# Curriculum Vitae

# [Michelle E. Jordan](https://asu.pure.elsevier.com/en/persons/michelle-jordan)

Associate Professor

Arizona State University

Mary Lou Fulton Teachers College,

Division of Teacher Preparation

College of Global Futures,

School for Complex Adaptive Systems

michelle.e.jordan@asu.edu

EDUCATION

May 2010 Ph.D., Educational Psychology, The University of Texas at Austin

 Major Concentration: Learning, Cognition, and Motivation

Dissertation: [*Managing Uncertainty through Peer Discourse during Collaborative Design Tasks*](https://repositories.lib.utexas.edu/bitstream/handle/2152/ETD-UT-2010-05-876/JORDAN-DISSERTATION.pdf?sequence=1)

2001 Master of Music Education, Texas State University

1993 Bachelor of Music Education, University of Colorado at Boulder

TEACHING CERTIFICATIONS

1994 All-Level Music (Grades PK-12)

1994 Secondary Music (06-12)

1996 Elementary Self-Contained (Grades 01-08)

APPOINTMENTS

Associate Professor, Mary Lou Fulton Teachers College, Educational Psychology

Education Director, QESST Solar Energy Engineering Research Center (funded by NSF/DOE)

President, Scholarly Consortium for Innovative Psychology in Education

Co-Chair, PVSC High School Solar Energy Engineering Competition

**PROFESSIONAL RECOGNITION**

2022 Mary Lou Fulton Teachers College *Excellence in the Scholarship of Engagement*Award

2019-2020 ASU Knowledge Exchange for Community Resilience Fellowship Award

2016-2017 Selected participant in the ASU Peer LA Leadership Program

2015 Mary Lou Fulton Teachers College *Outstanding Promising Research Scholar* Award

2012 *Early Career Workshop* of the International Conference of the Learning Sciences; two-day mentorship with senior learning sciences scholars

2012 Nominated for Best Paper Award, International Conference of the Learning Sciences, *Fifth-grade students’ propensities for managing uncertainty in collaborative engineering projects*

2009 National Reading Conference Area Chair Award for Best Paper, *Collaborative robotics design projects: Managing uncertainty as multimodal literacy practice.*

**ACADEMIC PUBLICATIONS: Refereed Journal Articles**

Rapkiewcz, J., Park, J., Chen, Y., & Jordan, M. (under review). *Student uncertainty as a pedagogical resource (SUPeR): Using the SUPeR approach to investigate electromagnetic force.*

Firetto, C. M., \*Starrett, E., & Jordan, M. E. (under review). *Developing in-service teachers’ high-level comprehension about photovoltaic (PV) science through small group discussions.*

Firetto, C. M., \*Starrett, E., & Jordan, M. E. (under review). *Embracing a culture of talk: STEM teachers’ discussion engagement and enactment.*

\*Howell, A. A., Jordan, M., McKelvy, M., \*Wahi-Singh, B. & \*Shadmany, H. (2023). The science of science is fun: assessing the impact of interactive science demonstrations through everyday experiences and near-peer role modeling, *International Journal of Science Education*, DOI: 10.1080/09500693.2022.2164473

Ricca, B. & **Jordan, M. E.** (2022). Dynamical systems measures of small group functioning. *International Journal of Complexity in Education, 3*(2), 79-108. Available at: <https://complexityineducation.com/index.php/ljce/Volume4>

Elwood, K., & **Jordan, M.E.** (2022). Development of the Design Thinking and Instructional Lessons (DTAIL) model: A creative approach for teachers. *Educational technology research and development, 70*, 1781-1807. [Doi: 10.1007/s11423-022-10140-w](https://rdcu.be/c3r1l)

\*Starrett, E., Firetto, C., & **Jordan, M. E.** (2022). Navigating sources of teacher uncertainty: Exploring teachers’ collaborative discourse when learning a new instructional approach. *Classroom Discourse, 14(1), 45-68.* Doi: <https://www.tandfonline.com/doi/full/10.1080/19463014.2021.2013266>

**Jordan, M. E.,** Zuiker, S., & \*Bernier, J. (2021). The future is open and shapeable: Using solar speculative fiction to foster learner agency. *Literacy Research: Theory, Method, and Practice, 708(1).* [https://doi.org/10.1177/23813377211028263 [348](https://doi.org/10.1177/23813377211028263%20%5B348) downloads to date]

**Jordan, M. E.,** Zuiker, S., Wakefield, W., & DeLaRosa, M. (2021). Real work with real consequences: Enlisting community energy engineering as an approach to envisioning Engineering in Context. *Journal of Pre-College Engineering Education Research (J-PEER), 11*(1), Article 13. <https://doi.org/10.7771/2157-9288.1294>

Silvestri, K., **Jordan, M. E.** Paugh, P., Schallert, D., & McVee, M. (2021). Intersecting engineering and literacies: A review of the literature on communicative literacies in K-12 engineering education. *Journal of Pre-College Engineering Education Research (JPEER), 11(1), Article 1.* [*https://doi.org/10.7771/2157-9288.1250*](https://doi.org/10.7771/2157-9288.1250)

Henriksen, D., **Jordan, M.**, Zuiker, S., Foulger, T., & Mishra, P. (2020). *Essential tensions in facilitating design thinking: Collective* reflections. *Journal of Formative Design in Learning. Doi: 10.1007/s41686-020-00045-3*

Ricca, B. P., \*Bowers, N. & **Jordan, M. E.** (2019). Seeking emergence through temporal analysis of collaborative-group discourse: A complex-systems approach. *The Journal of Experimental Education,*Doi: [10.1080/00220973.2019.1628691](https://doi.org/10.1080/00220973.2019.1628691)

Zuiker, S. J., **Jordan, M.E**., and the \*Learning Landscapes Team. (2019). Inter-organizational design thinking in education: Joint work between learning sciences courses and a zoo education program. *Open Education Studies.* Doi: 10.1515/edu-2019-0001

**Jordan, M. E.,** \*Lorenz, K., \*Stylianou, M., & Kulinna, P. H. (2018).The role of teacher social capital in a comprehensive school health project. *Journal of Teaching in Physical Education, 37, 218-224.* Doi: 10.1123/jtpe.2017-0197

Duggan, M. A., Carlson, D, **Jordan, M. E**., \*Gaias, L, \*Abry, T., & \*Granger, K. “(2017). [Dear Diary”: A qualitative examination of the phases of first-year teaching](https://books.google.com/books?id=HnsoDwAAQBAJ&lpg=PA16&ots=5ulseJU2Bj&dq=%22mary%20anne%20duggan%22&lr&pg=PP1#v=onepage&q&f=false). *Teacher Education & Practice, 30(1), 16-37.*

Daniel, S. & **Jordan, M. E.** (2017).Effects of a heedful interrelating intervention on postsecondary collaborative teams. *Active Learning in Higher Education, 1*8, 3, 199-212. [Doi: 10.1177/1469787417715201](http://journals.sagepub.com/doi/pdf/10.1177/1469787417715201)

Vogler, J. S., Schallert, D. L., **Jordan, M. E.,** Song, K., Sanders, A., Z., Chang, Y., Lee, J., Park, P., & Yu, L. (2017). Life history of a topic in an online discussion: A complex systems theory perspective on how one message attracts class members to create meaning collaboratively. *International Journal of Computer-Supported Collaborative Learning (iCSCL)*12(2), 173–194. Doi: 10.1007/s11412-017-9255-9

\*[[1]](#footnote-1)Stewart, O. & **Jordan, M. E.** (2017). Some explanation here: A case study of learning opportunities and tensions in an informal science learning environment. *Instructional Science*, 45, 137–156. Doi: 10.1007/s11251-016-9396-7

Schallert, D. L. Song, K., **Jordan, M. E.,** Lee, S., Park, Y…Lee, J. (2016). Shifts in positioning, trajectories in thought communities, and “wobbly” identities in computer-mediated classroom discussions among professionals in training. *International Journal of Educational Research, 80,* 49-59. Doi: 10.1016/j.ijer.2016.08.008

**Jordan, M. E**. (2016). Teaching as designing: Preparing pre-service teachers for adaptive teaching. *Theory into Practice*, *55*(3), 197-206.

Zuiker, S. Anderson, K., **Jordan, M. E.** & \*Stewart, O. (2016). Complementary lenses: Using theories of situativity and complexity to understand collaborative learning as systems-level social activity. *Learning, Culture and Social Interaction, 9,* 80-94.

**Jordan, M. E.,** \*Lorenz, K., \*Stylianou, M., & Kulinna, P. H. (2016). Examining student social capital in a comprehensive school-based health intervention. *Journal of Classroom Interaction, 15*(2), 48-57.

**Jordan, M. E.** (2015). Extra! Extra! Read all about it: Interactive read-alouds of a dynamic text with real-time local information. *Elementary School Journal, 15*(3), 358-383. Doi:10.1086/680174

**Jordan, M. E.,** & Santori, D. (2015). Constancy and variability: Dialogic literacy events as sites for improvisation in two third grade classrooms. *Journal of Research in Childhood Education, 29*(2), 226-243. Doi:10.1080/02568543.2015.1008657

Jordan, M. E. (2015). Variation in students’ propensities for managing uncertainty: A study of fifth-graders engaged in collaborative academic tasks. *Learning and Individual Differences, 38,* 91-106. Doi:10.1016/j.lindif.2015.01.005

Daniel, S. & **Jordan, M. E**. (2015). Measuring heedful interrelating in collaborative academic tasks. *International Journal of School & Educational Psychology, 3*, 25-36. Doi:10.1080/21683603.2014.909342

Worthy, J., Maloch, B, Pursley, B., Hungerford-Kresser, H., Hampton, A., **Jordan, M. E**., & Semingson, P. (2015). What are the rest of the kids doing? An examination of literacy centers in two first-grade classrooms. *Language Arts, 92*(3), 173-186.

Beth, A., **Jordan, M. E.,** & Schallert, D. L., Reed, J. L. & Kim, M. (2015). Responsibility and generativity in online learning environments. *Interactive Learning Environments, 23(4), 471-484.* Doi: 10.1080/10494820.2013.788035

**Jordan, M. E.** & McDaniel, R. (2014). Managing uncertainty during collaborative problem solving in elementary school teams: The role of peer influence in robotics engineering activity. *Journal of the Learning Sciences, 23*(4), 490-536.

Doi: 10.1080/10508406.2014.896254

**Jordan, M. E.,** Cheng, A. J., & the D-Team (2014). “I guess my question is”: What is the co-occurrence of uncertainty and learning in computer-mediated discourse? *International Journal of Computer-Supported Collaborative Learning, 9*(4), 451-475. Doi:10.1007/s11412-014-9203-x

**Jordan, M. E.,** & Massad, M. (2014). Facilitating peer discourse to support third graders’ comprehension of the news. *Journal of Classroom Interaction, 49(2), 11-21.*

**Jordan, M. E.,** Kleinsasser, R. C., & Roe, M. F. (2014). Wicked problems: Inescapable wickedity. *Journal of Education for Teaching: International Research and Pedagogy, 40*(4), 415-430. Doi:10.1080/02607476.2014.929381

**Jordan, M. E**., Kleinsasser, R., & Roe, M. (2014). Cautionary tales: Teaching, accountability, and assessment. *Education Forum, 78(3),* 323-337. Doi:10.1080/00131725.2014.912371.

**Jordan, M. E.,** Kleinsasser, R. C., & Roe, M. F. (2013). Teaching and teacher education: Complexity redux. *Interchange, 44*(3-4), 275-289. Doi:10.1007/s10780-014-9212-8

Cheng, A. C., **Jordan, M. E.,** Schallert, D. L. & the D-Team (2013). Reconsidering online learning and assessment. *Computers & Education, 68,* 51-59. Doi:10.1016/j.compedu.2013.04.022

**Jordan, M. E.** & Babrow, A. S. (2013). Communication in creative collaborations: The challenges of uncertainty and desire related to task, identity, and relational goals. *Communication Education*, *62*(2), 105-126. Doi: 10.1080/03634523.2013.769612

Maloch, B., Worthy, J., Hampton, A., **Jordan, M. E**., Hungerford-Kresser, H., & Semingson, P. (2013). Portraits of practice: A cross-case analysis of two first grade teachers and their grouping practices. *Research in the Teaching of English*, *47*(3), 277-312.

Vogler, J., Schallert, D. L, Park, Y., Song, K., Chiang, Y. V., **Jordan, M. E**., Lee, S. Cheng, A., Lee, J., & Park, J. H. & Sanders, A. J. Z. (2013). A microgenetic analysis of classroom discussion practices: How literacy processes intermingle in the negotiation of meaning in an online discussion. *Journal of Literacy Research,* *45,* 211-239. Doi:10.1177/1086296X13499846

**Jordan, M. E.**, Schallert, D. L., Park, Y., Lee, S. A., Chiang, Y. V., Cheng, A. C... Kim, T. (2012). Expressing uncertainty in computer-mediated discourse: Language as a marker of intellectual work. *Discourse Processes, 49*(8), 660-692. Doi:10.1080/0163853X.2012.722851

Leykum, L. K., Palmer, R., Lanham, H. J., **Jordan, M. E.,** Noel, P. H. & Parchman, M. L. (2011). Reciprocal learning and chronic care model implementation in primary care: Results from a new scale of learning in primary care settings. *BMC Health Services Research, 11*, 44-52. Available at <http://www.biomedcentral.com/1472-6963/11/44>

Lee, S., Schallert, D., Song, K., Park, Y., Chiang, Y., Vogler, J., **Jordan, M. E**., Lee, J., Cheng, A., Sanders, A. & Park, J. (2011). Resistance phenomena in collaborative online discourse. *Yearbook of the Literacy Research Association, 60,* 370-388.

**Jordan, M. E.** (2010). Interpreting embodied mathematics using network theory: Implications for mathematics education. *Complicity, 7*(1), 70-76.

**Jordan M. E.,** & Daniel, S. (2010). Heedful interrelating in the academic discourse of collaborative groups. *Journal of Classroom Interaction, 45*(2), 4-19.

**Jordan**, **M. E.,** McDaniel, R. R., Anderson, R., & Lanham, H. J. (2010). Implications of complex adaptive systems theory for interpreting research about health care organizations*. Journal of Evaluation in Clinical Practice, 16,* 228–231. Doi: 10.1111/j.1365-2753.2009.01359.x

**Jordan, M. E.**, & Massad, M. (2010). Peer-to-peer talk about newspaper articles: Supporting knowledge and comprehension of an informational genre in a third-grade classroom. *Yearbook of the National Reading Conference, 59*, 75-89.

**Jordan, M. E.** (2010). Collaborative robotics design projects: Managing uncertainty in multimodal literacy practice. *Yearbook of the National Reading Conference, 59*, 260-275.

**Jordan, M. E**., Lanham, H. J., Crabtree, B. F., Nutting, P. A., Miller, W. L., Stange, K. C., & McDaniel, R. R. Jr. (2009). The role of conversation in health care interventions: Enabling sensemaking and learning. *Implementation Science, 4*(15), 1-13*.* doi:10.1186/1748-5908-4-15. *Accessed at* [*http://www.implementationscience.com/content/4/1/15*](http://www.implementationscience.com/content/4/1/15)

Schallert, D. L., Chiang, Y. V., Park, Y., **Jordan, M. E**., Lee, H., Cheng, A. J., Chu, H.

R., Lee, S., Kim, T., & Song, K. (2009).Being polite while fulfilling different discourse functions in online classroom discussion. *Computers & Education, 53, 713-725.*

**Jordan, M. E.,** Schallert, D., Cheng, A., Park, Y., Lee, H., Chen, Y., Yang, M. Chu, R., & Chang, Y. (2007). Seeking self-organization in classroom computer-mediated discussion through a complex adaptive systems lens. *Yearbook of the National Reading Conference, 56,* 39-53.

Yang, M., Chen, Y., Kim, M., Chang, Y., Cheng, A., Park, Y., Bogard, T., & **Jordan, M. E.** (2006). Facilitating or limiting? The role of politeness in how students participate in an online classroom discussion. *Yearbook of the National Reading Conference, 55*, 341-356.

McDaniel, R. R., **Jordan, M. E.,** & Fleeman, B. (2003). Surprise, surprise, surprise: A complexity science view of the unexpected. *Health Care Management Review*, *28*, 266-278.

**Walls[[2]](#footnote-2), M. E.,** & McDaniel, R. R. (1999). Mergers and acquisitions in professional organizations: A complex adaptive systems approach*. Seminar for Nurse Managers*, *7*, 117-124.

McDaniel, R.R., & **Walls, M**. **E.** (1998). Professional organizations stuck in the middle: A complex adaptive systems approach to achieving organizational turnaround in adverse situations, *Advances in Applied Business Strategy*, *5,* 131-152.

McDaniel, R.R., & **Walls, M**. **E.** (1997). Diversity as a management strategy for organizations: A view through the lenses of chaos and quantum theories. *Journal of Management Inquiry*, 6(4), 363-375.

**ACADEMIC PUBLICATIONS: Peer-Reviewed Proceedings**

Howard, I. & Jordan, M. (under review). Fostering youth identity development through critical pedagogical practices and agentive action in sustainability learning. Submitted to the International Society of the Learning Sciences (ISLS) Conference, June 13–17, 2023, Montreal, Canada.

Rebekah Jongewaard, Michelle Jordan, Steven Zuiker and Carlos Meza-Torres (under review). Expansive framing for citizen science: Use of a facilitated online platform to connect current and future teacher practices in STEM. Submitted to the International Society of the Learning Sciences (ISLS) Conference, June 13–17, 2023, Montreal, Canada.

Jongchan Park, Emily Starrett, Carlos Meza-Torres, Ying-Chih Chen & Jordan, M. (under review). Measuring scientific uncertainty management in science classes. Submitted to the International Society of the Learning Sciences (ISLS) Conference, June 13–17, 2023, Montreal, Canada.

Bowden, S., Cordon, J., Dykes, M., Hernandez, M., Jordan, M., Killam, A., Martinez Castillo, J., Park, A., Pita, A., Robledo, M. & Zuiker, S. (2022). AgriPV Citizen Science Lab: A Collaborative Model for Engineers, Youth Scholars and Communities. *Proceedings of the 49th Photovoltaics Specialists Conference,*Philadelphia, PA: IEEE.  (Note: authors in alphabetical order, all contributed equally)

Bowden, S., Cordon, J, Dykes, M., Hernandez, M., Jordan, M., Killam., A, Castillo, J. M., Park, A., Pita, A., Robledo, M., & Zuiker, S. (2022). AgriPV Citizen Science Lab: A Collaborative Model for Engineers, Youth Scholars and Communities. [2022 IEEE 49th Photovoltaics Specialists Conference (PVSC)](https://ieeexplore.ieee.org/xpl/conhome/9938432/proceeding). 05-10 June 2022, Philadelphia, PA, USA, IEEE. **DOI:**[10.1109/PVSC48317.2022.9938961](https://doi.org/10.1109/PVSC48317.2022.9938961)

Park, J., Starrett, E., Chen, Y.-C., Jordan, M. (2022) Facilitating productive struggle in science education: The possible benefits of managing scientific uncertainty during sensemaking. In Chinn, C., Tan, E., Chan, C., & Kali, Y. (Eds.), *Proceedings of the 16th International Conference of the Learning Sciences – ICLS 2022.* (pp. 1117–1120). Hiroshima, Japan: International Society of the Learning Sciences.

Jongewaard, R., & Jordan, M. (2022). Real Work with Real Consequences in an evolving classroom context: Consequential and Connected STEM Learning. Proceedings of the International Society of the Learning Sciences (ISLS) Conference.

Bowden, S., Cordon, J., Dykes, M., Hernandez, M., Jordan, M., Killam, J., Martinez Castillo, J., Park, A., Pita, A., Robledo, M., & Zuiker, S. (2022). AgriPV Citizen Science Lab: A Collaborative Model for Engineers, Youth Scholars and Communities. Proceedings of the 49th IEEE PVSC Conference, Philadelphia, PA.

Melo-Lyra, M., Zhao, Z., Jordan, M., Savenye, W., O'Donnell, M., & Roehrig, G. (2022). [Developing common qualitative tools for cross ERC education program evaluation](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=7NzXUR0AAAAJ&sortby=pubdate&citation_for_view=7NzXUR0AAAAJ:LPZeul_q3PIC). 2022 ASEE Annual Conference & Exposition

Zhao, Z., Carberry, A., Jordan, M., Larson, J., Savenye, W., Eustice, K., Godwin, A., Roehrig, G., Barr, C., Farnsworth, K., Argenti, C., O’Donnell, M., & Barnard, W. (2021). [NSF Engineering Research Centers unite: Developing and testing a suite of instruments to enhance overall education program evaluation](https://peer.asee.org/design-and-development-nsf-engineering-research-centers-unite-developing-and-testing-a-suite-of-instruments-to-enhance-overall-education-program-evaluation). American Society for Engineering Education Virtual Conference and Exposition.

Zhao, Z., Carberry, A. R., Cook-Davis, A., Larson, J., Jordan, M., Barnard, W., O’Donnell, M., & Savenye, W. (2020). [Streamlining the process of evaluating educational and diversity impacts of Engineering Research Centers through a common assessment instrument](https://peer.asee.org/streamlining-the-process-of-evaluating-the-education-and-diversity-impacts-across-engineering-research-centers). American Society for Engineering Education Virtual Conference & Exposition.

Zhao, Z., Barnard, W., Carberry, A., Cook-Davis, A., Jordan, M., Larson, J., & O’Donnell, M., Savenye, W. (2019). Creating common tools to evaluate education and diversity impacts across three engineering research centers. ASEE/IEEE Frontiers in Education Conference, Cincinnati, OH, October 16-19.

Bowden, S., **Jordan, M.,** Killam, Ankrum, J., Anderson, R., Hernandez, D., McBeth, A., McCall, E., Piendl, B., Ramos-Molina, M., Smith, T., Tijerina, L., Adams, G., and Cortez, A. (2021). Agrivoltaics Citizen Science: A model for collaboration between Engineers and K-12 Schools. *Proceedings of the 2021 IEEE PVSC Conference, virtual.*

Zhao, Z., Carberry, A., Larson, J., **Jordan, M.,** Savenye, W., Barnard, K. (2021). Design and Development: NSF Engineering Research Centers Unite: Developing and Testing a Suite of Instruments to Enhance Overall Education Program Evaluation. *Proceedings of the 2021 American Society for Engineering Education Annual Conference & Exposition, virtual.*

**Jordan, M. E.,** Honsberg, C., Schmidt, D., & Honsberg, I. (2020). Using geographical information systems (GIS) to foster youth learning in photovoltaics. *Proceedings of the* *2020 IEEE 47th Photovoltaic Specialists Conference (PVSC)*. eCF Paper Id: 2020-859

Zhao, Z., Carberry, A. R., Cook-Davis, A., Larson, J. S., **Jordan, M. E.,** Barnard, W. M., O’Donnell, M., & Savenye, W. C. (2020). Streamlining the process of evaluating the education and diversity impacts across engineering research centers. *Proceedings of the American Society for Engineering Education Annual Conference & Exposition*, Montreal, Quebec, June 21-24, 2020.

Zhao, Z., Carberry, A., Barnard, W., Cook-Davis, A., **Jordan, M**., Larson, J., O’Connell, M., & Savenye, W. (2019). Creating common instruments to evaluate education and diversity impacts across three engineering research centers​. *Proceedings of the Annual meeting of the ASEE/IEEE Frontiers in Education Conference,*Cincinnati, OH.

Husein, S., Saive, R., Karas, J., **Jordan, M.,** & Bertoni, M. (2019). Podcasts: An under-utilized form of science communication. *PVSC IEEE proceedings 46th,* Chicago, Il.

Evans, M. & **Jordan, M. E.** (2019). How writing for the public provides affordances and constraints in enacting expert identity for undergraduate engineering students. *Proceedings of the 2019 American Society for Engineering Education Conference (ASEE),* Tampa, FL.

Bowers, N., **Jordan, M.,** Fisher, K., & Holman, Z, & M. Evans (2019). Fostering belonging through an undergraduate summer Internship: A Community of Practice model for engineering research education. *Proceedings of the 2019 American Society for Engineering Education Conference (ASEE),* Paper ID #27554, Tampa, FL.

**Jordan, M.,** Wakefield, W., DeLaRosa, M., Miller, C., & Alende, C. (2019). Building youth’s socio-technical engineering knowledge through engagement in a community solar energy project. *Proceedings of the 2019 American Society for Engineering Education Conference (ASEE),* Tampa, FL.

**Jordan, M.,** Johnson, M., Wolf, A., DeLeon, X. A., Ramos, M., Morrissey, M., Johnson, A., Currier, S. R., & D’Amico, L. (2019). Developing photovoltaics curriculum for middle and upper grades: Using solar to engineer our energy future *(P12 Resource Exchange). Proceedings of the American Society of Engineering Education Conference (ASEE) (Paper ID #25804), Tampa, FL.* [[view paper]](https://www.asee.org/public/conferences/140/papers/25804/view)

Zengilowski, A., Schallert, D. L., & **the D-Team**\*. (2018). Students discussing ideas in online spaces: Research-infused recommendations for making computer-mediated discussions productive for learning. *Proceedings of the 2018 International Conference on Teaching, Assessment, and Learning for Engineering (TALE)*, 243-250. [\*I was a member of the D-team and am an author on this publication]

\*Bruchok, C., Ricca, B., **Jordan, M.E.,** \*Wakefield, W., & \*Bowers, N. (2018). *Relating social network structure to uncertainty and social interaction in an engineering design challenge.* [Proceedings of the 2018 International Conference of the Learning Sciences](https://drive.google.com/drive/folders/1wTHiZuSn8Wn84Q1WpAL-ihQ6SvaDWP17) (pp. 1725-1726), London, England.

\*Wakefield, W., **Jordan, M. E**., & DeLaRosa, M. (2018). “We were on the same level”: Young engineering researchers taking up agentive positions in a diverse learning community.[*Proceedings of the 2018 International Conference of the Learning Sciences*](https://drive.google.com/drive/folders/1wTHiZuSn8Wn84Q1WpAL-ihQ6SvaDWP17) (pp. 887-894), London, England.

\*Brown, D., & **Jordan, M.** (2018). Influence of perceptions of past collaborative experiences on quality of pre-service collaboration and outcomes*.* [*Proceedings of the 2018 International Conference of the Learning Sciences*](https://drive.google.com/drive/folders/1wTHiZuSn8Wn84Q1WpAL-ihQ6SvaDWP17)(pp. 1633-1634), London, England.

**Jordan, M. E**., & DeLaRosa, M. (2017). Investigating peer observers' perspectives on middle school engineering designers' communication challenges*.* *Proceedings of the 2017 American Society for Engineering Education Conference,* Paper ID #20148*.*  Columbus, OH.

\*Elwood, K., Savenye, W., **Jordan, M. E.,** Larson, J., Zapata, C. (2016). Design thinking: A new construct for educators. *Proceedings of the Association for Educational Communication & Technology*, Las Vegas, NV, Vol. 1, 43-52.

**Jordan, M. E.** & \*Collins, J. (2016). Sketching a pathway through design worlds: Multimodal communication in a fifth-grade collaborative engineering project. *Proceedings of the International Conference on the Learning Sciences 2016.* Singapore.

**Jordan, M. E.** & \*Villanueva, T. M. (2015). Understanding youth collaboration: How learners experience the design process in a collaborative context. *2015 Proceedings of the American Society for Engineering Education Conference*, Seattle, WA.

**Jordan, M. E.,** \*DelaRosa, M., & \*Gonzalez, F. (2015*).* Examining middle school students’ perceptions of communication challenges in collaborative engineering design learning*. Proceedings of the American Society for Engineering Education Conference,* Seattle, WA.

**Jordan, M. E.** (2014). Influence of public design critiques on fifth graders collaborative engineering design work. *Proceedings of the 2014 International Conference of the learning Sciences (pp. 1166-1170).* Boulder, CO.

**Jordan, M. E.** (2014). How design critique processes influence fifth graders’ peer interaction in collaborative engineering projects. *Proceedings of the 2014 American Engineering Education Association Conference (Paper ID #10605).* Indianapolis, IN.

**Jordan, M. E**. & Schallert, D. L. (2013). Learning to manage uncertainty in collaborative engineering design projects: Lessons from a fifth-grade class. *Proceedings of the 2013 Frontiers in Education Conference* (pp. 1951-1953). Oklahoma City, OK.

**Jordan, M. E.** & Snyder, J. (2013). Middle school students’ conceptions of engineering. *Proceedings of the 2013 Frontiers in Education Conference* (pp. 1945-1950). Oklahoma City, OK.

**Jordan, M. E.** (2012).Variation in fifth grade students’ propensities for managing uncertainty during collaborative engineering projects. *Proceedings of the 10th International Conference of the Learning Sciences* (pp. 421-425). Sydney, Australia: International Society of the Learning Sciences.

**ACADEMIC PUBLICATIONS: Book Chapters and Book Reviews**

Jordan, M. E., lockmiller, c., & Zuiker, S. (accepted). Centering utopia: Fostering youth climate change education by exploring and envisioning hopeful futures. In R. Beach & Smith, B. E. (Eds.) Youth media creation on the climate change crisis in the ELA classroom: Hear our voice (pp. TBD) New York, NY: Routledge.

Evans, T., \*Bartlett, K., Jordan, M. E., & Zuiker, S. (accepted). Addressing climate change and sustainable energy futures through creative music engagement. In R. Beach & Smith, B. E. (Eds.) Youth media creation on the climate change crisis in the ELA classroom: Hear our voices (pp. TBD) New York, NY: Routledge.

Jordan, M.E. (2022). Answerability and communicative virtuosity in making democratic worlds: An exploration of one fifth-grade teachers’ engineering communication in service of dialogic citizenship. In A. Wilson-Lopez, E. Tucker-Raymond, Esquinca, A., & Mejia, J. A. (Eds). [*The literacies of design: Studies of equity and imagination in engineering and making*](https://www.amazon.com/Literacies-Design-Studies-Imagination-Engineering/dp/1612497446) *(pp. 120-136).* Purdue University Press. *[*[*https://www.google.com/books/edition/Literacies\_of\_Design/7ChDEAAAQBAJ?hl=en&gbpv=1*](https://www.google.com/books/edition/Literacies_of_Design/7ChDEAAAQBAJ?hl=en&gbpv=1)*]*

\*Ayala, S. & Jordan, M. E. (Eds.) (2018). [QE*SST solar energy outreach handbook*](https://qesst.org/wp-content/uploads/2018/05/Solar_Handbook.pdf)*.* ISBN 978-0-692-98656-1.

Lanham, H. J., Jordan, M. E. & McDaniel, R. R. (2016). Sustainable development: Complexity, balance, and a critique of rational planning. In S. A. Moore (Ed.), *Pragmatic Sustainability: Dispositions for critical adaptation, second edition.* New York, NY: Routledge.

Jordan, M. E. (2016). Aestheticizing a course on educational psychology. In D. Blumenfeld-Jones (Ed.), *Teacher education for the 21st Century: Creativity, aesthetics, and ethics in preparing teachers for our future.* Charlotte, NC:  Information Age Publishing, Inc. Jordan, M. E. (2014).

Jordan, M. S. (2015). [A review of Melanie Mitchell’s MOOC “Introduction to Complexity.”](http://ejournals.library.ualberta.ca/index.php/complicity/article/view/22980/17104) *Complicity: An International Journal of Complexity in Education, 11*(2), 108-120.

Jordan, M. E. & McDaniel, R. R. Jr. (2014). Helping students respond creatively to a complex world. In B. Sriraman & D. Ambrose (Eds.), *A critique of creativity and complexity: Deconstructing clichés.* (pp. 249-268).Rotterdam, The Netherlands: Sense.

Jordan, M. E. (2014). [Interweaving the digital and physical worlds in collaborative project-based learning experiences.](http://www.igi-global.com/chapter/interweaving-the-digital-and-physical-worlds-in-collaborative-project-based-learning-experiences/94181) In D. J. Loveless, B. Griffith, M. Berci, E. Ortlieb, & P. Sullivan (Eds.), *Academic knowledge construction and multimodal curriculum development* (pp. 266-284).Hershey, PA: IGI Global. doi: 10.4018/978-1-4666-4797-8.ch017

Carlson, D. L., & Jordan, M. E. (2013). The calling of practitioner-researchers in education.In, Perry, J. A., & D. L. Carlson (Eds.), *In their own words: A journey to the stewardship of the practice of education* (pp.129-138). Charlotte, North Carolina: Information Age Press.

|  |
| --- |
| Stafford, K., & Jordan, M. E. (2013). A review of “Inquiry: A districtwide approach to staff and student learning.” Thousand Oaks, CA: Corwin Press. *Journal of Educational Research, 106*(1), 101-109. doi: 10.1080/00220671.2012.712492 Jordan, M. E. (2011). A review of “Research and practice in education: Building alliances, bridging the divide.” *Journal of Educational Research, 104*(5), 371-372. doi: 10.1080/00220671.2011.575194. Acee, T. W., Weinstein, C. E., Jordan, M. E., Dearman, J. K. & Fong, C. (2011). Self-regulated learning: Helping students manage their own learning. In K. Agee & R. Hodges (Eds.), *Handbook for training peer tutors and mentors*. Mason, OH: Cengage Learning.  |
| McDaniel, R., & Jordan, M. E. (2008). Complexity and postmodern theory. In J. J. Johnson (Ed.), *Healthcare organizations: Theory, behavior, and development* (pp. 63-84). Boston, MA: Jones & Bartlett Publishers.  |  |
| Jordan, M. E. (2005). Ideas from the open discussion. In R. R. McDaniel, & D. J. Driebe, (Eds.), *Uncertainty and surprise in complex systems* (pp. 183-2000). New York: Springer.**NON-REFERREED PUBLICATIONS**  |  |

Jordan, M. E. & Rowlands, T. (2021). Strategic plan for Workforce Development, pre-college outreach and university education. In C. Honsberg (Ed.) *QESST Annual Report, 2021*.

Jordan, M. E. & Rowlands, T. (2020). Strategic plan for Workforce Development, pre-college outreach and university education. In C. Honsberg (Ed.) *QESST Annual Report*. Prepared for the NSF Site Visit Team, August, 2020.

Jordan, M. E. & Rowlands, T. (2019). Strategic plan for Workforce Development, pre-college outreach and university education. In C. Honsberg (Ed.) *QESST Annual Report*. Prepared for the NSF Site Visit Team, May, 2019.

Castek, J., Schira Hagerman, M., and Woodard, R. (Eds). (2019). *Principles for equity-centered design of STEAM learning-through-making*. Tucson: University of Arizona. Retrieved from <https://circlcenter.org/events/synthesis-design-workshops> [contributor]

Jordan, M. E. & Rowlands, T. (2018). Strategic plan for workforce development, pre-college outreach and university education. In C. Honsberg (Ed.) *QESST Annual Report*. Prepared for the NSF Site Visit Team, May, 2018.

Jordan, M. E. & Rowlands, T. (2017). Strategic plan for workforce development, pre-college outreach and university education. In C. Honsberg (Ed.) *QESST Annual Report*. Prepared for the NSF Site Visit Team, April, 2017.

Jordan, M. E. & Rowlands, T. (2016). Strategic plan for workforce development, pre-college outreach and university education. In C. Honsberg (Ed.) *QESST Annual Report*. Prepared for the NSF Site Visit Team, March, 2016.

Jordan, M. (2016). [*Managing uncertainty in wildland firefighting*.](https://www.youtube.com/watch?v=eKiVm_dKRi8&feature=em-share_video_in_list_user&list=PLDbVg2KwN4v32FUZGpvgnmhRCzaYeDCme) Video created for the U.S.

Forest Service Wildland Fire Learning Center.

**Jordan, M. E.** & Babrow, A. (2013). [Living up to the promise of brainstorming](http://www.natcom.org/CommCurrentsArticle.aspx?id=3847). *Communication Currents, 8*(3), June 2013. [invited translation of Jordan & Babrow, 2013]

**FUNDED GRANTS**

Honsberg, C., Potter, K., Barron-Gafford, G., Jordan, M., & Zuiker, S. (2021-2024). *RET Site: Collaborative Research: Sonoran Photovoltaics Laboratory: Energizing the STEM Pipeline through Citizen Science.* (NSF EEC AWD00036248). Co-PI. $392,999.00

Jordan, M. (2021). *MLFTC & QESST Engineering Research Center Garden-Based Learning Project.* Rob and Melani Walton Sustainability Teachers’ Academy. PI. $4,630

Chen, Y-C & Jordan, M. (2021-2024). [*Managing Uncertainty for Productive Struggle: Exploring Teacher Development for Managing Students' Epistemic Uncertainty as a Pedagogical Resource in Project-Based Learning*.](https://cadrek12.org/projects/managing-uncertainty-productive-struggle-exploring-teacher-development-managing-students) (NSF DRK12 -02100879). Co-PI. $442,293

Honsberg, C. Jordan, M., Zuiker, S. J., Bowden, S., & Miller, C. (2020, deferred to 2021-2022). *REM: Urban Energy Engineering: Research Experiences and Mentorship for High School Scholars Leading Community Solar Energy Innovation*. National Science Foundation Center Supplement. Co-PI. $96,056

Carberry, A., Larson, J., Jordan, M. & Savenye, W. (2020-2023). *Design and Development: NSF Engineering Research Centers Unite: Developing and Testing a Suite of Instruments to Enhance Overall Education Program Evaluation* (NSF - EEC-202375). Co-PI. $855,971.

Jordan, M., & Jordan, S. (2020, deferred to 2021-2022). NSF ERC Supplemental. *Culturally Responsive Teacher Professional Development for Teachers on Navajo Nation. $50,000.00*

Jordan, M. (2020*). Knowledge Exchange for Community Resilience Fellowship Award*.$15,000.00

Weinberg. A., Zuiker, S., Jordan, M., & Walters, M. (2020). *Garden-Based Education Learning Community (GBELC)*. $980.00

Jordan, M., Zuiker, S., & Miller, C. (2019, extended through August 2023). Spencer Foundation. *Co-Developing a Community Energy Engineering After-School Program with Latinx Youth*. $50,000.00. PI

Honsberg & Jordan, M. (2019). *Supporting Agrivoltaics Citizen Science*. IEEE SIGHT Group. Co-PI, $14,500.00

Jordan, M., Tobias, E., Zuiker, S. J., Wylie, R., & Miller, C. (2019). *The Weight of Light: Reasoning and Imagining with Present and Possible Energy Systems.* Herberger Institute for Design and the Arts and Mary Lou Fulton Teachers College, Arizona State University. $10,000.00 PI

Jordan, M., Zuiker, S. J., & Miller, C. (2018). *Teacher-Student Teams for Community-based Energy Engineering Projects.* Mary Lou Fulton Teachers College, Arizona State University. $10,273.00. PI

Jordan, M. & Honsberg, C. (2019). NSF ERC Supplemental. *PVSC high school solar energy engineering virtual mentoring project.* $29,000.00

Larson, J., Carberry, A., Jordan, M., Savenye, W., O’Donnel, M., (2018). NSF Supplemental. *ASU Cross-ERC Consortium Evaluation Project*. $160,511.00

Jordan, M. & Honsberg, C. (2018).NSF Supplemental. *QESST virtual mentoring project: Graduate scholars mentor high school teams.* $25,000.00.

McKelvey, M., Howell, A., & Jordan, M. (2018). Grant Ed Foundation. *Expanding and Exploring the Impact of Science is Fun*. $2,560.00

2018 MLFTC research mini-grant for transcription costs for transcripts for a project on engineering uncertainty. $450.00

2018 MLFTC research mini-grant for 360-recorder to conduct observations of high school collaborative designers. $376.00

2016 Fulton Challenge Scholar Award. *Building learning experiences with design thinking, creativity, and entrepreneurship: A study of 3-Day Startup*. Co-PI. $15,000.00

2015 Fulton Challenge Scholar Award. *Teachers as designers: Implementing collaborative project-based design projects to facilitate pre-service teachers’ design thinking and designerly identities*. PI. $15,000.00

2013 Mary Lou Fulton Teachers College. *Exploring the influence of public design critique on peer interaction and uncertainty management during collaborative work sessions*. PI. $5,000.00

**INTERNATIONAL CONFERENCE PRESENTATIONS**

Ricca, B., & Jordan, M. (2021). *New Measures of collaborative group functioning using a complex systems approach.* Conference on Complex Systems: Education Strand. France 10/26/2022

Ricca, B. & Jordan, M. (2021, October). *Novel measures of small collaborative group functioning.* Paper presented to the 2021 Scholarly Consortium of Innovation in Psychology in Education conference. Virtual meeting.

Chen, Y-C., Jordan, M., Park, Jongchan, & Starret, E. (September, 2022). Productive Struggle: Managing scientific uncertainty in sensemaking in argumentation. Paper presented at the EARLI conference, 14-16 September 20-26, 2022, Utrecht (NLD).

Zengilowski, A., Schallert, D. L., & the D-Team[[3]](#footnote-3). (2018, December). *Students discussing ideas in online spaces: Research-infused recommendations for making computer-mediated discussions productive for learning.* Paper presented at the annual meeting of Technology, Assessment, and Learning for Engineering, Institute of Electrical and Electronics Engineers, Wollongong, Australia.

\*Bruchok, C., Ricca, B., **Jordan, M. E.,** \*Wakefield, W., & \*Bowers, N. (2018). *Garnering social support in a diverse cohort to manage uncertainty during a summer engineering research program.* Poster presented to the 2018 ICLS Conference.

\*Wakefield, W., **Jordan, M. E**., & DeLaRosa, M. (2018). “*We were on the same level”: Young engineering researchers taking up agentive positions in a diverse learning community.* Paper presented to the International Conference of the Learning Sciences, London England.

\*Brown, D., & **Jordan, M.** (2018). *Influence of perceptions of past collaborative experiences on quality of pre-service collaboration and outcomes.* Poster presented to the 2018 ICLS Conference.

**Jordan, M. E.** & \*Collins, J. (2016, June). Sketching a path*way through design worlds: Multimodal communication in a fifth-grade collaborative engineering project.* Presented to the International Conference on the Learning Sciences 2016. Singapore.

Ricca, B. & **Jordan, M. E.** (2016, September). *Temporal network analysis of small group discourse.* International Conference on Complexity Science, Amsterdam, September 19-22.

**Jordan, M. E.** (2014, June). *How fifth grade engineering designers take up teacher and peer critique.* Paper presented to the International Conference of the Learning Sciences, Boulder, CO.

**Jordan, M. E**. & Schallert, D. L. (2013, October). *Learning to manage uncertainty in collaborative engineering design projects*. Frontiers in Education Conference, October 2013, Oklahoma City, OK.

**Jordan, M. E.** & Snyder, J. (2013, October). *Middle school students’ conceptions of engineering.* Frontiers in Education Conference, October 2013, Oklahoma City, OK.

Cheng, A., **Jordan, M. E.,** & the D-Team. (2013, August). *Assessing students in online/hybrid courses.* Taiwan Education Research Association (TERA) Conference, National Sun Yat-sen University, Kaohsiung, Taiwan.

**Jordan, M.** E. (2012, July). *Variation in fifth grade students’ propensities for managing uncertainty in collaborative engineering projects*. Paper presented at the International Conference of the Learning Sciences, Sydney, Australia.

**Jordan, M.** **E.** & McDaniel, R. (2012, July). *Peer interaction and uncertainty management.* Poster presented at the ICLS Early Career Workshop, Sydney, Australia.

Cheng, A. C. & **the D-Team**. (2011, December). *International students in American online/hybrid courses: Some cultural and academic discourse considerations*. Paper presented at The World Education Research Association, Kaohsiung, Taiwan.

Parchman, M., Lanham, H. J., **Jordan, M. E.,** Arar, N., & Bowers, K. (2009, June). *Learning in primary care teams and implementation of the chronic care model.* Paper presented to the 2009 WONCA Europe conference - the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians, Basel, Switzerland.

**Jordan, M. E.,** & McDaniel, R. (2005, November). *Designing curriculum: Changing students’ stances toward the unexpected*. Paper presented to the International Complexity Science and Educational Research Conference, Roberts, LA.

Weinstein, C. E. & **the CCLR Team**. (2007, July). *The community college longitudinal Retention (CCLR) study: Phase one*. Concurrent session presented to the 20th International Conference on the First-Year Experience, Hawaii’s Big Island, HI.

**NATIONAL INVITED PRESENTATIONS**

Jongewaard, R., Weinberg, A. E., & Jordan, M. E. (2023). *Preservice teachers’ visions for action-oriented pedagogies.* To be presented at the American Education Research Association Annual Meeting.

Zengilowski, A., Jordan, M., & Schallert, D. (2022). *Emerging engineers’ comprehension processes during learning: Sources and strategies associated with experiences of cognitive disequilibrium.* Paper presented to the Literacy Research Association Conference, Phoenix Arizona.

Jordan, M., Zuiker, S., Howard, I., & McCoy Chiryaa, E. (2022). *Youth Speculative Fiction: Locating energy futures at the intersections of geographical, environmental, and social space. Presented for the symposium,* Place-Resonant Explorations of Climate Justice Literacies. Literacy Research Association, Phoenix, Arizona.

Jordan, M. & Zuiker, S. (2022). *Youth speculative fiction: Locating energy futures at the intersections of geographical, environmental, and social space*. Literacy Research Association, Phoenix, Arizona. [Symposium selected as a highlighted session]

Weinberg, A. E., Jongewaard, R., & Jordan, M. E. (2021, October). *Action-oriented pedagogies for sustainability education.* Presented at the Scholarly Consortium for Innovative Psychology in Education Annual Conference.

Chen, Y.-C., Jordan, M. Park, J., & Starrett, E. (2022). *Productive Struggle: Managing scientific uncertainty for sensemaking in argumentation.* Paper presented at European Association for Research on Learning and Instruction (EARLI) SIG20 (Inquiry learning)-26 (Argumentation, Dialogue, and Reasoning) meeting, Utrecht, Netherlands.

Chen, Y.-C., Park, J., Starrett, E., & Jordan, M. (2022). *Managing scientific uncertainty for conceptual change: a theoretical framework for productive struggle in sense making*. Paper presented at European Association for Research on Learning and Instruction (EARLI) SIG3 (Conceptual Change)12th International Conference on Conceptual Change, Zwolle, Netherlands.

Park, J., Starrett, E., Chen, Y.-C., & Jordan, M. (2022). *Facilitating productive struggle in science education: The possible benefits of managing scientific uncertainty during sensemaking*. Paper presented at 15th International Conference of the Learning Sciences (ICLS) 2022, Hiroshima, Japan.

Starrett, E., Park, J., Chen, Y.-C., & Jordan, M. (April 2023). *Exploring science teachers’ perceptions and management of students’ desirable uncertainty.* To be presented to the annual meeting of the American Educational Research Association (AERA), Chicago, IL.

Park, J., Starrett, E., Chen, Y.-C., & Jordan, M. (April, 2023). Theoretical framework for understanding student experiences of productive struggle: Types, sources, and desirability of uncertainties. Submitted to the annual meeting of the American Educational Research Association (AERA), Chicago, IL.

Zuiker, S. J., van Geffen\*, B., & **Jordan, M.** (2022, November). *Developing pragmatic imagination through science education.* Paper presented at the 4th International Conference on Anticipation, Tempe, AZ.

\*\*Ankrum, J., & **Jordan, M.** (2022, November). *Cultivating Middle School STEAM Students’ Agrivoltaics Journey.* Presentation to the LRA Study Session: Literacy Research Association Conference Study Session:  Science Literacies, Sustainability, and Climate Justice. November 30, 2022, Phoenix, AZ.

Bowden, S., \*Cordon, J., \*Dykes, M., \*Hernandez, M., **Jordan, M.,** \*Killam, J., \*Martinez Castillo, J., \*Park, A., \*Pita, A., \*Robledo, M., & Zuiker, S. (June, 2022). *AgriPV Citizen Science Lab: A collaborative model for engineers, youth scholars and communities.* Paper presented to the IEEE PVSC Conference, Philadelphia, Pennsylvania.

Zuiker, S. & **Jordan, M.** (April, 2022). Understanding Community-Oriented STEM Learning as Local Value Creation. Presented to the AERA Conference, San Diego, CA, April 2022.

**Jordan, M.** & Lockmiller, C. (December, 2021). Sustainability and Solidarity:  Designing Ecological Futures through Literacy Networks. Presentation to the LRA Study Session: Literacy Research Association Conference Study Session:  Science Literacies, Sustainability, and Climate Justice. December 2nd, Virtual recorded presentation.

McCoy Chriyaa, E., **Jordan, M.** & Zuiker, S. (2021). Locating agency in middle grade learners' located futures narratives. Poster presented to the [Scholarly Consortium of Innovation in Psychology in Education (SCIPIE)](https://education.asu.edu/scipie2021), virtual.

Weinberg, A., Jongewaard, R., & **Jordan, M.** (2021). Social Justice in the Classroom: Exploring support for K-12 teachers use of action-oriented pedagogies. Workshop presented to the [Scholarly Consortium of Innovation in Psychology in Education (SCIPIE)](https://education.asu.edu/scipie2021), virtual.

Ricca, B., & **Jordan, M.** (2021). New Measures of Collaborative Group Functioning Using a Complex Systems Approach. Paper presented to the [Scholarly Consortium of Innovation in Psychology in Education (SCIPIE)](https://education.asu.edu/scipie2021), October, virtual.

Firetto, C., Starrett, E., & **Jordan, M.** (2021). *Embedding authentic discussions in professional development to promote science teachers' discussion competency and enactment*. Paper to be presented at the American Educational Research Association Conference, April 2021, virtual.

**Jordan, M. E**. & \*\*DeLaRosa, M. (2021). Constructing and receiving peer feedback on engineering designs: Student engagement and pedagogical supports. NARST, virtual conference, April, 2021

Zhao, Z., Carberry, A., Larson, J., **Jordan, M.,** Savenye, W., Barnard, K. (2021). *Design and Development: NSF Engineering Research Centers Unite: Developing and Testing a Suite of Instruments to Enhance Overall Education Program Evaluation.* Presented to the 2021 ASEE Conference, Toronto.

Carberry, A., Larson, J., **Jordan, M**., O’Donnell, M., Eustice, K., Barnard, W., Savenye, W., Farnsworth, K., & Zhao, Z. (2020). *Common evaluation of ERC education and diversity programming.* Presentation to the ERC Engineering Workforce Development, Diversity and Culture of Inclusion, Evaluation, and Student Leadership Workshop, Virtual, November 10, 2020.

**Jordan, M. E.** & Saenz, D. (2020). *QESST Solar Energy Engineering Research Center Education and Diversity Programs.* Poster presented to the ERC Engineering Workforce Development, Diversity and Culture of Inclusion, Evaluation, and Student Leadership Workshop, Virtual, November 10, 2020.

Lockmiller, C., & **Jordan, M.** (2020). *Review of Literature: Library Partnerships with Cross-Institutional Partners for Sustainability.* Presented at the Literacy Research Association Conference, virtual as part of a symposium, From sustainability to solidarity: Imagining ecological futures across our networks, organized by Jordan and Castek.

**Jordan, M.,** Bernier, J., Zuiker, S., Miller, C., Lashire, A., & DeLaRosa, M. (2020). *Imagining Solar Energy Futures: Using futures thinking strategies to position youth as sustainability leaders.* Presented at the Literacy Research Association Conference, virtual, as part of a symposium, From sustainability to solidarity: imagining ecological futures across our network, organized by Jordan and Castek.

Zuiker, S. J., Riske, A.\*, Marston, S., **Jordan, M.,** Wakefield, W.\*, Weinberg, A., & Thompson, M.\* (2020). *Gardening by design: Understanding and enhancing garden-based teaching in schools.* Poster presented to the Annual Conference of the North American Association for Environmental Education.

Zhao, Z., Barnard, W., Carberry, A., Cook-Davis, A., **Jordan, M.,** Larson, J., O’Donnell, M., & Savenye, W. (2019). *Creating common tools to evaluate education and diversity impacts across three engineering research centers.* Frontiers in Education Conference, Cincinnati, OH, October 16-19.

Brown, D. & **Jordan, M.** (2019). *Pre-service teachers as designers: Shifts in quality of collaborative interaction across phases of an instructional design project.* SCIPIE, October 3,4, 2019, Savanah GA.

Wakefield, W., Warr, W., & **Jordan, M.** (2019). *Exploring models of responsive professional development: How might we help teachers negotiate identity and expand agency?* A 90-minute experiential learning session presented to SCIPIE, Savanah GA, October 2-3, 2019.

Evans, M. & **Jordan, M.** (June, 2019). *How writing for the public provides affordances and constraints in enacting expert identity for undergraduate engineering students.* Paper presented to the American Society for Engineering Education Conference (ASEE), Tampa, FL.

Bowers, N., **Jordan, M.** Evans, M., Fischer, K., & Holman, Z. (June, 2019). *Framing a research experience for undergraduates using a model of engineering practices in a community of practice.* Paper presented to the American Society for Engineering Education Conference (ASEE), Tampa, FL.

**Jordan, M.E.,** Wakefield, W., & DeLaRosa, M. (June, 2019). *Building youth’s socio-technical engineering knowledge through engagement in a community solar energy project*. Paper presented to the American Society for Engineering Education Conference (ASEE), Tampa, FL.

**Jordan, M.E.** & Wakefield, W. (2019). *Two teacher trajectories for failing productively in engineering design.* Paper presented to Symposium at the National Association of Science Educators. Boston, MA.

Husein, S., Saive, R., Karas, J., Jordan, M., & Bertoni, M. (2019). Podcasts: An under-utilized form of science communication. *PVSC IEEE proceedings 46th,* Chicago, Il.

**Carberry, A. Cook-Davis, A., Jordan, M., Larson, J., & O’Donnell, M. (2019). *The ASU Tri-ERC Consortium.* Workshop presented to the** 2019 ERC Biennial Meeting, October 23 – 25, 2019, Arlington, Virginia.

Saenz, D. & Jordan, M. (2018). *Powering Education via QESST: A Solar Energy Engineering Research Center.* Poster presented to the NSF INCLUDES Summit: Broadening Participation through Center-Scale Research Activities, January 8-10, 2018.

Husein, S., Karas, J., Jordan, M., & Bertoni, M. (2018). [*PodQESST—A Case Study for a New Form of Science Communication*](https://mrsfall2018.zerista.com/event/member/528241)*.* Materials Research Society MRS 2018 Fall Conference, November 25-30, Boston, MA.

Jordan, M.E.\*, & Schallert, D. (2018). *Navigating uncertainty in engineering design: One fifth-grader’s empathetic leadership.* Paper presented at the Literacy Research Association Conference, November 28-December 1, Indian Wells, CA. [\*symposium co-organizer]

\*Brown, D. & **Jordan, M.** (2018). *Influence of Pre-Service Beliefs About In-Service Collaboration on Quality of Collaborative Interactions and Outcomes*. Paper presented to the 2018 AERA Conference, New York, NY.

\*Wakefield, W., \*Bowers, N., **Jordan, M.,** & \*Bruchok, C. (2018). *How an engineering research experience for teachers promotes integration of joint activity systems in curricular design.* Paper presented to the 2018 AERA Conference, New York, NY.

\*Bruchok, C., \*Bowers, N., \*Wakefield, W. & **Jordan, M.** (2018). *Positioned in the middle: Exploring affordances for underrepresented engineering students in a cross-age engineering research experience team.* Paper presented to the 2018 AERA Conference, New York, NY.

**Jordan, M**., Henrickson, D., \*Evans, M., \*Elwood, K., & Brown. D. (2017). *Developing approaches to understand how collaborative groups frame and re-frame problems: Using design challenges in educational context.* Experiential Learning Session presented to the SCIPIE Conference, Las Vegas, NV, October 19-20, 2017.

\*Brown, D. & **Jordan, M.E**. (2017). Is the quality of pre-service teachers’ collaborative interactions influenced by their beliefs about in-service collaboration? Presented to the SCIPIE Conference, Las Vegas, NV, October 19-20, 2017.

Holman, Z., Fischer, K., **Jordan, M. E**., Husman, J., Rowlands, T., & Honsberg, C. (2017). *REU Site: Solar energy research for the Terawatt Challenge.* Poster presented to the American Society for Engineering Education Conference, Nashville, TN.

Murphy, J., Hooper, R., DeLaRosa, M., Anderson, C., & **Jordan, M. E.** (2017). *Increasing K-12 students' understanding of photovoltaics: Using solar energy of engineer our energy future (P12 Resource Sharing).* Workshop presented to the American Society for Engineering Education Conference, Nashville, TN.

**Jordan, M. E.,** & DeLaRosa, M. (2017, June). *Investigating peer observers' perspectives on middle school engineering designers' communication challenges.* Presented to the ASEE Conference, Columbus, OH.

\*Bowers, N., Chi, M., **Jordan, M.,** & \*Yaghmourian, D. (2017). *Identifying ontological difficulties in causal explanations of everyday science.* Paper presented to AERA, San Antonio TX, 2017.

\*Elwood, K., **Jordan, M.,** & Zuiker, S. (2017). *An exploration of design thinking practices: Building a teacher education model from the ground up.* Roundtable presented at AERA, San Antonio, TX, 2017.

Elwood, K., Savenye, W., Larson, J., Jordan, M. E., & Zapata, C. (2017, November). *Wicked instructional problems: Exploring how STEM teachers use design thinking.* Paper session presented at the meeting of the Association for Educational Communications & Technology, Jacksonville, FL.

\*Brown, D. M. & **Jordan, M. E**. (2016, December). *Do preservice teachers’ beliefs about professional collaboration influence the quality of their interactions in a collaborative project?* Arizona Educational Researcher Organization Conference (AERO), Phoenix University, December 9.

Fraker, T., **Jordan, M.,** Schauer, D., & Zuiker, S. (2016, December). *Learning dandscapes: Making our connections matter.* Arizona Educational Researcher Organization Conference (AERO), Phoenix University, December 9.

Stewart, O.\* & Jordan, M. E. (2016, December). *A young woman’s deference to male peers in a collaborative, STEM informal learning environment.* Paper presented to the Literacy Research Association Conference. Nashville, TN.

Elwood, K. D., Savenye, W, **Jordan, M. E.,** Larson, J. & Zapata, C. (2016, October 18). *Design thinking: A new construct for educators.* AECT. Las Vegas, NV.

Stylianou, M., Kulinna, P.H., Lorenz, K.A., **Jordan, M.,** McCray, B., & Mohen, A. (2016, April). Instruments to measure social capital in CSPAP pro*grams.*Paper presented to the *Society of Health and Physical Educators America*Convention, Minneapolis, MN.

**Jordan, M. E.** & Collins, J. (2016, April). *Creating pathways to collaborative design through partial literacy acts: Sketching in a fifth-grade engineering project.* Paper presented to the American Educational Research Association Conference. Washington D.C.

**Jordan, M. E.** (2016, April). *Using design studio pedagogy to prepare teacher candidates for adaptive teaching.* Invited as part of the Symposium: An Examination of Adaptive Teaching: Exploring Democratic Spaces in Education. Presented to the American Educational Research Association Conference. Washington D.C.

Anderson, K. Zuiker, S., **Jordan, M. E**., & \*Stewart, O. (2016, April). *More than the sum of its parts: Understanding peer group interactional dynamics through complementarity between situativity and complexity theories.* Paper presented to AERA as part of a roundtable for the Complexity in Education SIG. Washington D.C.

**Jordan, M. E**., \*Elwood, K., & the D-Team (2015, December). *The dialogical construction of uncertainty expressions and experiences.* Paper presented to the Literacy Research Association Conference. Carlsbad, CA.

**Jordan, M. E.** & \*Evans, M. D. (2015, December). *Stories-in-progress: Third graders’ co-narration of news articles*. Paper presented to the Literacy Research Association Conference as part of the symposium Talk as a Creative Space for Inclusive Sense-Making in Elementary Classrooms. Carlsbad, CA. [\* selected as a special invited session for Area 5: Early and Elementary Literacy Processes]

\*Collins, J. & **Jordan, M. E.** (2015, November). *Project-based learning and imperfect literacy*. Presented to the Southwest Consortium for Innovative Psychology in Education as part of the workshop: Socially shared regulation in discipline-based research for which I was the session facilitator and co-organizer.

\*Elwood, K., **Jordan, M.,** & Zuiker, S. (2015, November). *Positively deviant: Developing an instrument to determine uncommon uses of design thinking in teacher educator programs*. Poster presented to the Southwest Consortium for Innovative Psychology in Education. Albuquerque, NM.

**Jordan, M. E.** & \*Villanueva, T. M. (2015, June). Understanding youth collaboration: How learners experience the design process in a collaborative context. Paper presented to the American Society for Engineering Education Conference, Seattle, WA.

**Jordan, M. E.,** \*DelaRosa, M., & \*Gonzalez, F. (2015, June*). Examining middle school students’ perceptions of communication challenges in collaborative engineering design learning.* Paper presented to the American Society for Engineering Education Conference, Seattle, WA.

\*DelaRosa, M., **Jordan, M. E.,** & \*Gonzalez, F. (2015, April). *Investigating middle school students’ communication during collaborative engineering design challenges.* Poster presented to the American Educational Research Association Conference, Chicago, IL.

**Jordan, M. E.**, Husman, J. E., & \*Foster, C. H. (2015, April). *Development of an instrument to measure middle school students’ conceptions of engineering*. Poster presented to the American Educational Research Association Conference, Chicago, IL.

**Jordan, M. E.**, \*Lorenz, K., \*Stylianou, M. & Kulinna, P. H.(2015, April). *Examining student social capital in a comprehensive school-based health intervention*. Paper presented to the American Educational Research Association Conference, Chicago, IL.

**Jordan, M. E**., Kleinsasser, R., & Roe, M., (2015, February). *Tensions, collisions, collaborations: Three teacher educators’ voices, conversations, and professional development.* Paper presented to the Association of Teacher Educators Conference, Phoenix, AZ.

Jordan, M. E. (2014, December). *Answerability and communicative virtuosity: Making social worlds in multiliteracies project-based environments.* Presented as part of the Symposium, Literacy in service of dialogic citizenship at the Literacy Research Association Conference, Marco Island, FL.

Cheng, A. J., **Jordan, M. E**., & the D-Team (2014, December). *Uncertainty experienced and uncertainty expressed in computer-mediated discourse.* Paper presented to theLiteracy Research Association Conference, Marco Island, FL.

**Jordan, M. E.,** (2014, June). *How design critique processes influence fifth graders’ peer interaction in collaborative engineering projects*. Presentation to the American Engineering Education Association conference. Indianapolis, IN.

**Jordan, M. E.** (2014, April). *Shifts in patterns of interaction in design critique sessions associated with fifth graders’ collaborative engineering projects.* Presentation to the American Educational Research Association Conference, Philadelphia, PA.

**Jordan, M. E**., Kulinna, P. H., Stylianou, M. & Lorenz, K. (2014, April). *The role of social capital in a comprehensive school health project.* Presentation to the American Educational Research Association Conference, Philadelphia, PA.

Duggan, M. A., Carlson, D. L., Indorf, A. L. F., Gaias, L. M., Abry, T., & **Jordan, M. E.** (2014, April). *Dear Diary:” A qualitative examination of the phases of first-year teaching*. Presentation to the American Educational Research Association Conference, Philadelphia, PA.

Worthy, J., Maloch, B, Hungerford-Kresser, H., Semingson, P., Hampton, A., & **Jordan, M**. **E.** (2013, December). *What are the rest of the kids doing? An Examination of literacy centers in two first grade classrooms*. Literacy Research Association Conference, Dallas, TX.

Roe, M. Kleinsasser, R., & **Jordan, M. E.** (2013, December). *Literacy teaching and literacy teacher education: Complexity redux.* Literacy Research Association. Dallas, TX.

**Jordan, M. E**. & Kilinc, S. (2013, December). *Sharing the daily news: A CHAT analysis across multiple timescales.* Literacy Research Association Conference, Dallas, TX.

Boyd, M. & **Jordan, M. E.** (2013, December). Working on the knowing: Recurring talk about text in two third grade classrooms. For the symposium *The classroom language environment and learning: Supporting the processes of getting “there”, not getting “it.”* Literacy Research Association Conference, Dallas, TX.

Kilinc, S. & **Jordan,** **M. E.** (2013, November). *Using newspaper discussions to facilitate first graders’ civic engagement: An analysis using Bronfenbrenner’s ecological systems model.* Paper presented to the American Anthropological Association Conference, Chicago, IL.

**Jordan, M. E.** & Babrow, A. (2013, April). *Communication challenges during creative problem solving in a fifth-grade class.* Poster presented to the annual meeting of the American Educational Research Association, San Francisco, CA.

**Jordan, M.** **E.** & Snyder, J. (2013, April). *Understanding self-perceptions, social influences, and experiences of middle school after-school engineering club members.* Poster presented to the annual meeting of the American Educational Research Association, San Francisco, CA.

Cheng, A., **Jordan, M. E.,** & the D-Team. (2013, April). *International students in American online/hybrid classrooms: Negotiating academic discourses and cultural boundaries.* Presented to the annual meeting of the American Educational Research Association, San Francisco, CA.

Cheng; A., **Jordan, M. E.,** & the D-Team (2013, April). *Reconsidering online learning and assessment: Online writing as evidence of complex interaction of agency, structure and social learning.* Poster presented to the annual meeting of the American Educational Research Association.

**Jordan, M. E.** (2012, December). *Fifth graders use of self-created and outside textual resources during collaborative robotics engineering tasks.* Paper presented to the annual conference of the Literacy Research Association, San Diego, CA.

Santori, D., & **Jordan, M. E.** (2012, December). *Dialogic literacy events as sites for improvisation in two third grade classrooms.* Paper presented to the annual conference of the Literacy Research Association, San Diego, CA.

**Roe, M. F., Jordan, M. E., & Kleinsasser, R. (2012, December), *Literacy accountability, assessment, and teaching.*** Paper presented to the annual conference of the Literacy Research Association, San Diego, CA.

Kilinc, S., & **Jordan, M. E**. (2012, November). *Sharing the daily news in a first-grade class: An activity theory perspective*. Presented to the Council on Anthropology and Education, San Francisco, CA.

**Jordan, M. E**. (2011, April). *Models in complexity*. Paper presented at the national meeting of the American Educational Research Annual Conference, New Orleans, LA.

**Jordan, M. E.** (2011, April). *Peer influence on uncertainty management in collaborative robotics projects.* Paper presented at the national meeting of the American Educational Research Annual Conference, New Orleans, LA.

Schallert, D., & **the D-Team.** (2011, April). *Multiple perspectives on computer-mediated classroom discussion: Research on discourse in the new millennium*. Paper presented at the national Meeting of the American Educational Research Association, New Orleans, LA.

Song, K., Schallert, D., **Jordan, M. E.,** & the D-Team (2011, April). *Graduate students on intertwined intellectual trajectories: A microgenetic analysis of computer-mediated classroom discussion.* Paper presented at the national meeting of the American Educational Research Association, New Orleans, LA.

Vogler, J., & **the D-Team**. (2011, December). *Life history of a message: How one message brings a class together to co-construct meaning in an online discussion*. Paper presented at the national meeting of the Literacy Research Association, Jacksonville, FL.

**Jordan, M. E**. (2010, December). *How third-graders make the newspaper meaningful through student-led discussions.* Presented at the national meeting of the Literacy Research Association, Fort Worth, TX.

Vogler, J., Schallert, D., & **the D-Team** (2010, December). *Construction zone ahead: Where reading, thinking, and writing intermingle in a classroom discussion taking Place online*. Paper presented at the national meeting of the Literacy Research Association, Fort Worth, TX.

Schallert, D., Lee, S., **Jordan, M.,** & the D-Team (2010, December). *Resistance phenomena in collaborative online discussions.* Paper presented at the national meeting of the Literacy Research Association, Fort Worth, TX.

Parchman, M, Leykum, L, **Jordan, M. E.,** Lanham, H., Arar, N., & McDaniel, R. (2010, June). *Shared team learning and patient satisfaction with quality of care in VA primary care clinics.* Paper presented at the national meeting of the Academy of Health.

Daniel, S. & **Jordan, M. E.** (2010, May). *Measurement of heedful interrelating*. Paper presented at the national meeting of the American Educational Research Association, Denver, CO.

Daniel, S. & **Jordan, M. E.,** & Robinson, D. (2010, May). *Heedful interrelating in cooperative teams*. Paper presented at the national meeting of the American Educational Research Association, Denver, CO.

**Jordan, M. E.,** & McDaniel, R. R. (2010, May) *Managing uncertainty in collaborative robotic design projects.* Paper presented at the national meeting of the American Educational Research Association, San Diego, CA.

**Jordan, M. E.** (2009, December). *Collaborative robotics design projects: Managing uncertainty as multimodal literacy practice.* Paper presented to the National Reading Yearbook Conference, Albuquerque, NM. [\*received an Area Chair Award for being particularly important and receiving uniformly supportive reviews]

**Jordan M. E.,** & Massad, M. (2009, December). *Peer-to-peer talk about newspaper articles: Supporting knowledge and comprehension of an informational genre.* Paper presented at the National Reading Yearbook Conference, Albuquerque, NM.

Song, K, Schallert, D., & **the D-Team**[[4]](#footnote-4) (2009, December). *Students’ shifts in positioning, trajectories in thought communities, and “wobbly” identities in computer-mediated discussions*. Paper presented at the National Reading Yearbook Conference, Albuquerque, NM.

**Jordan, M**. **E**. (2009, April). *Extra! Extra! Read all about it! Conversations around the newspaper in a first grade class.* Paper presented at the national meeting of the American Educational Research Association, San Diego, CA.

**Jordan, M. E**., & Daniel, S. (2009, April). *The effects of heedful interrelating on cooperative group discussion.* Paper presented to the Annual Meeting of the American Educational Research Association, San Diego, CA.

**Jordan, M**. **E**., Schallert, D., & the D-Team (2009, April). *I guess my question is: What are the dynamics of uncertainty in computer-mediated discussions?* Paper presented at the national meeting of the American Educational Research Association, San Diego, CA.

Weinstein, C. E., Acee, T. W., **Jordan, M. E**., Sylvester, B. J., Jung, JaeHak, et al. (2009, April). *The Community college longitudinal retention (CCLR) study: Phase 2*. Paper presented at the national meeting of the American Educational Research Association, San Diego, CA.

**Jordan, M**. **E**., Schallert, D., & the D-Team (2008, December). *Expressing uncertainty in computer-mediated discussion: Language as a marker of intellectual work*. Paper presented at the National Reading Yearbook Conference, Orlando, FL.

Weinstein, C. E., Acee, T. W., Murphy, D., **Jordan, M. E**., Jung, J. and the CCLR Team. (2008, October). *Community college longitudinal retention study (CCLR): 1st semester achievement and retention data*. Paper presented at the national meeting of the College Reading and Learning Association, Cleveland, OH.

Schallert, D., Cheng, A., & the **D-Team** (2008, March). *Politeness and perceptions of politeness: How face-saving strategies mediate computer-mediated classroom discussion*. Paper presented at the national meeting of the American Educational Research Association, New York.

Chiang, V., Park, Y., & the **D-Team** (2008, March). *Being polite while fulfilling different discourse function in online synchronous and asynchronous discussions.* Paper presented at the national meeting of the American Educational Research Association, New York.

Worthy, J., Maloch, B., Hampton, A., **Jordan, M. E.,** Steen, S., & Crook, D. (2008, March). *Guided reading in first grade*. Paper presented at the national meeting of the American Educational Research Association, New York.

**Jordan, M. E**., Schallert, D. L., Cheng, A., & the D-Team. (2007, April). *Exploring*

*Computer mediated discussion from different theoretical lenses: What can be learned from a complex adaptive systems perspective.* Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.

Cheng, A., Schallert, D. L., **Jordan, M. E**., & the D-Team. (2007, April). *Writing in new literacy environments: Discourse features of messages in discussions for different rhetorical purposes*. Paper presented to the Annual Meeting of the American Educational Research Association, Chicago, IL.

**Jordan, M**. **E**. Schallert, D., Cheng, A., et al. (2006, November). *Seeking self-organization in classroom computer-mediated discussion through a complex adaptive systems lens*. Paper presented at the National Reading Conference Meeting, Los Angeles, CA.

Schallert, D. L., Chen, Y., Yang, M., Kim, M., Chang, Y., & the **D-Team** (2006, March). “*As you said in CMC…”: Intertextual connections between computer-mediated and oral contributions in classroom discussions.* Poster session at Annual Meeting of the American Educational Research Conference, San Francisco, CA.

Yang, M., Chen, Y., Schallert, D. L., & the **D-Team** (2005, November). *The role of politeness in facilitating and limiting the social construction of knowledge in an online classroom discussion*. Paper presented at the National Reading Conference, Miami, FL.

**REGION INVITED PRESENTATIONS**

Kaarsgard, C. & Jordan, M. (2023). *Manifesto for decarbonizing research.* Workshop presented to the Learning Planet Festival, January 25, Tempe, Arizona. <https://cies2020.org/agora/>

**Jordan, M. E.** (2020). *Complex adaptive systems in education*. Invited presentation to the Introduction to Complexity Seminar. Arizona State University, School of Complex Adaptive Systems. November 11, 2020, virtual.

Lockmiller, C. & **Jordan, M. E.** (2019). *From sustainability to solidarity: Imagining ecological futures across our networks.* Arizona Librarians Association Conference, Tucson, AZ, November 10, 2019.

Zuiker, S. J., & **Jordan, M. E.** (2019, February). Fostering a university-organization collaboratory to enact educational change. Presentation at the ASU Social Embeddedness Network Conference. Phoenix, AZ.

**Jordan, M. (2019). Youth scholars inspiring underrepresented youth through a community solar energy project.** Presentation at the ASU [Social Embeddedness Network Conference](https://community.asu.edu/2019SENBreakoutSessions)**, Arizona State University, February 28, 2019.**

Fraker, T., **Jordan, M.,** Schauer, D., & Zuiker, S. J. (2016, December). Learning landscapes: Making our connections matter. Symposium presented at the annual meeting of the Arizona Educational Research Association. Phoenix, AZ.

Zuiker, S., Jordan, M. Fraker, T., & Schu (2016, October 27). EdXCafe: Making our Connections Matter. Phoenix Preparatory Academy.

Rowlands, T., Jordan, M., & the QESST Team (2016, October). Introducing the Solar Obstacle Course Challenge. Presented to MESA Arizona Club Leaders, Casa Grande, AZ.

Jordan M. (2016, October). Complexity in Education. Guest lecture presented to the Introduction to Complexity Course for the CSDC.

Jordan, M. (2016). QESST Education and Outreach: What no one tells you about outreach. Presented to QESST Engineering Research Center, Arizona State University videoconferencing, October 19, 2016.

Invited member of an Invited Panel (February 26, 2016). Conducting Interdisciplinary Research. MLFTC.

Jordan, M.E., Zuiker, S., Henriksen, D., Elwood, K. Dyer, P., & Evans, A. (2016, February 5). Design Thinking workshop. Mary Lou Fulton Teachers College Annual Summit. Chase Field, Phoenix Arizona.

Zuiker, S., Jordan, M., & \*Talarico, L. (2015). A Lesson Studio for Lesson Planning across iTeachAZ. Two-day workshop Presented to iTeachMay 26 and June 2, Central High School.

Jordan, M. E. & Chen, Y. (2015). Discourse trajectories in elementary classrooms: Using critique to facilitate scientific arguments and engineering design practices. Mary Lou Fulton Teachers College Faculty Spotlight. ASU Tempe Campus, Payne West 129, November 18.

Jordan, M. E. (2015). Classrooms as complex systems. Talk presented to the Fundamentals of Complex Adaptive Systems Science course. [as a core member of the Center for Social Dynamics and Complexity]. November 16, ASU Tempe Campus, ISTB 1 Room 401.

Jordan, M. & DeLaRosa, M. (2015). Using peer critique to support middle schoolers collaborative engineering design. Presented to the MESA middle and high school club leaders, Tucson, AZ, September 11.

Undergraduate Research Committee. (2015). Engaging Undergraduate and Graduate Students in Research. Mary Lou Fulton Teachers College Summit, Phoenix, AZ.

Foster, C., Mendoza, C., Purahito, K. Jordan, M, & Husman, J. (2013). *K-12 educational efforts report.* Presented at the QESST Second Annual Site Visit.

Kilinc, S. & **Jordan, M. E.** (2012, October). *Across the scales of time: An activity theory analysis of sharing the daily news in a first-grade classroom*. Presented to the Arizona Educational Research Organization, Tempe, AZ.

Park, Y., Schallert, D., & the **D-Team** (2007, February). *Social interaction patterns of students in synchronous online discussion.* Paper presented to the Southwest Educational Research Conference, San Antonio, TX.

Weinstein, C.E. & the **CCLR Team**[[5]](#footnote-5) (2007, October). *The community college longitudinal retention (CCLR) study: Phase one*. Concurrent session presented at the Conference on Academic Skills Programs, Houston, TX.

Chan, Y., Schallert, D. L., & the **D-Team** (2006, February). *Can a revised version of Bloom’s Taxonomy reveal the intellectual work of students involved in a synchronous computer-mediated discussion?* Paper presented to the Southwest Educational Research Conference, Austin, TX.

**Jordan, M. E.** (2006, February*). Educational implications of teachers’ responses to uncertainty and surprise*. Paper presented at Southwest Educational Research Conference, Austin, TX.

**WORKSHOPS PRESENTED TO PROFESSIONAL ORGANIZATIONS**

Jordan, M. Bowden, S., Ramos-Molina, M., McBeth, A., & Hernandez, D. (2020, December). *Engaging youth in real work with agrivoltiacs citizen science and community engineering.* Available at <https://youtu.be/2639d7GLYl8> [announcement available [here](https://sight.ieee.org/events/2020-sight-week-celebration/)].

Jordan, M. E. (2020). *Complex adaptive systems in education.* Invited presentation to the Introduction to Complexity Seminar. Arizona State University, School of Complex Adaptive Systems. November 11, 2020, virtual.

**Jordan, M.E.** (2020) Invited Workshop, *Engineering design for pre-service teachers.* Presentation for Elementary Education Program Expertise Expansion Series (Instructors: Jessica Debiase).

Jordan, M. E. (2019). Ideation Workshop for the Design of Education Programming for an international research team (2019). NSF STI Center for Analysis of Complex Transitions of Energy and Society (CACTES). December 5, ASU, Tempe Arizona.

Henriksen, D. & **Jordan, M**. (2019). *Design thinking.* Invited presentation to the AECT/JFDL Design Thinking Writers Workshop. October 20th - 21st, 2019, Las Vegas, NV.

Carberry, A. Cook-Davis, A., **Jordan, M.,** Larson, J., & O’Donnell, M. (2019). *The ASU Tri-ERC Consortium.* Workshop presented to th**e** 2019 ERC Biennial Meeting, October 23 – 25, 2019, Arlington, Virginia.

**Jordan, M. E.** (2019). *Solar 101: Light the way to a brighter future by re-energizing and re-engineering STEM learning in your classroom.* Organized a professional development workshop for 3rd-12th grade teachers and pre-service teachers, presented February 2, 2019, at ASU Tempe.

**Jordan, M.E.** (2019). Three-part webinar series on succeeding in graduate school to QESST students: [*Beating back imposter syndrome*, March 5, 2019; *Managing uncertainty in graduate school*, March 15, 2019; *Negotiating relationships with mentors*, February 19, 2019]

**Jordan, M. E.** (2018). Designed and implemented a three-part webinar series on mentoring underrepresented students in STEM for ERC faculty and graduate students, January-April, 2018.

Jordan, M.E., Zuiker, S., Hendriksen, D., \*Elwood, K. Dyer, P., & \*Evans, A. (2016, February 5). Design Thinking workshop. Mary Lou Fulton Teachers College Annual Summit. Chase Field, Phoenix AZ.

Zuiker, S., Jordan, M., & \*Talarico, L. (2015). A Lesson Studio for Lesson Planning across iTeachAZ. Two-day workshop Presented to iTeachMay 26 and June 2, Central High School, Phoenix, Arizona.

Jordan, M. E. & Chen, Y. (2015). Discourse trajectories in elementary classrooms: Using critique to facilitate scientific arguments and engineering design practices. Mary Lou Fulton Teachers College Faculty Spotlight. ASU Tempe Campus, Payne West 129, November 18.

Jordan, M. E. (2015). Classrooms as complex systems. Talk presented to the Fundamentals of Complex Adaptive Systems Science course. [as a core member of the Center for Social Dynamics and Complexity]. November 16, ASU Tempe Campus, ISTB 1 Room 401.

Jordan, M. & DeLaRosa, M. (2015). Using peer critique to support middle schoolers collaborative engineering design. Presented to the MESA middle and high school club leaders, Tucson, AZ, September 11.

Undergraduate Research Committee. (2015). Engaging Undergraduate and Graduate Students in Research. Mary Lou Fulton Teachers College Summit, Phoenix, AZ.

Jordan, M. E. (2014, September). *Implementing Design Studio Pedagogy in engineering after school clubs.* Presented to the MESA afterschool club leaders

Jordan, M. E. & Ganesh, T. (2014, October). *World class panel of educational experts.* Presented at the First LEGO League Kickoff event to FLL team members and leaders.

**Jordan, M. E**. & Snyder, J. (2013, September and November). *The MESA effect. Presented to MESA Club leaders as part of training for the 2013-2014 Challenges*. Tucson, AZ and Phoenix, AZ at ASU El Mercado.

**Jordan, M. E.,** & DelaRosa, M. (2013, May). *Fostering middle school students' collaborative* creativity in STEM settings. Mary Lou Fulton Teachers College, Learning Connections through Learning Forever.

**Jordan, M. E.** (2013, March). Helping Kids Succeed in Studies and in Life, at Brophy College Preparatory on Monday, March 25, 2013 as part of the ASU Foundation-Presidential Engagement Programs.

**Jordan, M. E.** & Snyder, J. (2012, December). *MESA collaborative challenges: Student perceptions and conceptions*. Presented to MESA Arizona Leadership Team, Casa Grande, AZ, December 13.

**Jordan, M. E**. & Snyder, J. (2012, November). *Collaborative challenges in engineering clubs.* Presented at the Mary Lou Fulton Teachers College Celebrating Current and Future School Partnerships event. ASU Skysong, Scottsdale, AZ, November 7.

**Jordan, M. E.** (2012, September). *Initial findings from a study of the MESA effect.* Presented to MESA club leaders, ASU College of Engineering, Tempe, AZ.

**Jordan, M.** **E.** (2011, October). *Uncertainty, innovation, and conversation: Learning to manage the unknown and unknowable in a changing world*. Presented to the President’s Community Enrichment Programs, ASU Skysong Campus, Scottsdale, AZ.

**Jordan, M.** **E.** (2011, March). *Creating with children.* Presented for the Mary Lou Fulton Teachers College Faculty Spotlight, Arizona State University, Tempe Campus.

**Jordan, M. E.** & Lanham, H. (2005, November). *Complexity and superperformance: Metaphors for leading*. Presentation made at the International Society for Performance Improvement (ISPI) Conference, Houston, TX.

McDaniel. R. R., & **Jordan, M. E.** (2005, October). *Complexity science and its organizational implications.* Presentation made for the Zachry Construction Leadership Conference, San Antonio, TX.

**Jordan, M. E.** (2004, August). *Composing multicultural music with children*. Presented to Austin ISD Music Teachers Professional Development, Austin, Texas.

With Austin ISD Team (2003, 2004, 2005). *Institute for learning fine arts training module.* Developed and presented to New Fine Arts Teachers in Austin ISD, Austin, TX.

With Austin ISD team (2005). *Behavioral management in fine arts classrooms*. Developed and presented to New Fine Arts Teachers in Austin ISD, Austin, TX.

**Jordan, M. E**. (2003). *Creating rubrics and criteria charts with students*. Presented to Blanton Elementary School faculty, Blanton Elementary School, Austin, TX.

**Jordan, M. E.** (1999). *Helping volunteer teachers be successful.* Presented to the Prime Time After School Program Directors, Austin TX.

**Jordan, M. E.,** Sutton, P. & Hout, K. (1998). *Together everyone achieves more*. Workshop on team integration of arts curriculum presented to Austin ISD Fine Arts Teachers, Austin, TX.

# PROFESSIONAL EXPERIENCE

UNIVERSITY LEVEL TEACHING & COURSE DEVELOPMENT\*: Arizona State University

TEL215: Child and Adolescent Development

TEL315: Child and Adolescent Development for Future Teachers\*

EDP311: Educational Psychology for Future Teachers\* (virtual and face-to-face sections)

EDP 310 Case Exemplars of Learning: Learning-in-Context with School Gardens (co-designed and co-taught with Steve Zuiker and Andrea Weinberg)

SCN400: Sustainability for Future Teachers (virtual course)

EDP540: Theoretical Views of Learning\* (face-to-face and online)

TEL703: Innovations for Teaching and Learning\* (face-to-face and online)

DC1 791: Readings on Complexity in Education\*

DC1 691: Collaborating for Learning\*

LSE 542: Research Methods in the Learning Sciences\* (co-developed with Steve Zuiker)

LSE 571: History of the Learning Sciences\* (co-developed with Steve Zuiker)

LSE 591: Learning Sciences Design Seminar\* (co-developed with Steve Zuiker)

LSE 540: Theoretical Views of Learning\* (co-developed with Steve Zuiker)

DCI 670: Readings on Complexity in Education\*

EED 284: Introduction to Integrated STEAM Learning Experiences\* (co-developed with Jessica DeBiase)

TEL370: Professional Educator Series: Building a Professional Network\*

SCN 494: Exploring STEM Education in Germany\* (co-developed with Sarah Carranza)

DCI 691: Topic: Design-Based Research on Learning, Teaching and Training

**Graduated student committees chaired**

* Isis Howard (2022). *Identity, Community, and Sustainability: A three-phase approach to integrating critical pedagogies and agency to foster holistic identity development.*
* Thesis Presented in Partial Fulfillment of the Requirements for the Masters in Learning Sciences.
* Wendy Wakefield, PhD (2021). Re-Setting professional development: *Fostering mid-career K-12 teachers’ identities and actions as culturally responsive science and engineering educators.* Dissertation Presented in Partial Fulfillment of the Requirements for the Educational Doctorate.
* Mathew Evans, PhD (2020). *Undergraduates Learning Public Engagement through Designing and Sharing Games: Undergraduate Research Engineers Enacting the Roles of Public Engagement with Science.* Dissertation Presented in Partial Fulfillment of the Requirements for the Educational Doctorate.
* Kermit Brown, EdD (2017). *What You Don’t Know Can Hurt You: Awareness, Action, and Discourse in Intercultural Communication*. Dissertation Presented in Partial Fulfillment of the Requirements for the Educational Doctorate.
* Lessita Villa, EdD (2017). *Taking action with student perception survey data*. Dissertation Presented in Partial Fulfillment of the Requirements for the Educational Doctorate.
* Kasey Lynn Romero, EdD (2017). *Examining the Effect of Club Aspire on Low Achieving Middle School Students.* Dissertation Presented in Partial Fulfillment of the Requirements for the Educational Doctorate.
* Connie Hahne, EdD (2017). *Introduction to Social Justice-oriented Arts-based Inquiry*. Dissertation Presented in Partial Fulfillment of the Requirements for the Educational Doctorate.
* Eric Leshinske, EdD (2017). *Developing Social Capital of Community College Developmental Education Faculty to Influence Student Success*. Dissertation Presented in Partial Fulfillment of the Requirements for the Educational Doctorate.
* Jody Johnson, EdD (2017). *Intergroup Contact: Arizona School District and Charter School Leaders’ Narratives Dissertation*. Presented in Partial Fulfillment of the Requirements for the Educational Doctorate.
* Denise Miller Brown, PhD (2016). *How Preservice Teachers Work in Collaboration: Do Past Experiences and Beliefs Influence the Quality of their Heedful Interrelating*. A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in Educational Psychology.

**Graduated masters and undergraduate students with thesis requirements**

* Stoltz, Julia (2014). Designing curriculum to support peer communication with deaf students.
* Pavlovich, Kaitlyn. (2014). Scaffolding third graders self-regulated learning.

**ELEMENTARY SCHOOL TEACHING & LEADERSHIP**

1994-2005 Teacher, Kindergarten–5th Grade General Music; Blanton Elementary School, Austin Independent School District, Austin, Texas

1998-2003 After-School Program Coordinator; Blanton Elementary School, Austin, Texas

2005 Developed Symphony Curriculum Packet for Austin Symphony League

2004-2005 Member of the Austin ISD Fine Arts Curriculum Development Committee: Developed curriculum frameworks, aligned curriculum, developed instructional planning guides, and formative and evaluative assessments

2004-2005 Austin ISD School Board Fine Arts Advisory Council. Selected to conduct the Austin ISD All-City Elementary Festival Choir

2003-2004 Designed and implemented a year-long faculty dialogue on developing literacy at Blanton Elementary School

2003-2004 Austin ISD Teacher Leadership Cohort: received leadership training; conducted and presented research on ESL instructional strategies

2002-2003 Superintendent’s Teacher Advisory Council, Austin ISD

2003-2004 McMillan Music Teacher Advisory Committee

# TEACHING HONORS AND AWARDS

2009-2010 Teresa Lozano Long Endowed Graduate Fellowship $1000

2008-2009 Mike Hogg Endowed Graduate School Fellowship $24, 000

2007-2008 Teresa Lozano Long Endowed Graduate Fellowship $1000

2006-2007 Weinstein Memorial Teacher of the Year Award $100

2006-2007 Teresa Lozano Long Endowed Graduate Fellowship $1,000

2005-2006 Lorrin G. and Laura D. Kennamer Endowed Presidential Scholarship $2, 500

2004 ABC (Aid for Better Classrooms) Grant, Austin Junior League $500

2003 National Board Certification - Early to Middle Childhood General Music Specialist

2003 HEB Excellence in Teaching Statewide Regional Finalist

2003 Selected to conduct the Austin ISD All-city Festival Choir

2002-2003 Selected for the Austin ISD Teacher Leadership Cohort

2002 Austin ISD Elementary Teacher of the Year, Area I

2002 Teacher of the Year, Blanton Elementary School

2002-2003 Austin ISD National Board Cohort

1999; 2001 Prime Time After School Grant for Blanton Elementary School $18,000

**PROFESSIONAL ASSOCIATIONS**

* IEEE
* International Society of the Learning Sciences
* American Educational Research Association
* American Society for Engineering Education
* Literacy Research Association
* NARST
* Scholarly Consortium for Innovative Psychology in Education (2010-present, past member-at-large; current president)
* SIG for Chaos and Complexity Theories in Education (2006-present, past program chair)
* Core Member of the Center for Social Dynamics and Complexity, Arizona State University (2012-present) http://csdc.asu.edu/ (2012-present)
1. [↑](#footnote-ref-1)
2. My former name [↑](#footnote-ref-2)
3. I was a member of the D-team and am an author on this presentation. [↑](#footnote-ref-3)
4. I contributed as a member of the D-Team for these papers [↑](#footnote-ref-4)
5. I contributed as a member of the CCLR Team for these presentations [↑](#footnote-ref-5)