Other Presentations

Peer-Reviewed Conference Presentations

Bao, H., Li, Y., Wang, Z., Rosenberg, J. M., & Koehler, M. J. (2025, April 23). *How are robots used in education? Mapping the robotics resources landscape on Teachers Pay Teachers.* Paper presented at the American Educational Research Association (AERA) Annual Meeting, Denver, CO, United States.

Krist, C., Dyer, E. B., Cox, E. M., & Rosenberg, J. M. (2025, April 23). *AI and educational justice: A critical conversation.* Paper presented at the American Educational Research Association (AERA) Annual Meeting, Denver, CO, United States.

Rosenberg, J. M., Veletsianos, G., Romero-Hall, E. J., & Allen, E. (2025, April 24). *The accessibility of published educational research.* Paper presented at the American Educational Research Association (AERA) Annual Meeting, Denver, CO, United States.

Rosenbaum, L., Pritchard, C. C., Rosenberg, J. M., & Blikstein, P. (2025, April 25). *Developing an assessment of informal data science learning: Two cycles of development, implementation, and revision.* Paper presented at the American Educational Research Association (AERA) Annual Meeting, Denver, CO, United States.

Bao, H., Wong, R. M., Williams, W., King, A., & Perez, C. S. (2025, April 27). *College students' interactions with Canvas LMS (Learning Management System) in a blended learning environment.* Paper presented at the American Educational Research Association (AERA) Annual Meeting, Denver, CO, United States.

Garner, A., & Rosenberg, J. M. (2025, April). Lichen our way to better data literacy: Insights from a place-based and Bayesian professional development [Conference presentation]. NARST 2025 Annual International Conference, Gaylord National Resort & Convention Center, National Harbor, MD, United States.

Kubsch, M., Kolbe, H., Tautz, S., Cox, E., Kardas, E., Chen, Y.-C., Manz, E., Korfmacher, I. M., Blauza, S., & Garner, A. (2025, April). Uncertainty in science education: Shaping a research agenda for an emerging field [Symposium presentation]. NARST 2025 Annual International Conference, Gaylord National Resort & Convention Center, National Harbor, MD, United States.

Supovitz, J. A., Diehl, D. K., DeBray, E. H., Rosenberg, J. M., Gonzalez Canche, M. S., Jabbar, H., Rubin, P. G., & Ferrare, J. J. (2024, April). Network analysis to inform policy: Testing a rapid-response approach [Roundtable presentation]. American Educational Research Association Annual Meeting, Philadelphia, PA, United States.

López, F., Darriet, C., Cervantes-Soon, C. G., Santibanez, L., Delcid, G. M., Serrano, E. M., Pritchard, C., Rosenberg, J. M., Frankenberg, E., & Asson, S. (2024, April). Enrollment patterns and online portrayals of dual language program [Roundtable presentation]. American Educational Research Association Annual Meeting, Philadelphia, PA, United States.

Morina, F., Fütterer, T., Rosenberg, J. M., Carpenter, J. P., & Fischer, C. (2024, April). Investigating associations of teacher characteristics with open educational resource usage in social media communities [Roundtable presentation]. American Educational Research Association Annual Meeting, Philadelphia, PA, United States.

Robertson, J. R., Logan, M. W., Rosenberg, J. M., & Lombardi, D. (2024, April). Scientific thinking, reasoning, and knowledge construction across adolescence [Poster presentation]. American Educational Research Association Annual Meeting, Philadelphia, PA, United States.

Garner, A. V., Bao, H., & Rosenberg, J. (2024, March). Collect, analyze interpret, oh my! 7th grade students' intended engagements in the OpenSciEd curriculum [Paper presentation]. National Association of Research in Science Teaching Annual Conference, Denver, CO, United States.

Kubsch, M., Krist, K., Wulff, P., Rosenberg, J., Hall, K., Cox, E., Palaguachi, C., & Tschisgale, P. (2024, March). How to use AI and center people in science education research [Workshop]. National Association of Research in Science Teaching Annual Conference, Denver, CO, United States.

Weatherton, M., Rosenberg, J., Schussler, E. E., & Lishinski, A. (2024, March). Exploring undergraduate students' momentary anxiety in introductory biology classes with intensive longitudinal methods [Paper presentation]. National Association of Research in Science Teaching Annual Conference, Denver, CO, United States.

A Bayesian Approach to Making Sense of Uncertainty in the Science Classroom Uncertainty and Sensemaking in Science Classrooms, 1:00-2:30pm Wednesday, 19 April, 2023 (with Marcus Kubsch, Mine Dogucu, and E.J. Wagenmakers

A Curriculum Analysis of The Sources of Data and Data Engagements of Science Students, 10:30am-12:00pm Thursday, 20 April, 2023 (with Amanda Garner)

Distributing Epistemic Functions and Tasks – Towards a Methodological Approach for Using ML in Science Education, 1:10-2:40pm Thursday, 20 April, 2023 (with Marcus Kubsch and Christina Krist)

Make Graphs? A Survey of Teachers on How Their Students Analyze and Interpret Data Strengthening Science Teachers' NGSS-Aligned Instruction by Focusing on Students, 8:25-9:55am Wednesday, 19 April, 2023 (with Omiya Sultana, Aaron Reedy, Elizabeth Schultheis, and Melissa Kjelvik)

Graduate Programs in Learning Analytics Workshop: Core Competencies, Curriculum, and Instruction (link)

"I Love Feeling Connected Still": Educator Preparation Program Alumni Engagement Through Social Media (link)

Foundations of K-12 Data Science Education (link)

Teacher Collaboration and Professional Development on Twitter: An Epistemic Network Analysis (link)

Experience Sampling Method: Relationships Between Students' Emotional Responses, Self-Efficacy, and Interest in Programming (link)

Carpenter, J., Morrison, S., Rosenberg, J. M., & Hawthorne, K. (2022, April). *Professional learning and networking for preservice teachers on Twitter: A Social Network Analysis of #BantshireEd.* Presentation at the American Educational Research Association Annual Meeting.

Lishinski, A., Rosenberg, J. M., +Sultana, O., +Mann, M., & Dunn, J. (2021, April). *A text messaging–based experience sampling method study of students' interest in introductory computer science.* Presentation at the American Educational Research Association Annual Meeting.

Michela, E., Rosenberg, J. M., +Sultana, O., ^Burchfield, M., ^Thomas, T., & Kimmons, R. (2021, April). *"Life will eventually get back to normal": School districts' Twitter use in response to COVID-19.* Poster presentation at the American Educational Research Association Annual Meeting.

Rosenberg, J. M., Carpenter, J., +Michela, E., +Sultana, O., McKenna, T. J., Dyer, E. D., & Reid, J. (2021, April). *"Best P.D. out there"? An exploration of the #NGSSchat network on Twitter.* Presentation at the American Educational Research Association Annual Meeting.

Rosenberg, J. M., ^Borchers, C., Gibbons, B., Dyer, E. D., Anderson, D. A., & Fischer, C. (2021, April). Don't worry, be happy: A sentiment analysis of the #NGSSchat Twitter Symposium community. In M. Rehm. (Chair), *Social opportunity spaces: How social media can inform/shape educational policy processes.* Symposium conducted at the American Educational Research Association Annual Meeting.

+Lawson, M. A., Rosenberg, J. M., & Herrick, I. (2021, April). *Better together: Supporting and understanding preservice teacher (PST) sense-making about STEM.* Presentation at the American Educational Research Association Annual Meeting.

Kellogg, S., Jiang, S., Rosenberg, J. M., & Moore, R. (2021, April). Learning Analytics in STEM Education Research (LASER) Institute. In F. J. Levine & G. L. Wimberly (Chairs), *Building capacity in STEM education research: A discussion with directors of the NSF institutes in research methods.* Symposium at the American Educational Research Association Annual Meeting.

Schmidt, J.A., Schell, M.J., Beymer, P.N., Alberts, K.M., Phun, V., Lee, M. & Rosenberg, J.M. (2020, August). *Students' momentary science engagement predicts end-of-course achievement.* Poster presented at the annual meetings of the American Psychological Association. Washington, DC. (Conference canceled)

Rosenberg, J. M., Reid, J., Dyer, E., Koehler, M. J., Fischer, C., & McKenna, T. J. (2020, April). A new context for professional networks: Understanding the social structure of #NGSS-Chat through social network analysis. In K. A. Frank, K., Torphy, K., Daly, A., & Greenhow, C. (Chairs), *Educators meet the fifth estate: Social media in education.* Symposium conducted at the American Educational Research Association Annual Meeting, San Francisco, CA. (Conference canceled)

Rosenberg, J. M., Hodge, L., Bertling, J., & King, S. (2020, April). Art as a context for data science: Exploring fourth-grade students' data visualization practices. In J. M. Rosenberg & B. Chen (Chairs), *Exploring data science across the curriculum and across grade levels.* Symposium conducted at the American Educational Research Association Annual Meeting, San Francisco, CA. (Conference canceled)

Rosenberg, J. M., Carpenter, J. P., Romero-Hall, E., & Kessler, A. (2020, April). *Teacher educators' technology competencies and the importance of context.* Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA. (Conference canceled)

Rosenberg, J. M., Beymer, P. N., Phun, V., Schmidt, J. A. (2020, April). Sources of variability for students' engagement in science: Findings from a cross-classified, multivariate modeling approach. In P. N. Beymer, D. K. Benden, & M. L. Bernacki (Chairs), *Affordances and modeling of intensive data.* Symposium conducted at the American Educational Research Association Annual Meeting, San Francisco, CA. (Conference canceled)

Rutherford, T., Rosenberg, J. M., & Staudt Willet, K. B. (2020, April). Which birds fill the branches of the AERA Twitter tree? Twitter networks around #AERA19. In P. N. Beymer, D. K. Benden, & M. L. Bernacki (Chairs), *Affordances and modeling of intensive data.* Symposium conducted at the American Educational Research Association Annual Meeting, San Francisco, CA. (Conference canceled)

Jones, R. S., & Rosenberg, J. M. (2020, April). *Latent class modeling of whole-class discussions about data, statistics, and probability.* Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA. (Conference canceled).

Rutherford, T., & Rosenberg, J. M. (2020, April). *Motivational correlates of choice to persist after failure.* Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA. (Conference canceled).

Ranellucci, J. & Rosenberg, J. M. (2020, April). *Interest, engagement, and achievement in online high school science courses.* Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA. (Conference canceled).

Schmidt, J. A., Rosenberg, J. M., & Beymer, P. N. (August, 2019). *Sources of variability in engagement: Exploring situational, personal, and classroom influences.* Poster presented at the annual meeting of the American Psychological Association, Chicago, IL.

Greenhalgh, S. P., Huang, K., & Rosenberg, J. M. (2019, October). *Understanding gaming communities and exploring learning opportunities: A computational grounded theory approach.* Paper presented at the meeting of the Association for Educational Communications and Technology International Convention, Las Vegas, NV.

Rosenberg, J. M, Beymer, P. N., Houslay, T. M., & Schmidt, J. A. (2019, April). Using a multivariate, multi-level model to understand how youths' in-the-moment engagement predicts changes in youths' interest. In M. Bernacki, A. Kaplan, and L. Linnenbrink-Garcia (Chairs), *Embracing and modeling the complex dynamics of motivation and engagement: Contextual, temporal, dynamic, and systematic.* Symposium conducted at the Annual Meeting of the American Educational Research Association, Toronto, CA.

Beymer, P. N., Schell, M. J., Alberts, K. M., Rosenberg, J. M., & Schmidt, J. A. (2019, April). *Student engagement profiles in formal and informal STEM learning settings.* Paper presented at the Annual Meeting of the American Educational Research Association, Toronto, Canada.

Schell, M. J., Beymer, P. N. Albert, K. M., Rosenberg, J. M., & Schmidt, J. A. (2019, April). *Predictors of momentary student engagement profiles in high school science classrooms.* Paper presented at the Annual Meeting of the American Educational Research Association, Toronto, Canada.

Reid, J., Rosenberg, J. M., Koehler, M. J., Fischer, C., & McKenna, T. J. (2019, March). *An exploration of #NGSSchat through social network analysis.* Paper presented at the National Association for Research in Science Teaching Annual International Conference, Baltimore, MD.

Rosenberg, J. M., Reid, J., Koehler, M. J., Fischer, C., & McKenna, T. J. (2019, January). *The roles of the Twitter hashtag #NGSSchat in the context of science education reform efforts.* Paper presented at the Association for Science Teacher Education International Meeting, Savannah, GA. (*Note. This paper was nominated for the ASTE John C. Park National Technology Leadership Institute Fellowship*)

Akcaoglu, M., Hodges, C. B., Rosenberg, J. M., & Hilpert, J. (2018, October). *Factors impacting middle school students' interest, efficacy, and utility value of programming.* Paper

presented at the Association for Educational Communications and Technology International Convention 2018. Kansas City, MO.

Staudt Willet, K. B., Greenhalgh, S. P., Rosenberg, J. M., Koehler, M. J. (2018, October). *Won't you be my neighbor? How education stakeholders use hyperlinks to build information neighborhoods on Twitter.* Paper presented at the Association for Educational Communications and Technology International Convention 2018. Kansas City, MO.

Beymer, P. N., Rosenberg, J. M., Schmidt, J. A., Naftzger, N. J., & Shumow, L. (August, 2018). *Agency in summer STEM programs predicts interest and career aspirations.* Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.

Schmidt, J. A., Beymer, P. N., Rosenberg, J. M., Naftzger, N. J., & Shumow, L. (August, 2018). *Examining the development of interest in summer STEM programs.* Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.

Beymer, P. N., Rosenberg, J.M., & Schmidt, J. A. (2018, April). *Investigating the effects of interest and choice: An experience sampling approach.* Paper 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 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 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 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 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 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., Linennbrink-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 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 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 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.

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.

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., Akcaoglu, 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.* In P. Resta & S. Smith (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference 2017 (pp. 283-286). Waynesville, NC: Association for the Advancement of Computing in Education (AACE).

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.

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. (slides)

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. (slides)

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.

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., 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 students' 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.

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.

Workshops

Hu, A. D., Greenhalgh, S. P. Rosenberg, J. M., & Staudt-Willet, B. (March, 2023). *What ChatGPT is, how it is impacting universities, and how might we make "good" use of it.*. Panel presentation at the Michigan State University College of Education. Michigan State University, East Lansing, MI.

Parr, E. D., Dyer, E. B., Rosenberg, J. M., D'Angelo, C., Lishinski, A., & Krist, C. (2021, June). Leveraging the power of visualization in the analysis of classroom audiovisual data https://tca2.education.illinois.edu/isls-2021/isls-2021-workshop

Rosenberg, J. M. (2021, June). *Data Visualization and Text Analysis Using R*. Workshop carried out at Southern Wesleyan University, https://github.com/jrosen48/data-viz-and-qual-analysis-workshop

Rosenberg, J. M. (2021, May). *An Introduction to Machine Learning Using R for Science Education Research*. Workshop carried out at the Machine Learning and Computer-Based Text Analysis conference, Kiel, Germany. https://github.com/jrosen48/ML-in-Science-Education-Workshop-Materials

Sorge, S., Kubsch, M., Rosenberg, J. M., & D'Angelo, C. (2021, April). *Rethinking how you understand your data with R*. Workshop carried out at the National Association for Research in Science Teaching.

Dyer, E. B., D'Angelo, D., Bosch, N., Krist, C., & Rosenberg, J. M. (2020, June). *Analyzing learning with speech analytics and computer vision methods: Technologies, principles, and ethics*. Workshop carried out at the International Conference of the Learning Sciences, Nashville, TN.

Staudt Willet, K. B., Rosenberg, J. M., & Greenhalgh, S. P. (2020, March). *R U ready 4 R? Introduction to Analyzing Educational Internet Data Using R*. Workshop carried out for the *Students, Social Media, and Schools Research Group* at Florida State University, Talahassee, FL.

Rosenberg, J. M. (2020, January). *An introduction to using R for data science (zero prerequisites required!)*. Workshop carried out for the KnoxData group, Knoxville, TN.

Rosenberg, J. M., Staudt Willet, K. B., & Greenhalgh, S. P. (2019, October). *Online data and open source tools: Analyzing educational internet data Using R*. Workshop carried out at the Association for Educational Communications and Technology, Las Vegas, NV.

Rosenberg, J.M. (September, 2019). *An introduction to data science in education using R*. Workshop at Middle Tennessee State University. Middle Tennessee State University, Murfreesboro, TN.

Rosenberg, J. M. (2019, June). *The use of mixed effects models for analyzing complex data.* Presentation for the KnoxData group, Knoxville, TN. YouTube recording: https://www.youtube.com/watch?v=1YY2FoCFIm4

Rosenberg, J. M. (2019, May). *Won't you be my neighboR? An introduction to R for data science in education.* Workshop carried out for the Educational Psychology and Educational Technology program, Michigan State University.

Anderson, D. J., and Rosenberg, J. M. (2019, April). *Transparent and reproducible research with R.* Workshop carried out at the Annual Meeting of the American Educational Research Association, Toronto, Canada.

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

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

Outreach and Community Engagement

Rosenberg, J. M., & Narvaiz, S. (2022, April). *What is data science and what do data scientists do? A presentation at L&N STEM Academy* (L&N STEM Career Connections presentation and presentation to two AP Computer Science Principles courses). https://tinyurl.com/stem-data-sci

Rosenberg, J. M. (2021, November). *Analyzing and interpreting scientific data with Data-Classroom.* Knox County Schools District Learning Day. https://joshuamrosenberg.com/kcs-dld-2021-11-02-analyzing-scientific-data.pdf

Rosenberg, J. M. (2021, April). *Discussion of Teaching Data Science.* Presentation for the Data Science in Education Using R book club. https://github.com/r4ds/bookclub-dsieur

Rosenberg, J. M. (2020, April). *An informal, open introduction to using R Markdown in education.* Virtual workshop. https://www.youtube.com/watch?v=BA1YFvmXCXQ&t=57s

Rosenberg, J. M. (2019, May). *Working with data in education: Using data and supporting students to use data.* Workshop carried out for teachers at Knoxville Jewish Day School. https://docs.google.com/presentation/d/1uSdRvF2GjhUpO2fCHZIUdXmf0texzczGGlbzmZBgggw/edit?usp=s

Trout-Fryxell, B., & Rosenberg, J. M. (2020, February). *Authentic science in the classroom with MEGA:BITESS.* Presentation at the Knox County Schools Science Department District Learning Day, Knoxville, TN.

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.

Crouter, S., Gibbons, M., Kim. Y.-K., Moore, T., & Rosenberg. J. M. (2022, April). *National recognition in research/scholarship.* Panel discussion in the College of Education, Heath, and Human Sciences. *Note.* I was the moderator for this panel discussion.

Rosenberg, J. M. (2022, March). *What is the role of data science in K-12 (pre-collegiate) teaching and learning?* Data Science and Statistics Seminar Series, Department of Mathematics, UTK. https://joshuamrosenberg.com/post/2022/03/24/what-is-the-role-of-data-science-in-k-12-teaching-and-learning/

Other Presentations

Rosenberg, J. M. (2024, November). *Computational Audio Data Analytics to Explore STEM Classroom Teaching and Learning.* Learning Break Presentation. College of Educationa, Health, and Human Sciences, UTK.

Rosenberg, J. M. (2024, April). *Public Scholarship, Broader Impacts, and Interfacing with Traditional and Social Media.* Presentation at the AERA Division C New Faculty Mentoring Program. https://docs.google.com/presentation/d/10XqT2jV1sM2Mk9YtIYDRNLlwTa0HwqI36EAkAFcE9a8/edi

^Gibbons, B., Bui, H., +Mann, M., +Longnecker, J., Dyer, E., & Rosenberg, J. M. (2021, January). *Insights on the current and preferred integration of computer science into K-8 education in Tennessee.* Presentation at the 15th Annual Tennessee STEM Education Research Conference. https://www.pechakucha.com/presentations/insights-on-the-current-and-preferred-integration-of-computer-science-into-k-8-education-in-tennessee

Rosenberg, J. M., +Sultana, O., +Mann, M., +Carter, B., +Kenner, N., & +Edwards, A. (2021, January). *How can K-12 science learners analyze data in creative and ambitious ways? Early findings from a design-based research project.* Presentation at the 15th Annual Tennessee STEM Education Research Conference.

Rosenberg, J. M., Dyer, E. B., Anderson, D. J., & Fischer, C. (September, 2020). *If you're happy and you know it, post a tweet? A study of the sentiment of posts to the #NGSSchat hashtag on Twitter.* Presentation at the AERA Satellite Conference on Educational Data Science, Stanford, CA.

Dyer, E. B., Rosenberg, J. M., Bosch, N., Krist, C., & D'Angelo, C. (September, 2020). *Better together? Initial findings and implications from combining qualitative coding and computational methods to analyze classroom audiovisual data.* Presentation at the AERA Satellite Conference on Educational Data Science, Stanford, CA.

Anderson, D., Rosenberg, J. M., Sáez, L., & Seeley, J. R. (September, 2020). *Using extreme gradient boosting to estimate community effects on school readiness.* Presentation at the AERA Satellite Conference on Educational Data Science, Stanford, CA.

Estrellado, R. A., Bovee, E. A., Mostipak, J., Rosenberg, J. M., & Velásquez, I. C. (July, 2020). *Expanding R into education.* Presentation at the useR conference, St. Louis, MO. (conference canceled)

Rosenberg, J. M., Qinyun, L., Xu, R., Maroulis, S., & Frank, K. A. (July, 2020). *The konfound R package and Shiny app for robustness analysis.* Presentation at the useR conference, St. Louis, MO.

Rosenberg, J. M.,& Lishinski, A. (January, 2020). *Measuring what matters in-the-moment: An experience sampling approach to understanding the development of interest in computer science.* Presentation at the 14th Annual Tennessee STEM Education Research Conference, Cookeville, TN.

Rosenberg, J. M., Hodge, L., Aydeniz, M., Schmidt, A. Lishinski, A., Rich, K., +Longnecker, J., +Mann. M., & Sadovnik, A. (January, 2020). *A survey of teachers and administrators regarding the implementation of new K-8 computing education standards in Tennessee.* Presentation at the 14th Annual Tennessee STEM Education Research Conference, Cookeville, TN.

Camponovo, M., +Lawson, M. A., & Rosenberg, M. J. (July, 2019). *Integrating geospatial tech with math and science pre-service teachers. 2019 Education Summit @ ESRI UC.* San Diego, CA.

Jones, R. S., & Rosenberg, J. M. (February, 2019). *Latent class modeling of whole class discussions about data, statistics, and probability. Presentation at the 13th Annual Tennessee STEM Education Research Conference*, Murfreesboro, TN.

+Lawson, M., Rosenberg, J. M., & Camponovo, M. (February, 2019). *Better together? Findings from a combined, integrated STEM unit with pre-service mathematics and science teachers.* Presentation at the 13th Annual Tennessee STEM Education Research Conference, Murfreesboro, TN.