

Joshua M. Rosenberg

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EDUCATION

Expected 2018	Ph.D.	Educational Psychology & Educational Technology	Michigan State University
2016	Graduate Certificate	Science Education	Michigan State University
2012	M.A.	Education, Technology and Learning Concentration	Michigan State University
2010	B.S.	Biology	University of North Carolina at Asheville
2010	Professional License	Teacher Licensure Program (Biology and General Science)	University of North Carolina at Asheville

PUBLICATIONS

Peer-Reviewed Journal Articles

Beymer, P. N., Rosenberg, J. M., Schmidt, J. A., & Naftzger, N. (in press). Examining relationships between choice, affect, and engagement in out-of-school time STEM programs. *Journal of Youth and Adolescence*.

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.
<http://www.learntechlib.org/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., & Shwartz, 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.

Phillips, M., Koehler, M. J., Rosenberg, J. M., & Zunica, B. (2017). Revisiting conceptions of knowledge as part of the TPACK framework. In L. Liu & D. Gibson (Eds.), *Research Highlights in Technology and Teacher Education 2017* (pp. 21-27). Chesapeake, VA: Association for the Advancement of Computing in Education. [Invited reprint of conference presentation in edited book]

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.

Journal Articles Submitted for Publication

Blondel, D. V., Rosenberg, J. M., Sansone, A., Godin, E. A., Yang, B. W., Jaglom-Kurtz, L. T., Linnenbrink-Garcia, L. L., & Schwartz-Bloom, L. (under review). The REX virtual experiment platform: Design, implementation, and effects on situational interest. *Journal of Science Education and Technology*.

Rosenberg, J. M., Schwarz, C. V., & Akcaoglu, M. (under review). A comparative longitudinal case study of two fifth-grade teachers' engagement in scientific modeling pedagogical practice. *Journal of Teacher Education*.

Greenhalgh, S. P., Rosenberg, J. M., & Koehler, M. J. (invited publication). Hide and go tweet: Comparing methods for locating educational hashtag participants. *Tech Trends* (special issue).

Other (Editor-reviewed) Publications

Rosenberg, J. M. (2017). Opportunities for engaging students in “data practices” in online science classes. *Michigan Virtual Learning Research Institute Blog: Research, Policy, Innovation & Networks*. <https://mvlri.org/blog/opportunities-engaging-students-data-practices-online-science-classes/>

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). TPCK/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/>

Manuscripts in Preparation

Krist, C., & Rosenberg, J. M. (in preparation). Shifts and patterns in learners’ epistemic considerations of generality in science: Combining automated and manual approaches.

Rosenberg, J. M., Lee, Y-K., Robinson, K., Ranellucci, J., Roseth, C. J., & Linnenbrink-Garcia, L. (in preparation). Patterns of engagement in a flipped undergraduate anatomy class: Antecedents and outcomes.

Ranellucci, J., Robinson, K.A., Rosenberg, J. M., Saltarelli, W., Roseth, C. J., & Linnenbrink-Garcia, L. (in preparation). Comparing emotions in-class and during online video lectures in a flipped classroom.

Rosenberg, J. M., & Vanden Heuvel, A. (in preparation). Use of a computational science simulation as a context for engaging in measuring and modeling practices.

Roseth, C. J., Linnenbrink-Garcia, L., Saltarelli, W., Lee, Y-K., Rosenberg, J. M. ... & Beymer, P. N. (in preparation). A design-based intervention on flipped instruction: Longitudinal effects on undergraduates’ engagement and achievement.

Rosenberg, J. M., Wormington, S. V., Steingut, R., & Beymer, P. N. (in preparation). Future directions for a person-oriented approach in motivation and engagement research.

Schmidt, J. A., Rosenberg, J. M., Beymer, P. N., Naftzger, N., & Shumow, L. (in preparation). Examining the development of interest in summer STEM programs.

PRESENTATIONS

Refereed Conference Proceedings (Indicated with *) and Presentations

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/172122>
- *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. Slykhuis & 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 Presentation

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

PROFESSIONAL EXPERIENCE

- 2017-Present Research Assistant, Profiles of Science Engagement: Broadening Participation by Understanding Individual and Contextual Influences, Jennifer A. Schmidt (PI)
- 2016-Present Research Assistant, STEM Interest and Engagement, Jennifer A. Schmidt (PI)
- 2017 Research Assistant, Self-generated Research Experiences to Support Biomedical/Behavioral Research Careers, Lisa Linnenbrink-Garcia (PI)
- 2015-2016 Research Assistant, Michigan State University - Educational Testing Service Partnership, Jamie Mikeska (ETS PI), Robert Floden (MSU PI)
- 2014-2015 Research Assistant, Assessing Teachers' Technological Pedagogical Content Knowledge Through Digital Portfolios, Matthew Koehler (PI)
- 2013-2017 Research Assistant, Supporting Scientific Practices in Elementary and Middle School Classrooms, Brian Reiser (Northwestern PI), Christina V. Schwarz (MSU PI)
- 2010-2012 High School Science Teacher (Biology and Earth Science), Shelby High School
- 2009-2010 High School Science Teacher Intern (Biology and Chemistry), C.D. Owen High School

FELLOWSHIPS, GRANTS, AND AWARDS

- 2017 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
- 2016 Best Paper Award, TPACK SIG, Society for Information Technology and Teacher Education International Conference
- 2016 College of Education Alumni Fellowship (\$5,500), Michigan State University
- 2015 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
- 2014 Outstanding Paper Award, Society for Information Technology and Teacher Education International Conference
- 2013 Massive Open Online Course Research and Development Fellowship (\$1,000), Michigan State University
- 2011 Amgen-NSTA Scholar, National Science Teachers Association
- 2009-2012 Burroughs Wellcome Fund Scholar, University of North Carolina Asheville and University of North Carolina General Assembly

COMPETITIVE RESEARCH TRAINING

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

TOOLS AND SOFTWARE DEVELOPED

Rosenberg, J. M., Schmidt, J. A., & Beymer, P. N., & Steingut, R. R. (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://jmichaelrosenberg.shinyapps.io/shinykonfound/>

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

TEACHING

Teaching Awards

- | | |
|------|--|
| 2014 | MSU-AT&T Instructional Technology Award: Best Online Course (Foundations of Science Massive Open Online Course) |
| 2013 | MSU-AT&T Instructional Technology Award (Honorable Mention): Best Online Course (Proseminar in Educational Technology) |

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

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

Service to Profession

2015-2017	Co-chair, 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

- 2017 Statistical software development, 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)