
- 34. Leyva, E., Walkington, C., Perera, H. N., & **Bernacki, M. L.** (2022). Making Mathematics Relevant: An Examination of Student Interest in Math, Interest in STEM Careers, and Perceived Relevance. *International Journal of Research in Undergraduate Mathematics Education*. <a href="https://link.springer.com/article/10.1007/s40753-021-00159-4">https://link.springer.com/article/10.1007/s40753-021-00159-4</a>.
- 33. Hong, W., **Bernacki, M.L.,** (2022). Initial and evolving perceptions of value and cost for the achievement and persistence of undergraduates pursuing science degrees. *Journal of Educational Psychology*, 114(5), 1005-1027. doi.org/10.1037/edu0000717.
- 32. Hilpert, J. C., **Bernacki, M.L.,** & Cogliano, M.C. (2021). Coping with the transition to remote instruction: patterns of self-regulated engagement in a large post-secondary biology course. *Journal of Research on Technology in Education, 54.* doi.org/10.1080/15391523.2021.1936702
- 31. **Bernacki, M.L.,** Lobczowski, N. G. & Greene\*, M. J. (2021). A systematic review of research on personalized learning: personalized by whom, to what, how, and for what purpose(s)?. *Educational Psychology Review, 33,* 1675-1715. <a href="https://doi.org/10.1007/s10648-021-09615-8">https://doi.org/10.1007/s10648-021-09615-8</a>.
- 30. **Bernacki, M.L.,** Vosicka, L., Utz, J.C. & Warren, C. (2021). Effects of digital learning skill training on the academic performance of undergraduates in science and mathematics. *Journal of Educational Psychology*, 113(6), 1107–1125. <a href="http://dx.doi.org/10.1037/edu0000485">http://dx.doi.org/10.1037/edu0000485</a>
- 29. Cogliano, M.C.\*, **Bernacki, M.L.** & Kardash, C.A. (2021). A metacognitive retrieval practice intervention to improve undergraduates' monitoring and control processes and use of performance feedback for classroom learning. *Journal of Educational Psychology*. http://dx.doi.org/10.1037/edu0000624

- 28. **Bernacki, M.L.,** Chavez (nee Dominguez)\*, M. M., & Uesbeck\*, P. M. (2020). Predicting STEM achievement with learning management system data: prediction modeling and a test of an early warning system. *Computers & Education*, 158, <a href="https://doi.org/10.1016/j.compedu.2020.">https://doi.org/10.1016/j.compedu.2020.</a>
- 27. Walkington, C. W. & Bernacki, M.L. (2020). Appraising research on personalized learning: definitions, theoretical alignment, advancements, and future directions. *Journal of Research on Technology in Education*, 52, (3), 235-252. <a href="https://doi.org/10.1080/15391523.2020.1747757">https://doi.org/10.1080/15391523.2020.1747757</a>
- 26. Crompton, H., **Bernacki, M.L.**, & Greene, J.A. (2020). Psychological foundations of emerging technologies for teaching and learning in higher education. *Current Opinion in Psychology, 36*, 101-105. <a href="https://doi.org/10.1016/j.copsyc.2020.04.011">https://doi.org/10.1016/j.copsyc.2020.04.011</a>
- 25. Part\*, R., Perera, H., Marchand, G. & **Bernacki, M.L.** (2020). Revisiting the dimensionality of subjective task value: Towards clarification of competing perspectives. *Contemporary Educational Psychology*. <a href="https://doi.org/10.1016/j.cedpsych.2020.101875">https://doi.org/10.1016/j.cedpsych.2020.101875</a>
- 24. Hong, W. **Bernacki, M.L.,** & Perera, H.N. (2020). A latent profile analysis of undergraduates' achievement motivations and metacognitive behaviors, and their relations to achievement in science. *Journal of Educational Psychology*, 112(7), 1409–1430. <a href="https://doi.org/10.1037/edu0000445">https://doi.org/10.1037/edu0000445</a>
- 23. **Bernacki, M.L.,** Vosicka\*, L. & Utz. J.C. (2020). Can brief, web-delivered training help STEM undergraduates "learn to learn"? *Journal of Educational Psychology, 112*(4), 765–781. <a href="http://dx.doi.org/10.1037/edu0000405">http://dx.doi.org/10.1037/edu0000405</a>
- 22. **Bernacki, M.L.,** Crompton, H., & Greene, J. A. (2020). Towards convergence of mobile and psychological theories of learning. *Contemporary Educational Psychology, 60.* <a href="https://doi.org/10.1016/j.cedpsych.2019.101828">https://doi.org/10.1016/j.cedpsych.2019.101828</a>
- 21. **Bernacki, M.L.,** Greene, J. A. & Crompton, H. (2020). mobile technology, learning, and achievement: a critical perspective on the role of mobile technology in education. *Contemporary Educational Psychology, 60.* https://doi.org/10.1016/j.cedpsych.2019.101827
- 20. Greene, J.A., Urban, C.J.\*, Plumley, R.D. \*, **Bernacki, M.L.,** Gates, K.M., Hogan, K., Demetriou, C. & Panter, A. T. (2019). Modeling temporal self-regulatory processing in a higher education biology course. *Learning and Instruction*. <a href="https://doi.org/10.1016/j.learninstruc.2019.04.002">https://doi.org/10.1016/j.learninstruc.2019.04.002</a>
- 19. Miller, C.\* & **Bernacki, M.L.** (2019) Training preparatory mathematics students to be high ability self-regulators: comparative and case-study analyses of impact on learning behavior and achievement. *Journal of High Ability Studies*. https://doi.org/10.1080/13598139.2019.1568829
- 18. Cogliano, M.C.\*, Kardash, C. A., & **Bernacki, M.L.** (2019). the effects of retrieval practice and prior topic knowledge on test performance and confidence judgments. *Contemporary Educational Psychology*, 56, 117-129. <a href="https://doi.org/10.1016/j.cedpsych.2018.12.001">https://doi.org/10.1016/j.cedpsych.2018.12.001</a>
- 17. Walkington, C. & **Bernacki**, **M. L.** (2019). Personalizing algebra to students' individual interests in an intelligent tutoring system: how moderators of impact. *Journal of Artificial Intelligence in Education*, 29, 58–88. <a href="https://doi.org/10.1007/s40593-018-0168-1">https://doi.org/10.1007/s40593-018-0168-1</a>
- 16. **Bernacki, M.L.** & Walkington, C. (2018). The role of situational interest in personalized learning. *Journal of Educational Psychology*, 110(6), 864-881. <a href="http://dx.doi.org/10.1037/edu0000250">http://dx.doi.org/10.1037/edu0000250</a>
- 15. Hilts, A.\*\*, Part, R.\*, & **Bernacki, M.L**. (2018). The roles of social influences on student competence, relatedness, achievement, and retention in STEM. *Science Education*, *102*, 744-770 <a href="https://doi.org/10.1002/sce.21449">doi.org/10.1002/sce.21449</a>

- 14. Richey, J.E., **Bernacki, M.L.,** Belenky, D.M. & Nokes-Malach, T.J. (2018) Comparing class- and task-level measures of achievement goals. *Journal of Experimental Education*, *86*, (4) 560-578. https://doi.org/10.1080/00220973.2017.1386155
- 13. Utz, J. C. & **Bernacki, M.L.** (2018). Voluntary web-based self-assessment quiz use is associated with improved exam performance, especially for learners with low prior knowledge. *HAPS Educator*, 22(2), 129-135. *Available online at* <a href="https://www.lifescitrc.org/download.cfm?submissionID=11876">https://www.lifescitrc.org/download.cfm?submissionID=11876</a>
- 12. Volkert, D.\*, Candela, L. & **Bernacki**, **M.L.** (2018). Student motivation, stressors, and intent to leave nursing doctoral study: a national study using path analysis. *Nurse Education Today*, *61*, 210-215.
- 11. Walkington, C. & **Bernacki, M.L.** (2018). Personalization of instruction: design dimensions and implications for cognition. *Journal of Experimental Education*, 86 (1), 50-68. doi: 10.1080/00220973.2017.1380590
- 10. Winkelmes, M.A., **Bernacki, M. L.,** Butler, J., Zochowski\*, M., Golanics\*, J., & Weavil\*, K. H. (2016). A Teaching intervention that increases underserved college students' success, *Peer Review*, 18 (1/2), 31-36.
- 9. **Bernacki, M. L.,** Nokes-Malach, T. J., Richey, J.E., & Belenky, D.M. (2016) Science diaries: a brief writing intervention to improve motivation to learn science. *Educational Psychology*, 36 (1), 26-46. <a href="https://doi.org/10.1080/01443410.2014.895293">https://doi.org/10.1080/01443410.2014.895293</a>
- 8. Walkington, C. & **Bernacki**, **M.L.** (2015). Students authoring personalized "algebra stories": problem-posing in the context of out-of-school interests" *Journal of Mathematical Behavior*, 40 (B), 171-191. <a href="https://doi.org/10.1016/j.jmathb.2015.08.001">https://doi.org/10.1016/j.jmathb.2015.08.001</a>
- 7. **Bernacki, M. L.,** Nokes-Malach, T. J., & Aleven, V. (2015) An examination of self-efficacy during a learning episode: initial levels, changes and associations with learning. *Metacognition & Learning*, 10 (1), 99-117. <a href="https://doi.org/10.1007/s11409-014-9127-x">https://doi.org/10.1007/s11409-014-9127-x</a>.
- 6. Ben-Eliyahu, A. & **Bernacki, M. L.,** (2015). Context, contingency, and dynamic relations in self-regulated learning. *Metacognition & Learning, 10* (1), 1-13 <a href="https://doi.org/10.1007/s11409-015-9134-6">https://doi.org/10.1007/s11409-015-9134-6</a>
- 5. **Bernacki, M. L.,** Aleven, V., & Nokes-Malach, T. J. (2014). Stability and change in adolescents' task-specific achievement goals for learning mathematics with an intelligent tutoring system. *Computers in Human Behavior*, *37*, 73-80. <a href="https://doi.org/10.1016/j.chb.2014.04.009">https://doi.org/10.1016/j.chb.2014.04.009</a>
- 4. **Bernacki, M. L.,** Byrnes, J. P. & Cromley, J. G. (2012). The effects of achievement goals and self-regulated learning behaviors on reading comprehension in technology-enhanced learning environments. *Contemporary Educational Psychology, 37*(2), 148–161. https://doi.org/10.1016/j.cedpsych.2011.12.001
- 3. Stull, J. C., Majerich, D. M., **Bernacki, M. L.,** Varnum, S. J., & Ducette, J. P. (2011). The effects of formative assessment, pre-lecture online chapter quizzes, and student-initiated inquiries to the instructor on academic achievement. *Educational Research and Evaluation*, 17 (4), 253-262. <a href="https://doi.org/10.1080/13803611.2011.621756">https://doi.org/10.1080/13803611.2011.621756</a>
- 2. Stull, J.C., Varnum, S.J., Ducette, J, Schiller, J. & **Bernacki, M. L**. (2011). The many faces of formative assessment. *International Journal of Teaching and Learning in Higher Education, 23* (1), 30-39. <a href="https://www.learntechlib.org/p/51005/">https://www.learntechlib.org/p/51005/</a>.
- 1. Bernacki, M.L. & Jaeger, E. A. (2008). The impact of service learning on moral development and

moral orientation. *Michigan Journal of Community Service-Learning*, *14* (2), 5-15. <a href="http://hdl.handle.net/2027/spo.3239521.0014.201">http://hdl.handle.net/2027/spo.3239521.0014.201</a>

## **Edited Book and Handbook Chapters**

- 11. Loures-Elias, A. P. S., & **Bernacki, M. L.** (2024). The Influence of Affect in Help-Seeking Behaviors and Performance in a Math Intelligent Tutoring System. in S. Kadry (Ed.) *Artificial Intelligence for Quality Education*. Intech Open. DOI: 10.5772/intechopen.1004185
- 10. Kuhlmann, S.L., Greene, J. A., & **Bernacki, M. L.** (2024). Online learning. *Reference Module in Neuroscience and Biobehavioral Psychology*. Elsevier. https://doi.org/10.1016/B978-0-323-96023-6.00089-0.
- 9. Greene, J. A., **Bernacki, M. L.** & Hadwin, A. F. (2024). Self-regulation. In P. A. Schutz & K. R. Muis (Eds.), *Handbook of Educational Psychology (4<sup>th</sup> ed.)* (pp. 314-334). New York, NY: Routledge.
- 8. **Bernacki, M.L.** (2023). Development, Sustainment, and Scaling of Self-Regulated Learning Analytics: Prediction Modeling and Digital Student Success Initiatives in University Contexts. In D. Glick. J. Bergin & C. Chang (eds.) *Supporting Self-Regulated Learning and Student Success in Online Courses*. (pp. 255-281) IGI. DOI: 10.4018/978-1-6684-6500-4
- 7. **Bernacki, M.L.** (2018). Examining the cyclical, loosely sequenced, and contingent features of self-regulated learning: Trace data and their analysis. In D.H. Schunk & J.A. Greene (eds.) *Handbook of Self-Regulated Learning and Performance*. (pp. 370-387). Routledge.
- 6. Schraw, G. & **Bernacki, M.L.** (2016). Teaching introductory statistics: Challenges and strategies. In M. C. Smith & N. DeFrates-Densch (eds). *Challenges and Innovations in Educational Psychology Teaching and Learning*. InfoAge
- Walkington, C. & Bernacki, M. L. (2014). Motivating students by "personalizing" learning around individual interests: A consideration of theory, design, and implementation issues. In S. Karabenick & T. Urdan (eds). Advances in Motivation and Achievement (Vol. 18). (pp. 139-176) Emerald Outstanding Author Contribution, 2015 Emerald Literati Network
- 4. **Bernacki, M. L.,** Nokes-Malach, T. J., & Aleven, V. (2013). Fine-grained assessment of motivation over long periods of learning with an intelligent tutoring system: Methodology, advantages, and preliminary results. In R. Azevedo & V. Aleven, (Eds.) *International Handbook of Metacognition and Learning Technologies* (pp. 629-644). Springer.
- 3. Byrnes, J. P. & **Bernacki**, **M. L.** (2012). Cognitive development and information behavior. In J. Beheshti & A. Large (Eds.), *Children's information behavior in the digital age*. Scarecrow Press.
- 2. **Bernacki**, **M.L.** Aguilar, A. & Byrnes, J. (2011). Self-regulated learning and technology-enhanced learning environments: An opportunity propensity analysis. In G. Dettori and D. Persico (Eds.), *Fostering self-regulated learning in ICTs*. (pp. 1-26) IGI Global Publishers.
- 1. **Bernacki, M.L.** & Bernt, F.M. (2007). Service-learning as a transformative experience: An analysis of the impact of service-learning on student attitudes and behaviors after two years of college. In S. B. Gelmon & S. Billig (Eds.), *From Passion to Objectivity: International and Cross-Disciplinary Perspectives on Service-Learning Research* (pp. 111-134) InfoAge.

## **Policy Briefs**

- 2. Walkington, C. & **Bernacki, M.L.** (2021). *Making Classroom Learning Personalized*. [Policy Brief]. University of Nevada Las Vegas. American Psychological Association, Division 15. <a href="https://apadiv15.org/making-classroom-learning-personalized/">https://apadiv15.org/making-classroom-learning-personalized/</a>
- 1. **Bernacki, M. L.** & Perera, H. (2017). Encouraging young Nevadans to choose and stick with STEM careers: a choice and retention perspective on science, technology, engineering, and mathematics workforce development. [Policy Brief]. University of Nevada Las Vegas. <a href="https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1000&context=co-educ-policy.">https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1000&context=co-educ-policy.</a>

## **Conference Proceedings**

- 10. DeLiema, D., Goeke, M., Hussein, B., Valerie, J., Anderson, C., Varma, K., Chen, B., Salehi, S., & Bernacki, M.L. (2022). Playful learning following deviations: A mixture of tinkering, causal explanations, and revision rationales. In C. Chinn, D. Tan, C. Chan, & Y. Kali (Eds.), 16th International Conference of the Learning Sciences (ICLS) 2022 (pp. 1421-1424). Hiroshima, Japan: International Society of the Learning Sciences.
- 9. Yu, L., **Bernacki, M.L.,** Greene, J.A., Plumley, R.D., Duke, R., Freed, R., Gates, K.M. & Panter, A. T. (2021). Understanding college students' self-regulated learning using process mining. *Proceedings of the 12th Annual Learning Analytics and Knowledge Conference* (pp. 45-47). Online. Society of Learning Analytics Research. at <a href="https://www.solaresearch.org/wp-content/uploads/2022/03/LAK22">www.solaresearch.org/wp-content/uploads/2022/03/LAK22</a> CompanionProceedings.pdf.
- 8. Howell, E., Walkington, C., **Bernacki, M. L.**, & Istas, B. (2020). The connection between perception of utility in careers with math and STEM career interest. In Karunakaran, S.S., Reed, Z., & Higgins, A. (Eds.), *Proceedings of the 23rd Annual Conference on Research in Undergraduate Mathematics Education* (pp. 1168-1169). Boston, Massachusetts.
- 7. **Bernacki, M.L.** (2019, March). Development, sustainment, and scaling of a learning analytics, prediction modeling and digital student success initiative. *Proceedings of the 10th Annual Learning Analytics and Knowledge Conference Workshop on Sustainable and Scalable Learning Analytics Solutions*. Society of Learning Analytics Research. ACM.
- 6. Huang, X., Hong, W., & **Bernacki, M.L.** (2018, July). The psychological cost of college math: digital learning behaviors, outcomes, and genders differences. In International Conference on Human-Computer Interaction (pp. 43-50). Springer.
- 5. Hayes, D., **Bernacki, M.L.**, Hong, W., Markle, J. & Voorhees, N. (2017, August). Using LMS data to provide early alerts to struggling students. *Proceedings of the 9th Annual First Year Engineering Experience Conference*. American Society for Engineering Education. Retrieved from http://www.asee.org/public/conferences/96/papers/20933
- 4. Hong, W.\* & Bernacki, M.L. (2017, June). A Prediction and Early Alert Model Using Learning Management System Data. In X. Hu, T. Barnes, A. Hershkovitz and L. Paquette (eds.) *Proceedings of the 10th International Conference on Educational Data Mining*, (pp. 358-359). Educational Data Mining Society. Retrieved from <a href="http://educationaldatamining.org/EDM2017">http://educationaldatamining.org/EDM2017</a>
- 3. Hong, W.\* & Bernacki, M.L. (2017, June) A prediction and early alert model using learning management system data and grounded in learning science theory. In X. Hu, T. Barnes, A. Hershkovitz and L. Paquette (eds.) *Proceedings of the 10th International Conference on Educational Data Mining*, (pp. 358-359). Educational Data Mining Society. Retrieved from <a href="http://educationaldatamining.org/EDM2017">http://educationaldatamining.org/EDM2017</a>

- 2. Dominguez\*, M., **Bernacki, M. L.,** & Uesbeck\*, P. M. (2016, July). Using learning management system data to predict STEM achievement: implications for early warning systems. In T.Barnes, M. Chi and M. Feng (eds.) *Proceedings of the 9th International Conference on Educational Data Mining*. (pp. 589-590) Educational Data Mining Society. Retrieved from <a href="https://www.educationaldatamining.org/EDM2016/proceedings/edm2016">https://www.educationaldatamining.org/EDM2016/proceedings/edm2016</a> proceedings.pdf
- 1. Fancsali, S., **Bernacki, M.L.,** Nokes-Malach, T. J., Yudelson, M. & Ritter, S. (2014, June). Goal orientation, self-efficacy, and "online measures" in intelligent tutoring systems. In *Proceedings of the 36<sup>th</sup> Annual Meeting of the Cognitive Science Society*, (pp. 2169-2174). Retrieved from: <a href="http://escholarship.org/uc/item/0p53v46r">http://escholarship.org/uc/item/0p53v46r</a>

## CONFERENCE PRESENTATIONS, & REPORTS (IN REVERSE CHRONOLOGICAL ORDER)

- 143. Ding, L. Windsor, E., Greene, J.A., Plumley, R. D., Ren, S., Webb, N., Bernacki, M.L., & Hilpert, J. C. (2024, August). *Using Survival Analysis based on Demographics and Motivation to Predict Students' Dropout in College Science*. [Poster Presentation]. American Psychological Association Annual Convention, Seattle, WA.
- 142. Sung, H., Plumley, R. D., **Bernacki, M. L.,** & Greene, J.A. (2024, August). *Exploring differently motivated STEM learners' self-regulated learning processes*. [Poster Presentation]. American Psychological Association Annual Convention, Seattle, WA.
- 141. Yu, L., Plumley, R.D., Sung, H., Ding, L. Ren, S., Greene, J. A. & **Bernacki, M. L.,**(2024, August). *Understanding College Students' Academic Help-seeking Behaviors and Early Academic Performance in an Introductory STEM Course.* [Poster Presentation]. American Psychological Association Annual Convention, Seattle, WA.
- 140. Darwin, T., Walkington, C., Bernacki, M., Hunnicutt, J. (Accepted). How College Students Seek Help During an Algebraic Problem-Posing Intervention. *Proceedings of the 46th International PME-NA Conference 2024*. Cleveland, United States of America: PME-NA.
- 139. Sung, H., Berro, M., Yu, L., Plumley, R.D., **Bernacki, M. L.** & Greene, J.A. (2024, June). *Exploring the Relationship Between Students' Adherence to Active Learning and Self-Regulated Learning Processes*. [Poster Presentation]. International Conferences of the Learning Sciences, Buffalo, NY.
- 138. **Bernacki, M. L.,** Yu, L., Kuhlmann, S. L., Plumley, R. D., Greene, J. A., Halpin, P. F., Duke, R., Freed, R., Hollander, C. & Thomas, M., (2024, April 11). *What does a digital trace mean? Validating inferences in learning analytics* [Paper Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 137. Zhang, L, Carter, R. A., Greene, J. A., & **Bernacki**, **M.L.**, (2024, April 11). *Unraveling Challenges with UDL Implementation: A Systematic Literature Review*, [Paper Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 136. Plumley, R. D., Utz, J. C., Strong, C. & **Bernacki, M. L.,** (2024, April 11). Should I Stay or Should I Go? Motivation and Persistence in a Gateway Science Course [Paper Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 135. Windsor, E. Ding, L. & **Bernacki, M. L.,** (2024, April 11). Overcoming Instructors' Design Differences to Deliver Equitable Learning Opportunities and Algorithms that Predict Science Achievement [Paper Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 134. Strong, CS., **Bernacki, M. L.** Utz, J. C., Rafferty, K., Cogliano, M.C., & Hilpert, J. C., (2024, April 11). *Motivations of and Implications for Students in Introductory Biology Courses for*

- Majors and Non-majors, [Paper Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 133. Plumley, R. D., **Bernacki, M. L.,** Greene, J. A. Kuhlmann, S. L., Rakovic, M., Urban, C. J. Hogan, K., Lee, C. (2024, April 11). *Improving the Prediction of Undergraduate STEM Outcomes via Curricular Temporality-Based Feature Design* [Poster Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 132. Berro, M., **Bernacki, M. L.,** Plumley, R. D., Kuhlmann, S. L. Ott, L. Hogan, K & Greene, J.A., (2024, April 11). *Exploring Learners' Adherence to High-Structure Course Design on Performance in Online and In-Person Settings* [Poster Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 131. **Bernacki, M. L.,** Greene, J. A., Plumley, R. D., Kuhlmann, S. L., & Hogan, K., (2024, April 11). Developing Skill and Appraising Will: Benefits of Learning Skill Training for Undergraduates by Motivational Profile, [Paper Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 130. Rosengarten, S., Ding, L., Hollander, C., Ben Eliyahu, A., & **Bernacki, M. L.** (2024, April 11). Cross-cultural Adaptability of a Brief Self-Regulated Learning Intervention and Effects on Undergraduates' Learning and Achievement [Poster Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 129. Utz, J. & **Bernacki, M.L.**, (2024, April 11). Applying Educational Psychology Lenses to the "Curious Construct of Active Learning" in Undergraduate Science Education [Symposium Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 128. Ren, S., **Bernacki, M. L.,** Dong, N., Greene, J.A., Ding, L., Windsor, E., & Hilpert, J. C. (2024, April 11). *Adult vs. Traditional Learners: Motivational Profiles and Academic Outcomes*, [Roundtable Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 127. Kuhlmann, S. L. Hogan, K., Plumley, R.D., **Bernacki, M. L.** Greene, J. A., Evans, M. (2024, April 11). *Achievement Goals Relate to Biology Students' Engagement with Clicker Applications Embedded in Videos and Learning* [Paper Presentation] Annual Meeting of the American Education Research Association, Philadelphia, PA.
- 126. **Bernacki, M. L.,** (2023, August). *The Interplay of Motivation, Emotion, and Self-Regulation In Diverse Populations.* Paper presented at the annual meeting of the European Association of Research on Learning and Instruction, Thessaloniki, Greece.
- 125. **Bernacki, M. L.,** Walkington, C. & Vongkulluksn, V. (2023, August). *Student- and Task-Specific Factors Influence How Personalized Learning Affects Math Learning Outcomes.* Paper presented at the annual meeting of the European Association of Research on Learning and Instruction, Thessaloniki, Greece.
- 124. **Bernacki, M.L.,** Walkington C., Vongkulluksn V., Greene, M., Darwin, T., Istas, B. & Leyva, E. (2023, August). *The Effect of Career-Personalized Mathematics Instruction on Students'*Learning and Interests. Paper presented at the annual meeting of the European Association of Research on Learning and Instruction, Thessaloniki, Greece.
- 123. **Bernacki, M. L.,** Salehian Kia, F., Greene, J. A., Yu, L., Plumley, R. D., Kuhlmann, S. L. (2023, August). *Theorized self-regulated learning events and sequences and task performance during biology learning*. Paper presented at the annual meeting of the European Association of Research on Learning and Instruction, Thessaloniki, Greece.

- 122. Greene, J. A., **Bernacki, M. L.**, Berro, M., Plumley, R. D., Kuhlmann, S. L. (2023, August). *Studying cyclical and temporal aspects of self-regulated learning with validated digital trace data*. Paper presented at the annual meeting of the European Association of Research on Learning and Instruction, Thessaloniki, Greece.
- 121. Raković, M., Greene, J. A., **Bernacki, M. L.,** Plumley, R. D., Hogan, K., Panter, A. T. (2023, August). *Examining the adaptive nature of self-regulated learning in a large-scale university course*. Paper presented at the annual meeting of the European Association of Research on Learning and Instruction, Thessaloniki, Greece.
- 120. Kuhlmann, S. L., Hogan, K. Yu, L., Greene, J.A., & **Bernacki, M.L**. (2023, August 5). *How do undergraduates' learning processes relate to achievement in high-structure STEM courses?* [Poster Presentation] Annual Convention of the American Psychological Association, Washington, DC.
- 119. Plumley, R. D., **Bernacki, M.L.**, Strong, C. & Utz, J. (2023, August 5). *Effects of Motivation and Early Performance on STEM Course Persistence*. [Poster Presentation] Annual Convention of the American Psychological Association, Washington, DC.
- 118. **Bernacki, M.L.**, Berro, M, Ding, L., Ren, S., Webb, N., Greene, J. A., Windsor, E. & Hilpert, J.C. (2023, August 4). Differences in Beliefs, Values, Costs, and Achievement-Related Choices of Groups of Biology Learners. [Paper Presentation] Annual Convention of the American Psychological Association, Washington, DC.
- 117. Yu, L., Bernacki, M.L., Greene, J.A. (2023, August 3). College Students' Help-seeking Patterns in Informal Math Assessments. [Poster Presentation] Annual Convention of the American Psychological Association, Washington, DC.
- 116. Schewe, O. & Bernacki, M.L., (2023, April 16). Designing effective digital programs to help students develop and deploy self-regulated learning skills [Symposium] Annual Meeting of the American Education Research Association, Chicago, IL.
- 115. Plumley, R.D., Greene, J.A., **Bernacki, M.L.,** Kuhlmann, S. L., Berro, M., Evans, M., & Hogan, K., (2023, April 16). *Effects of Multimedia Self-Regulated Learning Training on Course Engagement Across Motivational Profiles* [Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.
- 114. Greene, J.A., Plumley, R. D., **Bernacki, M.L.,** Kuhlmann, S. L., Berro, M., Garland, A., Ott, L., Hogan, K., Howlett, M. A. & Abels, K. (2023, April 16). What Works, For Whom: Motivation Moderates Self-Regulated Learning Intervention Efficacy in a Postsecondary Biology. [Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.
- 113. **Bernacki, M.L.,** Cogliano, M.C., Kuhlmann, S. L., Hilpert, J. C., & Strong, C. (2023, April 16). *What Self-Regulated Learning Skills Matter and How Can a Learner Acquire* Them?. [Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.
- 112. Berro, M., Ott, L., Greene, J.A., **Bernacki, M.L.,** Plumley, R.D., Kuhlmann, S. L., Yu, L., & Hogan, K. (2023, April 16). *Design Matters: Students' Adherence to High-Structure Course Design Activities Predicts Course Performance*. [Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.
- 111. Walkington, C., **Bernacki, M.L.,** Greene, M. J., & Leyva, E.. (2023, April 16). *Personalizing Mathematics to Students' Career Interests Using the "Stories of Algebra" Online Environment.*[Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.
- 110. **Bernacki, M.L.,** Walkington, C., Vongkulluksn, V., Greene, M. J., & Darwin, T. (2023, April 14). The Effect of an Intervention Personalizing Mathematics to Students' Career Interests. [Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.

- 109. Vongkulluksn, C., **Bernacki, M.L.,** Walkington, C., Greene, M. J., & Darwin, T. (2023, April 14). Modeling Complex Trajectories of Change: Using Freed Loading Latent Curve Modeling to Visualize Growth Trajectories in Math Interest [Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.
- 108. Walkington, C., Darwin, T., **Bernacki, M.L.,** Hollander, C.. Greene, M. J., (2023, April 13). *How Depth of Interest is Related to Personalized Learning in Mathematic.* [Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.
- 107. Hou, C\*\*, Kuhlmann, S.L. **Bernacki, M.L.,** Greene, J. A., Plumley, R.D. Hogan, K., Gates, K. M. Panter, A.T. (2023, April 13). *Process Mining Measures Students' Sequential Self-Regulated Learning Processes when Completing Assignments in Online Learning Environments*. [Paper Presentation] Annual Meeting of the American Education Research Association, Chicago, IL.
- 106. Bernacki, M. L., Yu, L., Plumley, R. D., Greene, J.A., Kuhlmann, S.L., Hogan, K., Thomas, M., Gates, K.M., & Panter, A. T. (2023, March). Multimodal modeling to validate digital traces of self-regulated learning and examine the robustness of their predictive validity when scaled to naturalistic settings. [Workshop Presentation]. Workshop on Measuring and Facilitating Self-regulated Learning based on Trace data 13<sup>th</sup> Annual Learning Analytics and Knowledge Research Conference.
- 105. **Bernacki, M. L.**, Plumley, R. D., Greene, J.A., Kuhlmann, S. L., Hilpert, J. Cogliano, M.C., Hogan, K., Strong, C., Windsor, E., Gates, K.M., & Panter, A. T. (2023, March). *Explainable, theory-guided prediction modeling to inform design and delivery of digital skill trainings that improve facility for self-regulated learning*. [Workshop Presentation]. Workshop on Measuring and Facilitating Self-regulated Learning based on Trace data 13<sup>th</sup> Annual Learning Analytics and Knowledge Research Conference.
- 104. Greene, J. A., Freed, R., **Bernacki, M. L.,** Wortha, F., Plumley, R. D., Duke, R. F., Tibus, M., Ehlis, A-C., & Gerjets, P. (August, 2022). *Predicting art learning performance using grit and multi-perspective hypermedia learning behaviors*. Paper presented at the meeting of the European Association for Research on Learning and Instruction, Special Interest Groups 8 and 16, Dresden, Germany.
- 103. Greene, M. J., **Bernacki, M.L.**, & Walkington, C. (2022, August 4-6). *Personalizing Mathematics to Students' Career Interests to Maximize Relevance*. [Poster Presentation] Annual Convention of the American Psychological Association, Minneapolis, MN.
- 102. Yu, L., Berro, M., Kuhlmann, S. L., Plumley, R.D., **Bernacki, M.L.,** Greene, J. A., Hogan, K., Gates, K. G., & Panter, A.T. (2022, August 4-6). *First-Generation College Students' Motivation, Academic Help-seeking Behaviors, and STEM Achievement.* [Poster Presentation]. Annual Convention of the American Psychological Association, Minneapolis, MN.
- 101. Plumley, R.D., **Bernacki, M.L.,** Greene, J. A., Berro, M., Hogan, K., Gates, K. G., & Panter, A.T. (2022, August 4-6). *Modeling How Timeliness and Concentration of Effort Relates to Performance in Undergraduate Biology*. [Poster Presentation]. Annual Convention of the American Psychological Association, Minneapolis, MN.
- 100. Plumley, R.D., **Bernacki, M.L**., Greene, J. A., Berro, M., Hogan, K., Gates, K. G., & Panter, A.T. (2022, August 4-6). *Exploring the Influence of Prior Knowledge and Value on Biology Students' Course Grade Composition*. [Poster Presentation] Annual Convention of the American Psychological Association, Minneapolis, MN.
- 99. Kuhlmann, S.L., **Bernacki, M.L.,** Greene, J.A., Hogan, K., Evans M., Plumley, R.D., Gates, K.M., & Panter, A.T. (2022, August 4-6). *Achievement goals relate to learning from instructional*

- videos and achievement. [Poster Presentation] Annual Convention of the American Psychological Association, Minneapolis, MN.
- 98. Kuhlmann, S.L., Plumley, R.D., Evans, Mo., **Bernacki, M.L.,** Greene, J.A., Hogan, K., Evans M., Gates, K.M., & Panter, A.T.. (2022, August 4-6). *Undergraduates science of learning video watching behaviors are related to STEM performance*. [Poster Presentation] Annual Convention of the American Psychological Association, Minneapolis, MN.
- 97. Plumley, R. D., Greene, J.A., **Bernacki**, **M. L.**, Kuhlmann, S. L., Hogan, K., Gates, K. M. & Panter, A. T. (2022, April 21-26). *Effects of a Brief Digital Self-Regulated Learning Intervention on Achievement and Moderation by Students' Motivation*. [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 96. Hilpert, J. C., **Bernacki, M.L.,** Cogliano, M.C., Strong, C., & Greene, J. A. (2022, April 21-26). *A Network-Based Learning Analytics Approach to Measuring Student Engagement and Predicting STEM Achievement* [Poster Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 95. Duke, R. F., Hollander, C., Yu, L., Kuhlmann, S. L., **Bernacki, M. L.**, & Greene, J.A.. (2022, April 21-26). *How Do Self-Regulated Learning Processes Relate to Students' Ability to Learn From Worked Peer Examples?*. [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 94. Walkington, C., **Bernacki, M.L.,** Greene, M. J., Istas, B. (2022, April 21-26). *Personalizing Mathematics to Students' Career Interests Using the "Stories of Algebra" Online Environment*. [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 93. Emery, A. & **Bernacki, M.L.** (2022, April 21-26). Conducting Community-Engaged Research on Motivation From Our Partners' Perspectives. [Symposium] Annual Meeting of the American Education Research Association, San Diego CA.
- 92. **Bernacki, M. L.,** Greene, J. A., Plumley, R. D., Yu, L., Duke, R. F. Freed, R., Hollander, C. & Hogan, K. (2022, April 21-26). *Code What I Say, Not Just What I Do! Multimethod Investigations into Digitally Traced Behaviors*. [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 91. **Bernacki, M.L**. (2022, April 21-26). Authenticating The Signal: Validating Digital Traces Of Student Learning Using Concurrent, Corroborating Data Sources. [Symposium] Annual Meeting of the American Education Research Association, San Diego CA.
- 90. Gianoutsos, D. J., Cogliano, M.C., **Bernacki, M.L.,** Strong, C. & Hilpert, J.C. (2022, April 21-26). Leveraging Learning Analytics, Digital Training, and Campus Academic Success Programs to Support STEM Learners. [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 89. Greene, J.A., **Bernacki, M.L.,** Kuhlmann, S. L., Plumley, R.D., Hogan, K., Evans, M., Gates, K. M., & Panter, A. T. (2022, April 21-26). *How Do Motivation Profiles Moderate the Efficacy of a Targeted Self-Regulated Learning Intervention?* [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 88. Cogliano, M.C., **Bernacki, M.L.** & Hilpert, J.C. (2022, April 21-26). A Self-Regulated Learning Analytics Prediction-and-Intervention Design: Detecting and Supporting Struggling Biology Students. [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.

- 87. **Bernacki, M.L.,** Cogliano, M.C., Utz, K., Strong, C., Rafferty, K., & Hilpert, J. (2022, April 21-26). *Optimizing Student Participation in and Benefit From Brief, Digital Learning Skills Training.*[Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 86. Greene, J.A. & **Bernacki, M.L.** (2022, April 21-26). Supporting Undergraduate Stem Students' Academic Success Through Campus-Based And Researcher-Developed Self-Regulated Learning Initiatives. [Symposium] Annual Meeting of the American Education Research Association, San Diego CA.
- 85. **Bernacki, M.** L. & Walkington, C. A., (2022, April 21-26). *An Integrative Variable- and Person-Centered Framework for Representing the Dimensionality of Math Interest*. [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 84. Greene, J.A., **Bernacki**, M. L., Plumley, R.D., Kuhlmann, S. L., Hogan, K. Evans, M., Gates, K. M. Panter, A. T. (2022, April 21-26). *Bifactor Modeling and Latent Profiling of Biology Undergraduates' General and Specific Achievement Goals and Task Values*. [Paper Presentation] Annual Meeting of the American Education Research Association, San Diego CA.
- 83. **Bernacki, M.L.** (2022, April 21-26). *Bifactor Models To Improve Theoretical And Analytical Precision And The Opportunity To Study Motivational Processes*. [Symposium] Annual Meeting of the American Education Research Association, San Diego CA.
- 82. Yu, L., **Bernacki, M. L.**, Plumley, R. D., Hogan, K., Evans, M., Gates, K.M., Panter, A. T. & Greene, J.A. (2022, March). *Understanding College Students' Self-Regulated Learning Using Process Mining*. [Poster Presentation] 12<sup>th</sup> Annual Learning Analytics and Knowledge Research Conference, Virtual.
- 81. **Bernacki, M. L.**, Plumley, R. D., Rakovich, M., Hogan, K., Evans, M., Gates, K.M., Panter, A. T. & Greene, J.A. (2021, April). *Self-Regulated Learning Behaviors in Learning Management Systems and Their Implications for Academic Achievement in Higher Education* [Paper Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 80. Berro, M., Bernacki, M. L., Perez, T., Plumley, R. D., Hogan, K., Evans, M., Gates, K.M. Panter, A. T., & Greene, J.A. (2021, April). *Examining Expectancy-Value Beliefs and Traces of Engagement in Science as a Function of Prior Knowledge* [Paper Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 79. Berro, M., **Bernacki, M.** L., Perez, T., Plumley, R. D., Hogan, K., Evans, M., Gates, K.M. Panter, A. T., & Greene, J.A. (2021, April). *Effects of Prior Knowledge on Relations Among Expectancies, Values, Costs, Digital Behavioral Engagement and Achievement* [Roundtable Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 78. Freed, R. Dragnic-Cindric, D., **Bernacki, M. L.**, Wortha, F., Plumley, R.D., Duke, R.F., Tibus, M., Gerjets, P. & Greene, J.A. (2021, April). *Comparing Behavioral Data versus Self-reported Use of Learning Strategies in a Multiperspective Hypermedia Learning Environment* [Roundtable Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 77. Greene, M. J., Lobczowski, N. G. & **Bernacki, M.L**. (2021, April). A Systematic Review of Personalized Learning Research: Personalized by Whom, to What, and for What Purpose(s)? [Poster Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 76. Hilpert, J. C., **Bernacki, M.L.,** & Cogliano, M.C. (2021, April). Coping With the Transition to Remote Instruction: Self-Regulation and Depletion in a Large Postsecondary Biology Course

- [Poster Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 75. Huang, X., **Bernacki, M.L.**, & Hong, W. (2021, April). *The Dynamics of Self-efficacy and Anxiety in Biology Courses: A Parallel Latent Growth Curve Model* [Poster Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 74. Perera, H. N., **Bernacki, M.L.**, & Walkington, C. (2021, April). *Profiles of STEM Vocational Interests: Relations With Sociodemographics and Math Academic Interest* [Paper Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 73. Rakovic,, M., **Bernacki, M. L.**, Greene, J.A., Plumley, R. D., Hogan, K., Gates, K.M. & Panter, A. T. (2021, April). *Examining the Critical Roles of Evaluation and Adaptation in Reflective Writing and Self-Regulated Learning* [Poster Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 72. Walkington, C., **Bernacki, M.L.**, Wang, M., Greene, M. J., Istas, B. & Howell, E. (2021, April). *Posing Math Problems about STEM Careers: An Examination of Scaffolds and the Role of Interest.* [Paper Presentation] Annual Meeting of the American Educational Research Association, Virtual.
- 71. Plumley R. D., Yust, P. K. S., Luo, L., Pirani, S., **Bernacki, M. L.**, Hogan, K. A., Evans, M., Gates, K. M., Panter, A. T., & Greene, J. A. (2020, August 6-9). *Effect of Group Members' Prior Knowledge on Individuals' Final Grade*. [Poster presentation]. Annual meeting of the American Psychological Association, Washington, DC, United States.
- 70. Plumley R. D., Hong, W., **Bernacki, M. L.,** Gates, K. M., Panter, A. T., & Greene, J. A. (2020, August 6-9). Does Consent Affect Who Benefits from Higher-Education Learning Analytics Research? [Poster presentation]. Annual meeting of the American Psychological Association, Washington, DC, United States.
- 69. **Bernacki, M. L.,** Perera, H. N., & Walkington, C. (2020, August). *Interest two ways: Examining competing (or complementary) measures and what they tell us about student interest in mathematics*. [Paper Presentation]. APA Convention 2020, Washington, DC.
- 68. **Bernacki, M. L.**, Urban\*, C. J., Plumley\*, R. D., Luo\*, L., Gates, K. M., Panter, A. & Greene, J.A.. (2020, April). *Leveraging Campus Data, Learning Theory, and Educational Data Mining to Predict Achievement Before Students Begin to Fail* [Paper Presentation]. Annual Meeting of the American Educational Research Association, San Francisco, CA. <a href="http://tinyurl.com/qnm3vlo">http://tinyurl.com/qnm3vlo</a> (Conference Canceled).
- 67. Beymer\*, P.N., Benden\*, D. K., & **Bernacki**, **M.L.** (2020, April). *Affordances and Modeling of Intensive Data*. [Poster Symposium]. Annual Meeting of the American Educational Research Association, San Francisco, CA. (Conference Canceled).
- 66. Cogliano, M. C. **Bernacki**, M. L., Gianoutsos, D. J. & Golanics, J. (2020, April). *Immediate and Sustained Benefits of a Self-Regulation Intervention on First-Year Undergraduates' Academic Achievement*. [Poster Presentation]. Annual Meeting of the American Educational Research Association, San Francisco, CA. (Conference Canceled).
- 65. Hong, W. H. & Bernacki, M. L. (2020, April). Predicting Academic Achievement Using Multiple Types of Campus Data in an Introductory Biology Course. [Poster Presentation]. 2020 Annual Meeting of the American Educational Research Association, San Francisco, CA. (<a href="http://tinyurl.com/yxb289bc">http://tinyurl.com/yxb289bc</a> Conference Canceled).

- 64. Hong, W. H. & **Bernacki, M. L.** (2020, April). *Two Methods of Extracting Campus Data, Interpreting LMS Events that Reflect Learning and Predicting Achievement.* [Paper Presentation]. 2020 Annual Meeting of the American Educational Research Association, San Francisco, CA. <a href="http://tinyurl.com/vn9zlzu">http://tinyurl.com/vn9zlzu</a> (Conference Canceled).
- 63. Hong, W. H. & Bernacki, M. L. (2020, April). Effects of Undergraduates Motivation Profile Transition on Course Achievement in Science. [Poster Presentation]. Annual Meeting of the American Educational Research Association, San Francisco, CA. (Conference Canceled).
- 62. Huang,\* X., **Bernacki**, **M. L.**, Kim, D. & Hong, W. (2020, April). *Examining the role of self-efficacy and online metacognitive monitoring behaviors in postsecondary physiology education*. [Paper Presentation]. Annual Meeting of the American Educational Research Association, San Francisco, CA. <a href="http://tinyurl.com/tfvte4k">http://tinyurl.com/tfvte4k</a> (Conference Canceled).
- 61. Walkington, C. Howell, E., Istas\*, B. & **Bernacki**, **M.L.**. (2020, April). *The Relationship Between Math Interest and STEM Career Interest: When am I ever going to use this?* [Roundtable Presentation]. Annual Meeting of the American Educational Research Association, San Francisco, CA. <a href="http://tinyurl.com/u7y2pnu">http://tinyurl.com/u7y2pnu</a> (Conference Canceled).
- 60. Cogliano, M. C., **Bernacki, M. L.,** Gianoutsos, D. & Golanics, J. (2019, August). *Impact of Metacognitive Self-Regulated Learning Training on First-Year Undergraduates' Academic Achievement and Retention*. [Poster Presentation]. Annual Convention of the American Psychological Association, , Chicago, IL.
- 59. Cogliano, M.C., Kardash, C. & **Bernacki, M.L.** (2019, August). A Retrieval Practice Intervention: Frequency and Spacing Practice-Testing in the Classroom. [Poster Presentation]. Annual Convention of the American Psychological Association, Chicago, IL.
- 58. Huang,\* X., Hong, W., & **Bernacki**, **M. L.** (2019, August). *Metacognitive Monitoring Behaviors and Self-Efficacy Sequentially Mediate Gender Achievement Gap.* [Poster Presentation]. Annual Convention of the American Psychological Association, Chicago, IL.
- 57. Johnson\*\*, K., Cogliano, M. C., & **Bernacki, M. L.,** (2019. August). *Impact of Metacognitive Self-Regulated Learning Training on First-Year Undergraduates' Academic Achievement and Retention*. [Poster Presentation]. Annual Convention of the American Psychological Association, Chicago, IL.
- 56. Part\*, R.P. Bernacki, M.L. (2019, August). An Integrative Variable-and-Person-Centered Approach for the Representation of Subjective Task Value. [Paper Presentation]. Annual Convention of the American Psychological Association, Chicago, IL.
- 55. **Bernacki, M.L.,** Kaplan, A, & Linnenbrink-Garcia, E. (2019, April) *Embracing and Modeling the Complex Dynamics of Motivation and Engagement: Contextual, Temporal, Dynamic, and Systematic*. [Poster Symposium]. Annual Meeting of the American Educational Research Association, Toronto, ON.1
- 54. Cogliano, M.C., Kardash, C.A. & **Bernacki, M.L.** (2019, April). *A Retrieval Practice Intervention: Undergraduates' Frequency and Spacing of Self-Directed Practice-Testing in the Classroom.* [Poster Presentation]. Annual Meeting of the American Educational Research Association, Toronto, ON.
- 53. Greene, J.A., Urban, C.J.\*, Plumley, R.D. \*, **Bernacki, M.L.,** Gates, K.M., Hogan, K., Demetriou, C. & Panter, A. T. (2019, April) *Theory-Driven Data Mining to Understand Self-Regulated Learning Processing in a Higher Education Biology Course,* [Paper Presentation]. Annual Meeting of the American Educational Research Association, Toronto, ON.

- 52. Hilley, C.\*, Marchand, G.C., & **Bernacki, M.L.** (2019, April). *Longitudinal complexity of affect and mathematics self-efficacy in middle school.* [Poster Presentation]. Annual Meeting of the American Educational Research Association, Toronto, ON.
- 51. Hong. W. & Bernacki, M.L. (2019, April). Latent Profile Analyses of Achievement Motivations and Metacognitive Behaviors, and Their Relations to Achievement. [Poster Presentation]. Annual Meeting of the American Educational Research Association, Toronto, ON.
- 50. Hong, W. & Bernacki, M.L. (2019, April). Examining the Power of Multiple Data Sources in Predicting Academic Achievement in Undergraduate STEM Courses. [Paper Presentation]. Annual Meeting of the American Educational Research Association, Toronto, ON.
- 49. Mefferd, K.C.\* & Bernacki, M.L. (2019, April). Tracing Science Learners' Digital Distribution of Self-Assessment Quizzes, Lecture Access, and Effects on Achievement. [Poster Presentation]. Annual Meeting of the American Educational Research Association, Toronto, ON.
- 48. **Bernacki, M.L.,** Campise, K., Romero, M., Speer, W. & Chase, D. Z. (2019, March). *Promoting college readiness in math with ALEKS: How restudy and learning behaviors relate to enrollment, achievement, and retention.* [Poster Presentation]. 10th Annual Learning Analytics and Knowledge Conference. Society of Learning Analytics Research. Tempe, AZ.
- 47. **Bernacki, M. L.** (2018, April). An Integrative and Comparative Analysis of Approaches to Developing Undergraduates' Learning Skills. [Paper Session]. Annual Meeting of the American Educational Research Association, New York, NY.
- 46. **Bernacki, M. L.** (2018, April). Scaffolding Self-Regulation, Co-Regulation, and Socially Shared Regulation of Future Learning: Affordances of Learning Analytics Dashboards. [Paper Session]. Annual Meeting of the American Educational Research Association, New York, NY.
- 45. **Bernacki, M. L.,** Voorhees, N.\*, & Bellomo-Warren (2018, April). *The Effects of Embedded Digital Learning Skills Training on Undergraduates' Science and Math Achievement.* [Paper Presentation]. Annual Meeting of the American Educational Research Association, New York, NY.
- 44. Cogliano, M.C.\*, & **Bernacki, M.L.** (2018, April). The Effects of a Retrieval Practice Intervention on Undergraduates' Monitoring and Control Using Performance Feedback. [Poster Presentation]. Annual Meeting of the American Educational Research Association, New York, NY.
- 43. Hong, W\*. & Bernacki, M.L. (2018, April) Data-Driven Digital Alerts and Learning Support: Effects on Achievement and Moderation by Unintended Course Events. [Poster Presentation]. Annual Meeting of the American Educational Research Association, New York, NY.
- 42. Mefferd, K.\*. & Bernacki, M.L. (2018, April) *Tracing Undergraduate Science Learners' Digital Cognitive Strategy Use and Effects on Achievement.* [Poster Presentation]. Annual Meeting of the American Educational Research Association, New York, NY.
- 41. Part, R.\*, Perera, H. N., **Bernacki, M.L.** & Marchand, G. C. (2018, April). *Expectancies, Values, and Costs: Reciprocal-Effects Models*. [Poster Presentation]. Annual Meeting of the American Educational Research Association, New York, NY.
- 40. Ryjova, Y.\*. & **Bernacki, M.L.** (2018, April) Longitudinal, Linguistic Analysis of Critical Thinking, Inquiry, and Communication Skills Development Among Second-Year Seminar Students. [Poster Presentation]. Annual Meeting of the American Educational Research Association, New York, NY.

- 39. **Bernacki, M.L.** & Johnson, C. (2017, November) *Increasing student success, completion, and retention through machine data and predictive analytics.* [Poster Presentation]. Annual meeting of EDUCAUSE, Philadelphia, PA.
- 38. Cogliano\*, M.C. & **Bernacki, M.L.**, (2017, October). Students' metacognitive monitoring of retrieval practice and heuristics for preparedness in a college classroom. [Poster Presentation]. Southwestern Consortium of Innovative Psychology in Education (SCIPIE), Las Vegas, NV.
- 37. Ryjova\*\*, Y., **Bernacki, M. L.** & Slife, N., (2017, October). *The Effects of Service-Learning on College Students' Learning Outcomes: An Analysis of Service-Learning Reflections.* [Poster Presentation]. Southwestern Consortium of Innovative Psychology in Education (SCIPIE), Las Vegas, NV.
- 36. **Bernacki, M.L.** & Backstrom, C. J. (2017, September). Continuing collaboration between IT operations + research: the impact of student achievement predictions to operational prediction...and back again. [Poster Presentation]. .conf 2017 user conference of Splunk [data management software), Washington, DC. Splunk.com
- 35. **Bernacki, M. L.,** Dai, T., & Part, R.\* (2017, August). *Cross-sectional, longitudinal, and contextual examination of student efficacy and achievement goals.* [Paper Presentation]. Annual Convention of the American Psychological Association, Washington, DC.
- 34. Hilts, A.\*\*, Part, R.\*, & Bernacki, M. L., (2017, August). The roles of social influences on student efficacy, belongingness, achievement and retention in STEM. [Paper Presentation]. Annual Convention of the American Psychological Association, Washington, DC.
- 33. **Bernacki, M. L.** & Johnson, C. (2017, July). *Using Splunk to increase student success at UNLV*. [Paper Presentation]. Campus Technology Conference, Chicago, IL.
- 32. Hong, W.\* & Bernacki, M. L. (2017, June). A prediction and early alert model using learning management system data and grounded in learning science theory. [Workshop Presentation]. 10<sup>th</sup> Annual Meeting of the Educational Data Mining Society, Wuhan, China.
- 31. Utz. J. & Bernacki, M.L. (2017, May) Voluntary web-based self-assessment quiz use improves exam performance, especially for learners with low prior knowledge. [Poster Presentation]. Human Anatomy and Physiology Society Annual Meeting, Salt Lake City, UT.
- 30. **Bernacki, M. L.**, Vosicka\*, L. & Utz, J. (2017, April). Web-delivered training to improve learning and achievement for under-represented and first generation STEM learners. [Paper Presentation]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- 29. **Bernacki, M. L.** & Walkington, C. (2017, April). *The role of situational interest in personalized learning*. [Paper Presentation]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- 28. **Bernacki, M. L.** & Winne, P.H. (2017, April *What can be inferred from trace data?: current methods to triangulate and validate traces of learning behavior.* [Poster Session]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- 27. Cogliano\*, M. C. & **Bernacki**, **M. L.** (2017, April). Web-based Training to Improve Undergraduates' Cognitive, Metacognitive, and Environmental Regulation Strategies: Impact of Treatment Fidelity on Performance. [Paper Presentation]. Annual Meeting of the American Educational Research Association, San Antonio, TX.

- 26. Hong\*, W. & **Bernacki**, **M. L.** (2017, April). Examining students' achievement goals, metacognitive monitoring behaviors, and achievement using person-centered and data-mining approaches. [Paper Presentation]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- 25. Murukutla\*, M., Calkins\*, C. & **Bernacki, M. L.** (2017, April). Are there benefits to combining social and cognitive writing interventions?: A Mixed Methods Investigation. [Paper Presentation]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- 24. Part\*, P. & Bernacki, M. L. (2017, April). Establishing the invariant natures and exploring the variable relations of value and cost. [Paper Presentation]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- 23. Poitras, E. & Bernacki, M.L. (2017, April). Data-driven techniques that complement theoretical study of cognition and learning with technology. [Paper Session]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- 22. Vosicka\*, L. & Bernacki, M. L. (2017, April). How well do logged events represent students' learning processes?: aligning students' reports with trace data. [Poster Presentation]. Annual Meeting of the American Educational Research Association, San Antonio, TX.
- 21. **Bernacki, M.L.,** Johnson, C., Whitaker-Freitas, L. (2016, September). From IT troubleshooting & service monitoring to predicting student achievement: an operations research love story. [Paper Presentation]. Annual Users Conference (.conf 2016), Orlando, FL.
- 20. Dominguez\*, M., **Bernacki, M. L.,** & Uesbeck\*, P. M. (2016, July). *Using learning management system data to predict STEM achievement: implications for early warning systems.* [Poster Presentation]. Educational Data Mining Society Annual Conference, Raleigh, NC.
- 19. **Bernacki, M.L.,** (2016, June). *Scalable, web-delivered supports to help students "learn to learn* [Poster Presentation]. CIRCL Cyberlearning Annual Conference. Arlington, Virginia.
- 18. **Bernacki, M.L.,** (2016, June). *Predicting undergraduate STEM achievement using only early learning behavior*. [Paper Presentation]. CIRCL Cyberlearning Annual Conference. Arlington, Virginia.
- 17. Walkington, C. & **Bernacki**, **M. L.** (2016, April). *Exploring the "algebra stories" students tell:* evaluating personalized problem-posing. [Paper Presentation]. Annual Meeting of the American Educational Research Association, Washington DC.
- 16. **Bernacki, M.L.,** Vosicka\*, L. & Utz, J. (2016, April). Can brief, web-delivered training help STEM undergraduates "learn to learn" and improve their achievement? [Paper Presentation]. American Educational Research Association Annual Meeting, Washington, DC.
- 15. **Bernacki, M.L.** (2016, April). *Self-Regulated Learning Analytics: Aligning data and their treatment to the assumptions of theory*. [Paper Session]. presented to American Educational Research Association Annual Meeting, Washington, DC.
- 14. Part\*, R., **Bernacki, M.L.**, Nokes-Malach, T.J. & Aleven, V. (2016, April). *Motivation under the microscope: a microgenetic examination of motivation to learn mathematics*. [Poster Presentation]. American Educational Research Association Annual Meeting, Washington, DC.
- 13. Walkington, C. & Bernacki, M.L. (2015, April). The Effects of personalization of algebra instruction to students' interests on learning, behavior, and interest in mathematics. [Paper Presentation]. Annual Meeting of the American Educational Research Association. Chicago, IL.

- 12. Richey, J.E., **Bernacki, M.L.,** Belenky, D. M. & Nokes-Malach, T. J. (2014, July). *Predicting performance with a task-based behavioral measure of achievement goals.* [Paper Presentation]. Annual Meeting of the Cognitive Science Society, Quebec City, Quebec.
- 11. **Bernacki, M. L.,** & Walkington, C. (2014, July). *The impact of a personalization intervention for mathematics on learning and non-cognitive factors*. [Paper Presentation]. Non-Cognitive Factors & Personalization for Adaptive Learning Workshop at the 7th International Conference of Educational Data Mining, London.
- 10. **Bernacki, M. L.,** Nokes-Malach, T. J., Aleven, V. & Glick, J. (2014, April). *Intelligent tutoring systems promote achievement in middle school mathematics, especially for students with low interest.* [Paper Presentation]. Annual meeting of the American Educational Research Association, Philadelphia, PA.
- 9. **Bernacki, M. L.,** Nokes-Malach, T. J., & Aleven, V. (2014, April). *An examination of self-efficacy during a learning episode: initial levels, changes and associations with learning.* [Paper Presentation]. Annual meeting of the American Educational Research Association, Philadelphia, PA.
- 8. Walkington, C., & **Bernacki**, **M. L.** (2014, April). Students authoring personalized "algebra stories": Problem-posing in the context of out-of-school interests. [Paper Presentation]. Annual Meeting of American Educational Research Association.
- 7. **Bernacki, M. L.,** Nokes-Malach, T. J., Richey, J.E., & Belenky, D.M. (2012, November). *Science diaries: a brief writing intervention to improve motivation to learn science*. [Poster Presentation]. National Science Foundation Site Visit (Award #0836012). Arlington, VA.
- 6. Ben-Eliyahu, A. & **Bernacki, M. L.** (2012, April). *Integrating different approaches to investigating self-regulated learning.* [Paper Session]. Annual meeting of the American Educational Research Association, Vancouver, BC, Canada.
- 5. **Bernacki, M. L.,** Nokes-Malach, T. J., & Aleven, V. (2012, April). *Investigating stability and change in unit-level achievement goals and their effects on math learning with intelligent tutors.* [Paper Presentation]. Annual meeting of the American Educational Research Association, Vancouver, BC, Canada.
- 4. Belenky, D. M., Nokes, T. J., & **Bernacki, M. L.** (2011, September). *Achievement goals over time:* How changes in mastery and performance-approach predict deep knowledge. [Paper Presentation]. 14th Biennial Conference EARLI 2011, Exeter, UK.
- 3. **Bernacki, M. L.** (2011, April). The effect of self-regulated learning and prior knowledge on knowledge construction in computer-based learning environments. [Paper Presentation]. Annual meeting of the American Educational Research Association. New Orleans, LA.
- 2. **Bernacki, M. L.** (2010, April). An exploration of self-regulated learning, prior knowledge and knowledge acquisition in computer-based learning environments. [Poster Presentation]. Conference on Human Development at Fordham University. New York, NY.
- 1. **Bernacki, M. L.,** Stull, J.C., Varnum, S.J., Schiller, J., & Ducette, J. (2010, April). *How does online embedded student self-assessment affect achievement?* [Poster Presentation]. Annual meeting of the American Educational Research Association. Denver, CO.

#### INVITED TALKS

- 26. Bernacki, M. L. (May 28, 2024). E-ADAPT. *Personalized Learning: toward an extensible conceptualization that aligns to psychological theories of learning and offers coherent design and optimal impact. E-ADAPT network* (e-adapt.net; funded by the Jacobs Foundation). University of Potsdam. Potsdam, Germany.
- 25. Bernacki, M. L. (May 17, 2024). *Multimodal learning analytics for enhancing teaching and learning in higher education*. Korean Association for Educational Information and Media (KAIEM). (Virtual presentation). Seoul, Korea
- 24. Bernacki, M. L. (November 8, 2023). A Personalization Use Case: [Context] Personalized Learning. In Talk Session 1: Personalized Assessment in the Service of Equity: What, Why, When, How, for Whom? Educational Testing Services. Princeton, NJ.
- 23. Bernacki, M. L., (July 20, 2022). *Designing to Develop Learning Skill*. Educational Testing Services, Virtual.
- 22. Bernacki, M. L., (June 20, 2022). *Designing for Personalized Learning*. Educational Testing Services, Virtual.
- 21. Bernacki, M. L., (May 17, 2022). Personalized Learning & Self-Regulated Learning Analytics: Observing Students' Learning Through the Lens of Learning Theory to Understand and Personalize Support to Build Learning Skills. Bar Ilan University, Faculty of Education. Tel Aviv, Israel
- 20. Bernacki, M. L., (May 16, 2022). Self-Regulated Learning Analytics: Observing Students' Learning Through the Lens of Learning Theory to Understand and Personalize Support to Build Learning Skills. University of Haifa, Faculty of Education. Haifa, Israel
- 19. Bernacki, M. L., (May 11, 2022). Leveraging Student-Generated Data to Personalize Learning, and Theories of Learning to Guide Instructional Designs that Promote Relevance, Interest, and Skillful Learning. Educational Testing Services, Virtual.
- 18. Bernacki, M. L., (June 10, 2021). *Keynote address: "Education in the Digital World."* German Society for Empirical Educational Research, Virtual.
- 17. Bernacki, M. L., (December 10, 2020). *The Science of Learning to Learn: New Developments and Designs.* Memory Dynamics Laboratory, Washington University, Saint Louis, MO.
- 16. Bernacki, M. L., Plumley, R.D., Cogliano, M., & Hilpert, J. (November 6 and 13, 2020). *Improving Undergraduate Student Success in Introductory STEM Courses Via Campus Data Systems and Targeted Support for Self-Regulated Learning (Parts I and II)*. University of California Irvine School of Education, Digital Learning Laboratory, Irvine, CA.
- 15. Bernacki, M. L., Mensing, A. Hong, W. & Plumley, R. (January, 2020). *Machine Learning for Student Success*. Splunk Higher Education Webinar Series. Online at https://events.splunk.com/Machine-Learning-for-Student-Success-Webinar-013020, San Francisco, CA.
- 14. Bernacki, M.L., Greene, J.A., & Plumley, R. (November, 2019) *Learning Analytics and Prediction Modeling Involving Pearson Mastering Biology Data*. Videoconference presentation to the Pearson Impact Evaluation Group. Pearson Education, London, UK.
- 13. Greene, J.A. & Bernacki, M.L. (October, 2019) Self-Regulation in Education: How to Study and Promote It. Keynote presented to the LEAD Research Network, Heiligkrutzal, Germany.
- 12. Bernacki, M.L. (November, 2017). *Analyzing the full student experience: the powerful intersection between curricular, co-curricular, and student life data.* Panel presentation at the Annual Meeting of EDUCAUSE, Philadelphia, PA.
- 11. Bernacki, M.L. & Johnson, C. (June, 2017). *Achieve institutional excellence by harnessing campus-wide intelligence*. Webinar sponsored by Campus Technology.
- 10. Bernacki, M.L. (April, 2017). Predicting achievement using existing university data and intervening

- to promote achievement and retention. School of Education, University of North Carolina-Chapel Hill.
- 9. Bernacki, M.L., Johnson, C., & Backstrom, C. (April, 2017). *Achieving the connected campus experience*. Panelist in presentation at the Splunk Higher Ed Forum, Durham, NC.
- 8. Bernacki, M.L., Johnson, C. & Backstrom, C. (February, 2017). From IT troubleshooting to predicting student achievement at UNLV. Webinar to the Splunk Higher Education Group. Retrieved online at http://carahevents.carahsoft.com/Event/Details/20149-cs1a
- 7. Bernacki, M.L. (January, 2017). *Cognitive, metacognitive, and motivational mechanisms to improve STEM learning.* College of Education, Pennsylvania State University.
- 6. Bernacki, M.L. (April, 2016). *Cognitive, metacognitive, and motivational mechanisms to improve STEM learning*. Curry School of Education, University of Virginia.
- 5. Bernacki, M.L. (February, 2016) *Helping students "Learn to learn" more effectively right in their Blackboard courses.* Talk presented as a session of the UNLV Faculty Development Series, Las Vegas, NV.
- 4. Bernacki, M.L. (February, 2016) Supporting math learners with technology, analytics and lessons on learning. Talk presented at the UNLV Math Learning Center, Las Vegas, NV
- 3. Bernacki, M.L. (December, 2015) *Learning theory and analytics to understand and improve STEM achievement.* Talk presented at the Learning Analytics Technical Topics Exchange series, Pearson, Virtual.
- 2. Bernacki, M.L. (November, 2015) *Using learning theory and analytics to understand and improve STEM achievement.* Presented at UNLV School of Nursing, Las Vegas, NV.
- 1. Bernacki, M.L. (July, 2015) *Motivation under the microscope: applying a microgenetic approach to understanding the role of motivation in an intelligent tutoring context*. Talk presented at Teacher's College, Columbia University, New York, NY.

# **Externally Funded Research Awards**

2024-2026	Co-Principal Investigator (R305N240063): 84.305N A Multipronged Approach to Small-Teaching Interventions for Reducing Academic Procrastination: A Randomized Control Study via Terracotta. (\$1,000,000) PI: Akira Miyake (University of Colorado); additional co-PIs are Michael Kane and Hannah Snyder. Institute of Educational Sciences. Digital Learning Platform Network.
2023-2026	Co-Principal Investigator ( <u>DUE-2300613</u> ): Using Fine-grained Programming Trace Data to Inform Disciplinary Models of Self-Regulated Learning in Computing Education. (\$849,908) PI is Thomas Price (North Carolina State University); additional co-PIs are Jeffrey Greene and Sarah Heckman. National Science Foundation. Division of Undergraduate Education (DUE), Core Research.
2022-2028	Co-Principal Investigator ( <u>DUE-2221635</u> ): Strengthening the Skill and Will to Succeed in STEM (\$1,499,136). National Science Foundation, S-STEM. PI is Jenifer Utz (University of Nevada, Las Vegas), additional co-PIs are Frank van Breukelen, Kathryn Rafferty, and Christy Strong. National Science Foundation. Division of Undergraduate Education (DUE), S-STEM.
2022-2025	Co-Principal Investigator (R305A220385): iCODE: Improving Code Comprehension; (\$1,999,598) PI: Vasile Rus (University of Memphis); co-PIs Pani Kendeou (University of Minnesota), Amy Cook and Andrew Tawfik (University of Memphis). Institute of Educational Sciences.
2022-2023	Principal Investigator ( <u>DRL-1920756</u> ): SUPPLEMENT: Principal Investigator: ECR (Level II): Transformative Undergraduate Self-regulated STEM Learning and Education Research (TUSSLER); co-PIs: Jeffrey Greene, Kathleen Gates, Abigail Panter (\$707,962) National Science Foundation, Education & Human Development (EHR), Division of Undergraduate Education (DUE) – EHR Core Research (ECR).
2021-2022	Principal Investigator (DRL-1851680): SUPPLEMENT: Collaborative Research: Strategies: Personalizing Mathematics to Maximize Relevance and Skill for Tomorrow's STEM Workforce. PI is Candace Walkington, co-PIs are Neil Heffernan & Harsha Perera. (\$16,351). National Science Foundation, Division of Research on Learning (DRL), Innovative Technology Experiences for Students and Teachers (ITEST).
2019-2022	Principal Investigator ( <u>DRL-1920756</u> ): ECR (Level II): Transformative Undergraduate Self-regulated STEM Learning and Education Research (TUSSLER); co-PIs: Jeffrey Greene, Kathleen Gates, Abigail Panter (\$707,962) National Science Foundation, Education & Human Development (EHR), Division of Undergraduate Education (DUE) – EHR Core Research (ECR).
2018-2023	Principal Investigator - UNLV Award ( <u>DUE-1821601</u> ; PI of lead award is Jeffrey Greene, <u>DUE-1821594</u> ): Improving Undergraduate Student Success in Introductory STEM Courses Via Campus Data Systems and Targeted Support for Self-Regulated Learning. Additional co-PIs are Katie Gates, Abigail Panter, Christy Strong & Erin Windsor. (\$1,996,489) National Science Foundation, Education & Human Development, Division of Undergraduate Research, Improving Undergraduate STEM Education (IUSE).
2018-2021	Co-Principal Investigator ( <u>DRL-1759238</u> → 1851680): Collaborative Research: Strategies: Personalizing Mathematics to Maximize Relevance and Skill for Tomorrow's STEM Workforce. PI is Candace Walkington, co-PIs are Neil Heffernan & Harsha Perera. (\$1,037,000). National Science Foundation, Division of Research on Learning (DRL), Innovative Technology Experiences for Students and Teachers (ITEST).

2018-2023	Co-Principal Investigator ( <u>DUE-1742185</u> ): Developing the Skill and Will to Succeed in STEM (\$649,000). National Science Foundation, S-STEM. PI is Jenifer Utz, additional co-PIs are Donald Price, Kathryn Rafferty, and Christy Strong. National Science Foundation. Division of Undergraduate Education (DUE), S-STEM.
2014- 2019	Principal Investigator ( <u>DRL-1420491</u> ): Learning Theory and Analytics as Guides to Improve Undergraduate STEM Education. (\$499,973). National Science Foundation Research on Education and Learning
2012- 2014	Principal Investigator: Personalizing Algebra Instruction to Students' Interests. Pittsburgh Science of Learning Center, Metacognition and Motivation Thrust. (\$15,400). Subaward of National Science Foundation Award SBE-0836012 Additional Principal Investigators are Candace Walkington and Ryan Baker.
2011- 2013	Principal Investigator: Microgenetic and Longitudinal Approaches to Assessing the Relationship between Motivation and Affect on Robust Learning. Pittsburgh Science of Learning Center, Metacognition and Motivation Thrust. (\$105,447 in 2011-12; renewal for 2012-2013, \$99,318. Total funding to date: \$204,765). Subaward of National Science Foundation Award SBE-0836012. Additional Principal Investigators are Timothy Nokes-Malach and Vincent Aleven.

# **Internally Funded Awards**

intermany i t	
2024	Co-Principal Investigator. UNC-Tübingen Seed Fund: Leveraging Learning Analytics to Identify and Deliver Targeted Self-Regulated Learning Interventions to Students in the Hector Children's Academy Program. Office of the Vice Provost for Global Affairs (\$9,600 from UNC-Chapel Hill and €10,000 from Tübingen). PIs Jeff Greene (UNCCH), Ulrich Trautwein (Tubingen).
2023	Principal Investigator. Global Partnership Award. Expansion Grant: Expand a partnership with Eberhard Karls University of Tübingen in Germany. Chancellor's Global Education Fund (\$3,500). Co-PI Jeff Greene (UNCCH), Ulrich Trautwein (UT).
2023	Principal Investigator. "Leveraging Data Science to Study, Improve, and Broaden STEM Pathways at Chapel Hill": A Cloud Hosted STEM Learning Data Model. Funded by the Office of Research Development (\$20,000). Co-PI Jeff Greene.
2020	Principal Investigator. Junior Faculty Development Award. Redesigning interventions to develop undergraduates' learning skills, and improve their performance in STEM courses. (\$10,000)
2017	Principal Investigator: Enhancing the First and Second Year Experience to Help Undergraduates Achieve Mastery of the University Universal Learning Objectives. through Linguistic Analysis. (\$1000) UNLV Office of Assessment. Co-PI is Nathan Slife
2015- 2017	Principal Investigator: Educational Data-mining Under the Supervision of Learning Theory: A Learning Sciences Collaboration Investigating STEM Learning. (support equivalent to \$79,650). UNLV Graduate College. Co-PI is Andreas Stefik.
2014- 2015	Principal Investigator: Building Capacity for Research on Learning via Analytics and "Big Data". (\$19,970). UNLV Faculty Opportunity Award.
2014	Principal Investigator: Improving Assessment of Undergraduate Learning: Construct, Content, and Predictive Validation Study of the Transparency in Teaching Instrument. (\$998). UNLV Office of Assessment.
2007- 2008	Principal Investigator: Service-Learning As a Transformative Experience. Office of Mission, Saint Joseph's University (\$8,000) Co-PI was Francis Bernt.

Service to One's Neighbor. Program for Research on Religion and Urban Civil Society,

University of Pennsylvania. (\$6,000). Co-PI was Francis Bernt.

Examining the impact of service-learning on moral development and moral orientation.

Saint Joseph's University Sigma Xi Chapter, Undergraduate Research Program. (\$500).

Co-PI was Elizabeth Jaeger.

## **Training & Design Contracts**

2015-2017 Co-Principal Investigator: NASA-Teledyne Mentor-Protégé Program. PI is Rama Venkat,

additional co-PI is Fatma Nasoz (\$504,513).

## **University-Community Partnership & Training Grants**

2006 Scholars in Service. PA Campus Compact (\$7,500).

2006 Service-Learning Faculty Development Program. University of Pennsylvania,

Philadelphia Higher Education Network for Neighborhood Development. (\$11,300)

2004-2007 Developing Educated, Engaged People. Raskob Foundation (\$23,600).

## TEACHING ACTIVITIES

Course	Dept	Institution	Semester(s)	Size
Personalized and Adaptive Learning	SOE	University of North Carolina Chapel Hill (UNC-CH)	F21 F22 F23	6 to 12
Learning Analytics	SOE	UNC-CH	S19, S20, S21, S22, S23, S24	10 to 21
Learning and Development	SOE	UNC-CH	F18, F24	15
Introduction to Statistics (Online; Development of Master Course)	EPY	University of Nevada Las Vegas (UNLV)	F16, S17	20- 35
Principles of Learning in Education Media	EPY	UNLV	S16	8
Cognition & Instruction	EPY	UNLV	F15, F17	13
Self-Regulated Learning	EPY	UNLV	S15, S18	10
Research Methods	<b>EPY</b>	UNLV	F14	25
Introduction to Statistics	<b>EPY</b>	UNLV	6 times	25
Assessment & Evaluation	EDU	Temple University	F07(2), S08(2)	35
Lifespan Development	EDU	Temple University	F06(2) S07 (2)	35
Developmental Psychology	PSY	Chestnut Hill College	F09	25
Child Development	PSY	St. Joseph's University	S03	25

## MENTORING EXPERIENCE

## **Supervision of Postdoctoral Research Associates**

Name	Funding Source	Year(s)
Sarah Wolff	NSF 1821601 (UNLV; co w Jon Hilpert)	2023 to present
Hanall Sung	NSF 1920756	2023 to present
Fatemeh Salehian Kia	NSF 1920756	2022 to 2023
Shelbi Kuhlmann	NSF 1821594, 1920756 (UNC-CH)	2020 to 2023
Megan Cogliano	NSF 1821601 (UNLV)	2019 to 2022
Mladen Rakovic	NSF 1821594, 1920756 (UNC-CH)	2019 to 2020
Wonjoon Hong	Office of Online Education (UNLV)	2018-2020
Marissa Owens	NASA Mentor-Protégé Award (UNLV)	2015-2017

## **Graduate Student Advising & Committee Membership**

	_	<del>-</del>	
Student	Institution (Completion	Program	Role
	Year)		
Sirui Ren	University of North Carolina,	PhD, Learning Sciences and	Co-Chair
	Chapel Hill (UNC)	Psychological Studies (LSPS)	
Leiming Ding	UNC	PhD, LSPS	Chair
Linyu Yu	UNC	PhD, LSPS	Chair
Michael Berro	UNC	PhD, LSPS	Chair
Robert Plumley	UNC	PhD, LSPS	Co-Chair
Rebekah Freed	UNC	PhD, LSPS	Committee

Mustafa Gunozu	University of Nevada, Las Vegas (UNLV)	PhD, Educational Psychology	Co-Chair (Co)→ External Member (Ext)
Kyle Mefferd	UNLV	PhD, Educational Psychology,	$Co- \rightarrow Ext$
Elsa Mason	UNLV	PhD, Educational Psychology	$Co- \rightarrow Ext$
Nancy Webb	UNLV	PhD, Learning & Technology	$Co- \rightarrow Ext$
Vic Deekens	UNC (2019)	PhD, LSPS	Committee
Eric Ekholm	Virginia Commonwealth (2019)	PhD Educational Psychology	External Member
Nikki Lobczowski	UNC (2019)	PhD, LSPS	Committee
Rachel Part	UNLV (2020)	PhD, Educational Psychology	Committee → Ext
Michael Wilder	UNLV (2019)	PhD, Learning & Technology	$Co- \rightarrow Ext$
Christopher Oswald	UNC (2018)	MS, Learning Sciences	Committee
Yvette Aqui	UNLV (2018)	PhD, Learning & Technology	Co-Chair
Megan Cogliano	UNLV (2018)	PhD, Educational Psychology	Co-Chair
Wonjoon Hong	UNLV (2018)	PhD, Learning & Technology	Chair
Jason Boggs	UNLV (2018)	PhD, Educational Psychology	Committee
Scot Ewen	UNLV (2018)	PhD, Teaching & Learning	Committee
Lucie Vosicka	UNLV (2017)	MS, Educational Psychology	Thesis Chair
Elif Adibelli	UNLV (2016)	PhD, Science Education	Graduate College Representative
Delene Volkert	UNLV (2016)	PhD, Nursing	Grad College Rep
Patrick Daleiden	UNLV (2016)	MS, Computer Science	Grad College Rep
P. Merlin Uesbeck	UNLV (2016)	MS, Computer Science	Grad College Rep
G.K. Nwosu	UNLV (2015)	PhD, Higher Education	Committee

Undergraduate			
Scholarship	Institution	Department & Product	Year(s)
Katherine Johnson	UNLV	Psychology; Independent Study	2017
Britney Trieu	UNLV	Biology; Honors Thesis	2017
Alexis Hilts	UNLV	Biology Honors Thesis	2016
Julia Glick	Pitt	Biology; Independent Study	2012-13
Yana Ryjova	UNLV	Psychology; Independent Study	2017

## **Supervision of Research Assistants**

Graduate Student	Institution	Program	Year(s)
Leiming Ding*	UNC CH	Learning Sciences & Psychological Studies	2022-present
Sirui Ren*	UNC CH	Learning Sciences & Psychological Studies	2022-present
Linyu Yu*	UNC CH	Learning Sciences & Psychological Studies	2020-present
Michael Berro*	UNC CH	Master's in Educational Innovation,	2019-present
		Technology, and Entrepreneurship, LSPS	
Christina Hollander*	UNC CH	School Psychology, LSPS	2020-present

Robert Plumley*	UNC CH	Learning Sciences & Psychological Studies	2018-present
Meghan Jones Greene*	UNC CH	School Psychology	2019-2022
Jianing Liang	UNC CH	Master's in Educational Innovation, Technology, and Entrepreneurship	2021-2022
Juliana Vanderberg*	UNC CH	School Psychology	2020-2021
Molly Ewing*	UNC CH	Learning Sciences	2020
Cara Arizimendi*	UNC CH	Quantitative Psychology	2020
Christopher Urban*	UNC CH	Quantitative Psychology	2018-19
Rebekah Freed*	UNC CH	Learning Sciences	2019-20
Rebekah Duke*	UNC CH	Learning Sciences	2019-20
Nikki Lobczowski*	UNC CH	Learning Sciences	2018-19
Rachel Part*	UNLV	Educational Psychology	2016-2018
Wonjoon Hong^	UNLV	Educational Psychology	2016-2018
Megan Cogliano^	UNLV	Educational Psychology	2017-2018
Elizabeth Hofschulte*	UNLV	Educational Psychology	2017-2018
Timothy Rafalski*	UNLV	Computer Science	2017-2018
Nicholas Voorhees*	UNLV	Higher Education	2016-17
Michelle Dominguez*	UNLV	Higher Education	2015-16
Monique Yarnell	UNLV	Learning & Technology	2015-16
Lucie Vosicka*	UNLV	Educational Psychology	2014-2017
Erica Marti*	UNLV	Environmental Engineering	2014-15
Jason Boggs	UNLV	Educational Psychology	2013-14
G.K. Nwosu	UNLV	Higher Education	2013-14
Caleb Picker	UNLV	Psychology	2013-14
Phillip M. Uesbeck^*	UNLV	Computer Science	2014
Marissa Owens^*	UNLV	Learning & Technology	2014
Hossein Zangooei*	UNLV	Mechanical Engineering	2014
John Ng^	SJU	Sociology	2007-2008

<sup>\* -</sup> funded via sponsored projects; see the Awards section ^- funded through on-campus collaborations

Undergraduate Student	Institution	Program	Year(s)
Sarayu Yenumula	UNC	Computer Science	2022
Monty Evans	UNC	Computer Science	2020-2022
Jerra Strong	UNLV	Computer Science	2016-2017
Robert Coe	UNLV	Computer Science	2015-2016
Kira Albers	UNLV	Computer Science	2015-2016
Kyle Bowen	UNLV	Computer Science	2014-2015
Stephanie Torres	UNLV	Psychology	2015
Hermella Misiker	UNLV	Life Sciences	2015-2017
Nicholas Moellers	Pitt	Psychology	2012
Danielle Cristofano	Saint Joseph's	Sociology; Research Internship Credit	2007-2008

	University(SJU)		
Joshua Durando	SJU	Sociology; Research Internship Credit	2007-2008
Julia Farrell	SJU	Sociology; Research Internship Credit	2007-2008
Amanda George	SJU	Sociology; Research Internship Credit	2007-2008
Sarah Jones	SJU	Sociology; Research Internship Credit	2007-2008
Mairead McInerney	SJU	Sociology; Research Internship Credit	2007-2008
Angela Citti	SJU	Psychology; Research Internship Credit	2006- 2008
Michael Ortiz	SJU	Psychology; Research Internship Credit	2006- 2008
Meghan Ochs	SJU	Psychology; Research Internship Credit	2006- 2008
Jessica Salefski	SJU	Psychology; Research Internship Credit	2006- 2008

2020-present
2018
2013
2002-2008
2003-2007
2005-2006
2004-2006
2000-2003

Research Assistant 2000-2002

Department of Psychology, Temple University; National Institute of Child Health and Human Development; Study of Early Child Care Child Care Matters

PIs: Kathy Hirsh-Pasek, Marsha Weinraub, et al.

### PROFESSIONAL SERVICE

### **Professional Activities**

Associate Editor

Journal of Educational Psychology (2020-present)

**Editorial Board Member** 

Contemporary Educational Psychology (2014 - present)

Educational Psychology Review (2023 – present)

Journal of Educational Psychology (2015 - 2019) Journal of Experimental Education (2014 - present) Metacognition & Learning (2024 - present)

### **Guest Editorships**

Journal of Educational Psychology. (Editor: Pani Kendeou; January 2023 to present; to be published 2025)). Section Title: Leveraging Learning Theory and Analytics to Produce Grounded, Innovative, Data-Driven, Equitable Improvements to Teaching and Learning

Contemporary Educational Psychology (with Jeffrey Greene & Helen Crompton; Editor: Patricia Alexander; 2020 issue). Issue Title: Mobile Technology, Learning, and Achievement: A Critical Perspective on the Role of Mobile Technology in Education

Journal of Research on Technology in Education (with Candace Walkington; Editor: Albert Ritzhaupt; 2020 Issue). Issue Title: Personalization in Technology-Enhanced Learning Environments

Metacognition & Learning (with Adar Ben-Eliyahu; Editor: Roger Azevedo; April 2015 issue) Issue Title: Context, Contingency, and Dynamic Relations in Self-Regulated Learning

#### Ad hoc reviewer

AERA Open

Applied Cognitive Psychology

British Journal of Educational Psychology

British Journal of Educational Technology

CBE Life Sciences

Cognition and Instruction

Computers & Education

Computers in Human Behavior

Educational Assessment

Educational Researcher

Educational Psychologist

Educational Psychology

Educational Psychology Review

International Journal of Artificial Intelligence

in Education

Internet & Higher Education

Journal of Applied Research in Memory and

Cognition

Journal of Educational Data Mining

Journal of Experimental Psychology: Applied

Journal of Experimental Psychology: Learning

Memory and Cognition

Learning and Individual Differences

Learning and Instruction

Journal of Learning Analytics

*Metacognition and Learning* 

PLOS One

Review of Educational Research

AERA Division C (Learning & Instruction) Program section co-Chair, 2016 – 2018, 2023 – 2025

Section 3b (Technology-based Learning Environments, 2024, 2025)

Section 3b (Technology-based Learning Environments, 2017, 2018)

Section 2b (Cognitive & Motivational Processes, 2016)

AERA SIG Studying and Self-Regulated Learning,

Graduate Student Mentoring Program, 2020, 2021, 2022, 2023

Poster Award Chair 2014-2019

**Conference Program Committees** 

International Society of the Learning Sciences, 2022

Learning Analytics and Knowledge, 2021, 2022

Educational Data Mining, Personalization & Non-Cognitive Factors Workshop, 2014

National Science Foundation Convening: Research on Emerging Technologies for Teaching and Learning (coordinated by Digital Promise), 2021

## Conference Program Reviewer

American Educational Research Association Annual Meeting, 2011-2021

Cognitive Science Society (CogSci) 2011-2014

International Association for Research on Service Learning & Community Engagement, 2007-8

## **Grant Review Panelist**

Institute for Educational Science, 2017-2022

National Science Foundation, EHR Directorate, 2018-present

Advisor, Splunk Machine Learning Group, 2016-18

#### **Institutional Service Activities**

*Note:* C – Service to College, c – Center, D – Department, U – University

#### **UNC**

## **University Activities**

2020 Instructional Design Consulting Team

### **School & Program Activities**

2023-	Program Coordinator, Learning Sciences & Psychological Studies (in PhD in Education)
2021-	School of Education Scholarship Committee
2020-	LSPS Graduate Student Pro-Seminar Coordinator
2018-19	Committee Member Learning Sciences Position Search, School of Education
UNLV	
2017-18	(U) Senate Committee Instructional Infrastructure
2015 10	

2017-18	(U) Senate Committee Instructional Infrastructure	
2017-18	(C) Committee	Scholarship and Awards
2016-18	(U) Advisory Board	Office of Online Education Faculty Advisory Committee
2014-18	(C) Advisory Board	College of Education Office of Research & Sponsored Projects
2013-18	(U) Committee	University Learning Management System Committee
2013-18	(U) Advisory Board	Transparency in Teaching & Learning Project
2016-17	(D) Subcommittee	Educational Psychology Program – Program Evaluation
2014-17	(D) Subcommittee	Learning & Technology Program – Program Evaluation
2013-14	(D) Subcommittee	EPHE Graduate Studies

### **Center** (while appointed at University of Pittsburgh)

2010-2013	(c) Coordinator	LearnLab Metacognition and Motivation Thrust

2010-2011 (c) Postdoctoral Rep LearnLab Executive Committee

2010-2011	(c) Coordinator	LearnLab Postdoctoral Professional Development (PD) Series
2010-2011	(c) Co-Coordinator	LearnLab Junior Faculty/Postdoctoral Researcher PD Series

## **Community**

Coach (Middle School Boys Soccer), Immaculata Catholic School, 2021, 2022 School Board, Immaculata Catholic School, Durham, 2022-present Educational Technology Committee, Immaculata Catholic School, Durham, NC 2018-2022 Coach, Triangle United Soccer Club, 2019-2020

School Organizational Team, Neil C. Twitchell Elementary, Clark County Public Schools Elected 2016 (one-year term), Re-elected 2017 (one-year term)

Coach, Henderson United Youth Soccer, 2014-2018

Updated 1/4/2024