

# Joshua M. Rosenberg

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Assistant Professor, University of Tennessee, Knoxville (August, 2018)

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## Education

PhD, Educational Psychology & Educational Technology Michigan State University	2018 (Expected)
Graduate Certificate, Science Education, Michigan State University	2017
MA, Educational Technology, Michigan State University	2012
BS, Biology, University of North Carolina, Asheville	2010
Teacher Licensure Program, University of North Carolina, Asheville	2010

## Professional Experience

Assistant Professor of STEM Education	2018 (August)
Department of Theory and Practice in Teacher Education	
College of Education, Health, and Human Sciences	
University of Tennessee, Knoxville	

## Publications

### *Peer-Reviewed Journal Articles*

Beymer, P. N., Rosenberg, J. M., Schmidt, J. A., & Naftzger, N. (2018). Examining relationships between choice, affect, and engagement in out-of-school time STEM programs. *Journal of Youth and Adolescence*, 47(6), 1178-1191. <https://doi.org/10.1007/s10964-018-0814-9>

Akcaoglu, M., Rosenberg, J. M., Ranellucci, J., & Schwarz, C. V. (2018). Outcomes from a self-generated utility value intervention on fifth and sixth-grade students' value and interest in science. *International Journal of Educational Research*, 87, 67-77. <https://www.sciencedirect.com/science/article/pii/S0883035517308492>

Schmidt, J. A., Rosenberg, J. M., & Beymer, P. (2018). A person-in-context approach to student engagement in science: Examining learning activities and choice. *Journal of Research in Science Teaching*, 55(1), 19-43. <https://dx.doi.org/10.1002/tea.21409>

Rosenberg, J.M., Greenhalgh, S.P., Graves Wolf, L. & Koehler, M.J. (2017). Strategies, use, and impact of social media for supporting teacher community within professional development: The case of one urban STEM program. *Journal of Computers in Mathematics and Science Teaching*, 36(3), 255-267. <https://www.learntechlib-org.proxy1.cl.msu.edu/p/180387/>

Koehler, M. J., Greenhalgh, S. P., Rosenberg, M. J., & Keenan, S. (2017). What the tech is going on with digital teaching portfolios? Using the TPACK framework to analyze teachers' technological understanding. *Journal of Technology and Teacher Education*, 25, 31-59. <http://www.learntechlib.org/p/173346/>

Rosenberg, J. M., Greenhalgh, S. P., Koehler, M. J., Hamilton, E., & Akcaoglu, M. (2016). An investigation of State Educational Twitter Hashtags (SETHs) as affinity spaces. *E-Learning and Digital Media*, 13(1-2), 24-44. <http://dx.doi.org/10.1177/2042753016672351>

Greenhalgh, S. P., Rosenberg, J. M., & Wolf, L. G. (2016). For all intents and purposes: Twitter as a foundational technology for teachers. *E-Learning and Digital Media*, 13(1-2), 81-98. <http://dx.doi.org/10.1177/2042753016672131>

Hamilton, E., Rosenberg, J. M., & Akcaoglu, M. (2016). Examining the Substitution Augmentation Modification Redefinition (SAMR) model for technology integration. *Tech Trends*, 60, 433-441. <http://dx.doi.org/10.1007/s11528-016-0091-y>

Rosenberg, J. M., Terry, C. A., Bell, J., Hiltz, V., & Russo, T. (2016). Design guidelines for graduate program social media use. *Tech Trends*, 2, 167-175. <http://dx.doi.org/10.1007/s11528-016-0023-x>

Rosenberg, J. M., & Koehler, M. J. (2015). Context and Technological Pedagogical Content Knowledge (TPACK): A systematic review. *Journal of Research on Technology in Education*, 47, 186-210. <http://dx.doi.org/10.1080/15391523.2015.1052663>

#### *Book Chapters*

Eidelman, R., Rosenberg, J. M., & Schwartz, Y. (invited publication). E-Learning in chemistry education: Self-regulated learning in a virtual classroom. In D. Ifenthaler, M. Spector, P. Isafas, & S. Sergis (Eds.), *Learning technologies for transforming teaching, learning and assessment at large scale*. Berlin, Germany: Springer.

Herring, M., Koehler, M. J., Mishra, P., Rosenberg, J. M., & Teske, J. (2016). Introduction to the 2nd edition of the TPACK handbook. *Handbook of Technological Pedagogical Content Knowledge (TPACK) for educators* (2nd ed.). In M. Herring, M. J. Koehler, & P. Mishra (Eds.), *Handbook of Technological Pedagogical Content Knowledge (TPACK) for educators* (2nd ed., pp. 1-8). New York, NY: Routledge.

Keenan, S., Rosenberg, J. M., Greenhalgh, S. P. & Koehler, M. J. (2016). Examining teachers' technology use through digital portfolios. In L. Liu & D. C. Gibson (Eds.), *Research highlights in technology and teacher education 2016* (pp. 53-60). Chesapeake, VA: Association for the Advancement of Computing in Education. [Invited reprint of conference presentation in edited book]

Phillips, M., Koehler, M. J. & Rosenberg, J. M. (2016). Considering context: Teachers' TPACK development and enactment. In L. Liu & D. C. Gibson (Eds.), *Research highlights in technology and teacher education* (pp. 197-204). Chesapeake, VA: Association for the Advancement of Computing in Education. [Invited reprint of conference presentation in edited book]

Rosenberg, J. M., & Koehler, M. J. (2015). Context and teaching with technology in the digital age. In M.L. Niess & H. Gillow-Wiles (Eds.), *Handbook of research on teacher education in the digital age* (pp. 440-465). Hershey, PA: IGI Global.

Rosenberg, J. M., Greenhalgh, S. P., & Koehler, M. J. (2015). A performance assessment of teachers' TPACK using artifacts from digital portfolios. In L. Liu & D. C. Gibson, *Research highlights in technology and teacher education 2015*. Waynesville, NC: Association for the Advancement of Computing in Education (AACE). [Invited reprint of conference presentation in edited book]

Koehler, M. J., Mishra, P., Akcaoglu, M., & Rosenberg, J. M. (2013). Technological pedagogical content knowledge for teachers and teacher educators. In N. Bharati and S. Mishra (Eds.), *ICT integrated teacher education: A resource book* (pp. 1-8). Commonwealth Educational Media Center for Asia, New Delhi, India.

#### *Other (Editor-reviewed) Publications*

Rosenberg, J. M. (invited publication). Engaging students in "data practices" in online science classes: Opportunities, challenges, and recommendations. Michigan Virtual Learning Research Institute Blog: Research, Policy, Innovation & Networks.

Rosenberg, J. M., & Logan, C. W. (2017). Review of the book *What's Worth Teaching: Rethinking Curriculum in the Age of Technology*, by A. Collins. *Teachers College Record*. <http://www.tcrecord.org/Content.asp?ContentID=22173>

Phillips, M., Harris, J., Rosenberg, J. M., & Koehler, M. J. (2017). TPACK/TPACK research and development: Past, present, and future directions. *Australasian Journal of Educational Technology*. <https://doi.org/10.14742/ajet.3907>

Rosenberg, J. M., & Ranellucci, J. (2017). Student motivation in online science courses: A path to spending more time on course and higher achievement. *Michigan Virtual Learning Research Institute Blog: Research, Policy, Innovation & Networks*. Retrieved from <https://mvlri.org/blog/student-motivation-in-online-science-courses-a-path-to-spending-more-time-on-course-and-higher-achievement/>

#### *Peer-Reviewed Conference Presentations*

Conference Proceedings Paper Indicated with an \*

Beymer, P. N., Rosenberg, J.M., & Schmidt, J. A. (2018, April). Investigating the effects of interest and choice: An experience sampling approach. Paper to be presented at the Annual Meeting of the American Educational Research Association New York, NY.

Greenhalgh, S. P., Staudt Willet, B., Rosenberg, J. M., Akcaoglu, M., & Koehler, M. J. (2018, April). Timing is everything: Comparing synchronous and asynchronous modes of Twitter for teacher professional learning. Paper to be presented at the Annual Meeting of the American Educational Research Association New York, NY.

Rosenberg, J. M., Beymer, P. N., & Schmidt, J. A. (2018, April). How engagement during out-of-school time STEM programs predicts changes in motivation in STEM. In J. M. Rosenberg (Chair), *Data-intensive approaches to studying engagement in education: Exploring their current potential*. Paper to be presented at the Annual Meeting of the American Educational Research Association New York, NY.

Rosenberg, J. M., Lee, Y., Robinson, K. A., Ranellucci, J., Roseth, C. J., & Linnenbrink Garcia, L. (2018, April). Patterns of engagement in a flipped undergraduate class: Antecedents and outcomes. In L. Daniels & A. Frenzel (Chairs), *New empirical insights on what energizes learners – A session on emotions and engagement*. Paper to be presented at the Annual Meeting of the American Educational Research Association New York, NY.

Schmidt, J. A., Rosenberg, J.M., & Beymer, P. N. (2018, April). Experiences, activities, and personal characteristics as predictors of interest and engagement in STEM-focused summer programs. Paper to be presented at the Annual Meeting of the American Educational Research Association New York, NY.

Shwartz, Y., Bayer, I., Bielik, T., Kolonich, A., Eidelman, R., Shwartz, G., . . . Rosenberg, J. M. (2018, March). Graduate student international collaboration for investigating science teachers' professional learning. Paper to be presented at the meeting of the National Association for Research in Science Teaching, Atlanta, GA.

Yang, B. W., Blondel, D. V., Rosenberg, J. M., Sansone, A., Linnenbrink-Garcia, L., Schwarz-Bloom, R. D. (2017, November). The Rex virtual experiment platform: Design, implementation, and effects on situational interest. Poster presented at the Annual Meeting of the Society for Neuroscience, Washington, DC.

Greenhalgh, S. P., Staudt Willet, K. B., Rosenberg, J. M., & Koehler, M. J. (2017, November). No accounting for theory? The case for an affinity space approach to educational hashtag research. Paper to be presented at the Association for Educational Communications and Technology International Convention 2017, Jacksonville, FL.

Greenhalgh, S. P., Rosenberg, J. M., & Koehler, M. J. (2017, November). Hide and go tweet: Comparing methods for locating educational hashtag participants. Paper to be presented at the Association for Educational Communications and Technology International Convention 2017, Jacksonville, FL.

Schmidt, J. A., Rosenberg, J. M., & Beymer, P. N. (2017, August). Stability and variation in student engagement in science classes: A person-oriented approach. Paper to be presented at the Annual Meeting of the American Psychological Association, Washington, DC.

Beymer, P. N., Rosenberg, J. M., Schmidt, J. A., Naftzger, N., Sniegowski, S., Shumow, L. (August, 2017). Examining relationships between choice, affect, and engagement in informal STEM programs. Paper presented at the Annual Meeting of the American Psychological Association, Washington, DC.

Greenhalgh, S. P., Rosenberg, J. M., & Koehler, M. J. (2017, April). Combining data sets and methods to explore equity in teacher professional development. In D. G. Krutka (Chair), *Data, Big and Small*. Symposium conducted at the meeting of the American Educational Research Association, San Antonio, TX.

Schmidt, J. A., Rosenberg, J. M., & Beymer, P. N. (2017, April). Momentary engagement profiles: A person-in-context approach to studying student engagement using experience sampling data. Paper presented at the Annual Meeting of the American Educational Research Association, San Antonio, TX.

Roseth, C. J., Linnenbrink-Garcia, L., Saltarelli, W., Lee, Y-K., Rosenberg, J. M. . . . & Beymer, P. N. (2017, April). A design-based intervention on flipped instruction: Longitudinal effects on undergraduates' engagement and achievement. Paper presented at the Annual Meeting of the American Educational Research Association, San Antonio, TX.

Galey, S., Ferrare, J., & Rosenberg, J. M. (2017, April). Idea brokers, policy convergence, and paradigm shifts: The co-evolution of school choice and alternative certification issue networks in the national educational policy discourse, 2000-2015. Paper presented at the Annual Meeting of the American Educational Research Association, San Antonio, TX.

Wright, E., Hao, Q., & Rosenberg, J. M. (2017, April). What are the most important predictors of the earnings of college graduates? Data from the college scorecard. Paper presented at the Annual Meeting of the American Educational Research Association, San Antonio, TX.

Mikeska, J. N., Rosenberg, J. M., Holtzman, S., & McCaffrey, D. (2017, April). Comparing the alignment between two observational measures of science teachers' instructional practice. Poster presented at the National Association for Research in Science Teaching Annual International Conference, San Antonio, TX.

\*Peterson, A., Freer, D., & Rosenberg, J. M. (2017). Interacting with purpose: What is the difference between face-to-face and online student relationships in a combined program? In *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (pp. 3411-3414). Austin, TX: Association for the Advancement of Computing in Education. Retrieved from <https://www.learntechlib.org/p/177955/>

Greenhalgh, S. P., Rosenberg, J. M., & Koehler, M. J. (2017, March). Avoiding madness in our methods. Paper presented at the Society for Information Technology and Teacher Education International Conference 2017, Austin, TX.

Rosenberg, J. M., Ackaoglu, M., Staudt Willet, K. B., Greenhalgh, S. P., & Koehler, M. J. (2017, March). A tale of two Twitters: Synchronous and asynchronous use of the same hashtag. Paper presented at the Society for Information Technology and Teacher Education International Conference 2017, Austin, TX.

Phillips, M., Koehler, M. J., Rosenberg, J. M., & Zunica, B. (2017, March). Unpacking TPACK: Reconsidering knowledge and context in teacher practice. Paper presented at the Society for Information Technology and Teacher Education International Conference 2017, Austin, TX.

Kessler, A., & Rosenberg, J. M. (2017, March). Considering how teachers' TPACK is leveraged during the mental engineering of instruction: A theory of action. Paper presented at the Society for Information Technology and Teacher Education International Conference 2017, Austin, TX.

Nyland, R., Greenhalgh, S. P., Rosenberg, J. M., Koehler, M. J., Veletsianos, G., & Kimmons, R. (2016, October). Public data mining methods, ethics, & legalities. Panel presented at the Association for Educational Communications and Technology International Convention 2016, Las Vegas, NV.

Rosenberg, J. M., Greenhalgh, S. P., & Wolf, L. G. (2016, October). Participating from near and far: Analyzing online graduate learning communities with social network analysis. Paper presented at the Association for Educational Communications and Technology International Convention 2016, Las Vegas, NV.

Rosenberg, J. M. (2016, October). Having agency in conditions that are not equitable: An examination of Donors Choose data. Paper presented at the Association for Educational Communications and Technology International Convention 2016, Las Vegas, NV.

Phillips, M., Koehler, M. J., & Rosenberg, J. M. (2016, September). Contextualising teachers' TPACK development and enactment. Paper presented at the Australian Council for Computers in Education, Brisbane, Australia.

\*Krist, C., & Rosenberg, J. M. (2016). Finding patterns in and refining characterizations of students' epistemic cognition: A computational approach. In Looi, C.-K., Polman, J., Cress, U., & Reimann, P. (Eds.), *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences Proceedings 2016* (Vol. 2, pp. 1223-1224). Singapore, Singapore: ICLS.

Rosenberg, J. M. & Schwarz, C. V. (2016, April). Examining fifth and sixth grade students' epistemic considerations through an automated analysis of embedded assessment items. In B. Reiser (Chair), *Longitudinal studies of elementary and middle school students' epistemic considerations through participation in scientific practice*. Related paper set presented at the National Association for Research in Science Teaching Annual International Conference, Baltimore, MD.

Rosenberg, J. M. & Krist, C. (2016, April). Characterizing students' epistemic considerations: An automated computational approach for embedded assessment responses. Poster presented at the National Association for Research in Science Teaching Annual International Conference, Baltimore, MD

Ranellucci, J., Rosenberg, J. M., Klautke, H., Robinson, K. A., Saltarelli, W., Linnenbrink-Garcia, L., & Roseth, C. J. (2016, April). Achievement goals, behavioral engagement, and achievement in a flipped undergraduate anatomy course. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC.

Lee, Y.-K., Rosenberg, J. M., Robinson, K. A., Klautke, H., Seals, C., Saltarelli, W., Linnenbrink-Garcia, L., & Roseth, C. J. (2016, April). Comparing motivation and achievement in a flipped and traditional classroom. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC.

Wormington, S. V., Lee, Y.-K., Seals, C., Rosenberg, J. M., Saltarelli, W., Roseth, C. J., & Linnenbrink-Garcia, L. (2016, April). Predicting profile permanence: When is motivation stable, why does it change, and what are the consequences? Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC.

Ranellucci, J., Robinson, K. A., Rosenberg, J. M., Saltarelli, W., Roseth, C. J., & Linnenbrink-Garcia, L. (2016, April). Comparing emotions in-class and during online video lectures in a flipped classroom. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC.

Rosenberg, J. M., Ranellucci, J., Lee, Y.-K., Robinson, K., Saltarelli, W., Linnenbrink-Garcia, L., & Roseth, C. J. (2016, March). Patterns of engagement in a flipped undergraduate anatomy class and their relations to achievement. Paper presented at the Society for Information Technology & Teacher Education Annual Conference, Savannah, GA.

\*Phillips, M., Koehler, M. J. & Rosenberg, J. M. (2016). Looking outside the circles: Considering the contexts influencing TPACK development and enactment. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (pp. 3029-3036). Chesapeake, VA: Association for the Advancement of Computing in Education. Retrieved from <http://www.editlib.org/p/171222>

\*Rosenberg, J. M., Koehler, M. J., Akcaoglu, M., Greenhalgh, S. P. & Hamilton, E. (2016). State Educational Twitter Hashtags: An introduction and research agenda. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2016* (pp. 355-360). Chesapeake, VA: Association for the Advancement of Computing in Education. Retrieved from <http://www.editlib.org/p/171698>

\*Greenhalgh, S. P., Rosenberg, J. M. & Wolf, L. G. (2016). For every tweet there is a purpose: Twitter within (and beyond) an online graduate program. In *Proceedings of Society for Information Technology*



& Teacher Education International Conference 2016 (pp. 2044-2049). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE). Retrieved from <http://www.editlib.org/p/171972>

\*Keenan, S., Rosenberg, J. M., Greenhalgh, S. P. & Koehler, M. J. (2016). Examining teachers' technology use through digital portfolios. In Proceedings of Society for Information Technology & Teacher Education International Conference 2016 (pp. 1084-1091). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE). Retrieved from <http://www.editlib.org/p/171824>

Rosenberg, J. M. (2015, November). Examining what teachers and researchers discuss at science education conferences through a computational analysis of Twitter data. Paper presented at the meeting of the Association for Educational Communications and Technology, Indianapolis, IN.

Rosenberg, J. M., Akcaoglu, M., Hamilton, E., Greenhalgh, S. P., & Koehler, M. J. (2015, November). Tweeting U.S.A.: An examination of State Educational Twitter Hashtags (SETHs). Paper presented at the meeting of the Association for Educational Communications and Technology, Indianapolis, IN.

Greenhalgh, S. P., Rosenberg, J. M., Keenan, S., & Koehler, M. J. (2015, November). An investigation of the use of digital portfolios for understanding educators' technology knowledge. Paper presented at the meeting of the Association for Educational Communications and Technology, Indianapolis, IN.

Hamilton, E., Rosenberg, J. M., & Akcaoglu, M. (2015, November). Examining the Substitution Augmentation Modification Redefinition (SAMR) Model for instructional design and technology integration. Paper presented at the meeting of the Association for Educational Communications and Technology, Indianapolis, IN.

Mehta, R., Rosenberg, J. M., Russo, T., Arnold, B., Marich, H., & Bell, J. (2015, November). A survey of social media use and the effects of a social media initiative on graduate student engagement. Paper presented at the meeting of the Association for Educational Communications and Technology, Indianapolis, IN.

Rosenberg, J. M., & Koehler, M. J. (2015, April). Context and Technological Pedagogical Content Knowledge: A content analysis. In J. M. Rosenberg & M. J. Koehler (Chairs), Addressing the complexity of teaching with technology: Context and Technological Pedagogical Content Knowledge. Symposium conducted at the American Educational Research Association Annual Meeting, Chicago, IL.

Hamilton, E., Rosenberg, J. M., & Akcaoglu, M. (2015, April). The Substitution Augmentation Modification Redefinition (SAMR) framework for technology integration: Challenges to its use for guiding K-12 teacher's pedagogy and practice. Paper presented at the American Educational Research Association Annual Meeting, Chicago, IL.

Rosenberg, J. M., Greenhalgh, S. P. & Koehler, M. J. (2015). A performance assessment of teachers' TPACK using artifacts from digital portfolios. In D. Slykhuus & G. Marks (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference 2015 (pp. 3390-3397). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE). Retrieved from <http://www.editlib.org/p/150472>

Rosenberg, J. M., Ervin, L., Harris, J., Greenhow, C., Kessler, A., & Tai, D. (2015, March). How should educational technology researchers consider context? An interactive discussion on context and teaching and learning with technology. Panel presented at the meeting of the Society for Information Technology and Teacher Education International Conference, Las Vegas, NV.

Akcaoglu, M., & Rosenberg, J. M. (2015, March). Best practices for designing synchronous and asynchronous online teaching for adult learners. Poster presented at the meeting of the Society for Information Technology and Teacher Education, Las Vegas, NV.

Rosenberg, J. M., Schwarz, C. V., & Lee, S. W.-Y., & Akcaoglu, M. (2015, April). A comparative longitudinal case study of the use of scientific modeling in the pedagogical practice of two fifth-grade science teachers. In A. Lo (Chair), Leveraging the epistemic dimensions of scientific practice to support student's meaningful engagement in modeling. Related paper set presented at the National Association for Research in Science Teaching Annual International Conference, Chicago, IL.

Rosenberg, J. M., Schwarz, C.V., Akcaoglu, M., & Lee, S.W-Y. (2014, October). Comparative longitudinal case studies of two middle school teachers' use of scientific modeling. Poster presented at the Advances in Educational Psychology Conference. Fairfax, VA.

Schwarz, C. V., Ke, L., Lee, M., & Rosenberg, J. M. (2014). Developing mechanistic explanations of phenomena: Case studies of two fifth grade students' epistemologies in practice over time. In J. L. Polman, E. A. Kyza, K. O'Neill, I. Tabak, W. R. Penuel, A. S. Jurow, . . . L. D'Amico (Eds.), *Learning and becoming in practice: The international conference of the learning sciences (ICLS) 2014* (Vol. 1, pp. 182-189). Boulder, CO: ISLS. <http://www.isls.org/icls2014/Proceedings.html>

Rosenberg, J. M., & Koehler, M. (2014). Context and Technological Pedagogical Content Knowledge: A content analysis. In M. Searson & M. Ochoa (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2014* (pp. 2412-2417). Chesapeake, VA: AACE. Retrieved from <http://www.editlib.org/p/131183>

Greenhalgh, S. P., Rosenberg, J. M., Zellner, A. & Koehler, M. J. (2014). Zen and the art of portfolio maintenance: Best practices in course design for supporting long-lasting portfolios. In M. Searson & M. Ochoa (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2014* (pp. 1604-1610). Chesapeake, VA: AACE. Retrieved from <http://www.editlib.org/p/131027>

Rosenberg, J., Terry, C., Bell, J., Hiltz, V., Russo, T. & The EPET Social Media Council (2014). What we've got here is failure to communicate: Social media best practices for graduate school programs. In M. Searson & M. Ochoa (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2014* (pp. 1210-1215). Chesapeake, VA: AACE. Retrieved from <http://www.editlib.org/p/130949>

Lee, M., Schwarz, C. V., Ke, L., & Rosenberg, J. M. (2014, April). Analyzing fifth-grade students' engagement in scientific modeling: Changes in students' epistemologies-in-practice over time. Paper presented at the meeting of the National Association for Research in Science Teaching, Philadelphia, PA.

Ke, L., Schwarz, C. V., Lee, M. & Rosenberg, J. M. (2014, April). Examining elementary students' attention to mechanism as they engage in scientific modeling across content areas. Paper presented at the meeting of the National Association for Research in Science Teaching, Philadelphia, PA.

Koehler, M. J., Rosenberg, J. M., Greenhalgh, S., Zellner, A. L., & Mishra, P. (2014, March). Analyzing students' portfolios for the development of TPACK. In J. Voogt (Chair), *Artifacts demonstrating teachers' technology integration competencies*. Symposium presented at the meeting of the Society for Information Technology and Teacher Education, Jacksonville, FL.

Rosenberg, J. (2013). Review of mobile device use policies in public high schools. In R. McBride & M. Searson (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2013* (pp. 3774-3779). Chesapeake, VA: AACE. Retrieved from <http://www.editlib.org/p/48698>

#### *Invited Talk*

Rosenberg, J. M. (March, 2016). An introduction to R for programming and statistical analysis in education. Georgia Southern University College of Education, Statesboro, GA.

## **Awards & Funding**

Delia Koo Global Travel Fellowship (\$500), Michigan State University 2017 Michigan Virtual Learning Research Institute Dissertation Fellowship (\$1,500), Michigan Virtual University 2017 Data Science Educational Technology Travel Stipend (\$1,000), Concord Consortium 2017 Council of Graduate Students Disciplinary Leadership Award (\$2,000), Michigan State University 2017 Research Expenses Fellowship (\$3,250), Michigan State University 2017 College of Education Alumni Fellowship (\$5,500), Michigan State University 2016 Best Paper Award, TPACK SIG, Society for Information Technology and Teacher Education

International Conference 2016 Cotterman Family Endowment for Education Summer Research Fellowship (\$6,000), Michigan State University 2015 Early Career Symposium Travel Stipend (\$980), Association for Educational Communications and Technology 2015 Outstanding Paper Award, Society for Information Technology and Teacher Education International Conference 2014 Versal Foundation Grant, Basic Biology for Everyone (\$2000), Versal 2013 Massive Open Online Course Research and Development Fellowship (\$1,000), Michigan State University 2013

## Competitive Research Training

American Educational Research Association Division C Graduate Student Seminar 2016  
National Science Foundation and Association for Educational Communications and Technology Early Career Seminar 2015 American Psychological Association Advanced Training Institute on Research Methods with Diverse Groups 2014

## Software Developed

Rosenberg, J. M., Schmidt, J. A., & Beymer, P. N. (2017). prcr: Person-centered analysis. [Statistical software for R]. Retrieved from <https://cran.r-project.org/web/packages/prcr/index.html>

Rosenberg, J. M., & Lishinski, A. (2017). clustRcompaR: Easy interface for clustering a set of documents and exploring group-based patterns [Statistical software for R]. Retrieved from <https://cran.r-project.org/web/packages/clustRcompaR/index.html>

Rosenberg, J. M., Xu, R., & Frank, K. (2017). konfound: Sensitivity analysis based on Rubin's causal model [Statistical software for R]. Retrieved from <https://github.com/jrosen48/konfound>

Rosenberg, J. M., Xu, R., & Frank, K. (2017). konfound: Sensitivity analysis based on Rubin's causal model [Interactive web application]. Retrieved from <https://jmmichaelrosenberg.shinyapps.io/shinykonfound/>

Rosenberg, J. M., Schmidt, J. A., & Beymer, P. N. (2017). tidyLPA: Interface to MCLUST to perform Latent Profile Analysis in R. [Statistical software for R]. Retrieved from <https://github.com/jrosen48/tidyLPA>

Rosenberg, J. M. (2016). Diffusion & Temperature – AP Physics 2 (MVS). [Interactive science simulation]. Retrieved from <http://lab.concord.org/interactives.html> - [interactives/external-projects/msu/temperature-diffusion.json](http://lab.concord.org/interactives.html)

## Teaching

### *Teaching Awards*

2014, MSU-AT&T Instructional Technology Award: Best Online Course  
2013, MSU-AT&T Instructional Technology Award (Honorable Mention): Best Online Course

### *Courses Taught*

Instructor at Michigan State University:

Psychology of Learning in School and Other Settings (CEP 800, M.A. class; taught two courses)  
Approaches to Educational Research (CEP 822, M.A. class)  
Technology and Leadership (CEP 815, M.A. class, taught seven courses, hybrid or online)

Teaching Assistant at Michigan State University:

Proseminar in Educational Psychology and Educational Technology (CEP 900, Ph.D. class)  
Proseminar in Educational Technology (CEP 807 / ED 870, M.A. class, assisted eight courses, online)  
Educational Inquiry (CEP 900, Ph.D. class)  
Social-Emotional Development Across the Lifespan (CEP 904, Ph.D. class)



## Service

### *Editorial Service and Review Activity*

Special Issue Editor, Australasian Journal of Educational Technology, 2017 Editorial Review Board, Journal of Research on Technology in Education 2016- Program Committee Member, International Conference on Computer-Supported Collaborative Learning 2017  
Review Panel Member, American Educational Research Association (AERA) Annual Meeting 2014-2016  
Reviewer, Association for Educational Communications and Technology (AECT) 2016 International Convention 2016  
Reviewer, American Psychological Association (APA) 2015 Convention 2014

### *Service to Profession*

2015-2017, Co-chair, 2015-2017 Technological Pedagogical Content Knowledge (TPACK) Special Interest Group (SIG), Society for Information Technology and Teacher Education  
\* 2014-2017, Membership Committee, Division 15 (Educational Psychology), American Psychological Association (APA)  
\* 2015-2016, Communications Deputy, Division C, American Educational Research Association  
\* 2014-2015, Associate Chair, TPACK SIG, Society for Information Technology and Teacher Education

### *Ad-hoc Journal Article Reviews*

Computers & Education (3)  
British Journal of Educational Technology  
E-Learning and Digital Media (2)  
Journal of Educational Technology & Society  
Contemporary Issues in Technology and Teacher Education

### *Departmental Service*

2014-Present, Member of two practicum committees for Educational Psychology and Educational Technology program Ph.D. students  
  
2015, Search Committee Member, Program Specialist, Master of Arts in Educational Technology Program, Michigan State University  
  
2012-2014, Co-Chair, Social Media Council, Educational Psychology & Educational Technology program, Michigan State University

**Workshops and Outreach** Rosenberg, J. M. (2017, April). Introduction to R for Data Analysis. Presentation at the School of Criminal Justice, Michigan State University.

Ranellucci, J., & Rosenberg, J. M. (2016, February). Motivating our students: A partnership between Michigan Virtual Schools and Michigan State University. Workshop at Michigan Virtual University, East Lansing, MI.

Rosenberg, J. M. (2014, April). Action research with mobile devices and other “disruptive” technologies. Presentation at the Best of the Michigan Association for Computer Users in Learning Conference, Waterford, MI.

Rosenberg, J. M. (2014, February). Action research with mobile devices. Presentation at the Michigan Association for Computer Users in Learning Mobile Learning Conference, Kalamazoo, MI.

Sawaya, S., & Rosenberg, J. M (2014, February). Master of Arts in Educational Technology Mobile Learning Workshop. Workshop at Michigan State University, East Lansing, MI.

## Campus and Departmental Presentations

Rosenberg, J. M., Beymer, P. N., & Schmidt, J. A. (2017, February). Does choosing the problem or topic matter? Using a person-in-context approach to understand student engagement in science. Poster presented at the Create4Stem MiniConference 2017, East Lansing, MI.

Rosenberg, J. M. (2016, April). Momentary engagement profiles: An examination of student engagement in science settings using experience sampling methodology. Presentation at the Michigan State University Educational Psychology and Educational Technology Program Informal Colloquium, East Lansing, MI.

Rosenberg, J. M., & Schwarz, C. V. (2016, February). Examining the development of fifth and sixth grade students' epistemic considerations over time through an automated analysis of embedded assessment items. Poster presented at the Create4Stem MiniConference 2016, East Lansing, MI.

Rosenberg, J. M. (2015, September). Achievement goals, in- and out-of-class engagement, and students' achievement in a flipped undergraduate anatomy class. Presentation at the Michigan State University Educational Psychology and Educational Technology Program Informal Colloquium, East Lansing, MI.

Rosenberg, J. M., Akcaoglu, M., Schwarz, C.V., & Lee, S.W-Y. (2015, February). Comparative longitudinal case studies of two middle school teachers' use of scientific modeling. Poster presented at the Create4Stem MiniConference 2015, East Lansing, MI.

Lee, M., Schwarz, C.V., Ke, L., Rosenberg, J. M., Reiser, B., Berland, L., Kenyon, L., Wilson, M., Draney, K. (2015, February). Epistemic considerations in scientific practices for elementary & middle schools. Poster presented at the Create4Stem MiniConference 2015, East Lansing, MI.

Wolf, L. G., Henriksen, D., Sawaya, S., & Rosenberg, J. M. (2014, December). EdCamp with Team MAET. Presentation at the Michigan State University Master of Arts in Educational Technology Bridge Webinar Series, East Lansing, MI.

Rosenberg, J. M. (2014, November). Integrating "disruptive" technologies into teaching with action research and Technological Pedagogical Content Knowledge (TPACK). Presentation at the Michigan State University Educational Technology Conference, East Lansing, MI.

Wolf, L. G., Henriksen, D., Sawaya, S., & Rosenberg, J. M. (2014, March). Mobile learning for educators. Presentation at the Michigan State University Master of Arts in Educational Technology Bridge Webinar Series, East Lansing, MI.

Rosenberg, J. M. (2014, February). Context and Technological Pedagogical Content Knowledge: Preliminary results of a content analysis. Presentation at the Michigan State University Educational Psychology and Educational Technology Program Informal Colloquium, East Lansing, MI.

Ke, L., Lee, M., Rosenberg, J. M., & Schwarz, C.V. (2014, February). Modeling across content areas: Examining elementary students' attention to mechanism. Poster presented at the Create4Stem MiniConference 2014, East Lansing, MI.

Rosenberg, J. M., Rapa, L., & Wolf, L. G. (2013, February). CEP 815 and the transition from ANGEL to Desire2Learn. Poster presented at the 6th Annual Faculty Technology Showcase.

Rosenberg, J. M. (2012, November). Mobile learning for teachers. Presentation at the Michigan State University Educational Technology Conference, East Lansing, MI.

## Consulting

*Statistical software development,*

2017 Kenneth Frank, Michigan State University

2017, Statistical analysis, Yael Shwartz, Weizmann Institute

2016, Statistical analysis, Lara Kassab, San Jose State University

## **Professional Affiliations**

American Educational Research Association (2012 - Present)

Association for Educational Communications and Technology (2015 - Present)

Association for the Advancement of Computing in Education (2012 - Present)

International Society of the Learning Sciences (2014 - Present)

National Association for Research in Science Teaching (2015 - Present)