
STEVEN J. ZUIKER
ORCID: [0000-0003-0887-0695](https://orcid.org/0000-0003-0887-0695)

P.O. Box 871811, Mail Code 1811
Tempe, AZ 85287-1811

phone: 480.965.4673
email: steven.zuiker@asu.edu

EDUCATION

<u>Institution and Location</u>	<u>Degree</u>	<u>Year</u>	<u>Field</u>
Indiana University - Bloomington, IN	PhD	2007	Learning Sciences
The University of Georgia - Athens, GA	MA	2005	Educational Psychology
University of Illinois - Urbana-Champaign, IL	BS	1997	Psychology

APPOINTMENTS

2020 – Present Associate Professor, Mary Lou Fulton Teachers College, Arizona State University
2012 – 2020 Assistant Professor, Mary Lou Fulton Teachers College, Arizona State University
2011 – 2012 Associate Director, Center for Digital Learning & Scholarship, Rice University.
2007 – 2011 Assistant Professor, Learning Sciences & Technologies Department, National Institute of Education at Nanyang Technological University, Singapore.

PUBLICATIONS

* denotes graduate student co-author @ denotes practitioner co-author † denotes youth co-author

PEER-REFEREED JOURNAL ARTICLES

- Iftikhar, F., Cox, G., Lau, P. F. M., Ishkova, M., Sun, J. Z., Iannucci, C., Kinna, L., Naseem, A., Ansari, A. N., Baygi, H. N., Weise, N., Millmore, A., Dave, K., Reddy, E., Male, S., Doria, D., Koekkoek, Y., Crivineanu, A., Jahangier, R., Rebac, S., Thölke, J., Dombi, E., Kuo, Y.-E., Kotevska, L., Veuger, S., Scott*, K., Dang*, J., **Zuiker, S.**, Umuringa*, A., Briggs, S., Nguyen, T., Satia, A., Liong-Rasi, R., Collin, R., Woods, S., Galvin, K., Waters, J., Ahmed, B., Abbas, M., Van den Steen, F., Matthews, A. R., Beleska, J., Murray, M. G., Cooks, T., Forde, J., & Howarth, D. (2025). A time-capsule for Students as Partners 2034: What we left behind, what we've taken with us, and what we hope will be. *International Journal for Students as Partners*, 9(1), 321–336. <https://doi.org/10.15173/ijpsap.v9i1.6116>
- Coats, C., Singha*, S., & **Zuiker, S. J.** (2022). Time unbound: Framing encounters for embodied connection and ecological imagination. *Studies in Art Education*, 63(4), 330-345. doi: 10.1080/00393541.2022.2116681
- Anderson, K. T., Ambroso*, E., Cruz, J., **Zuiker, S. J.**, & Rodriguez*, S. (2022). Complicating methods for understanding educators' language ideologies: Transformative approaches for mixing methods. *Language & Education*, 36(1), 1-19. doi: 10.1080/09500782.2021.1931296
- Zuiker, S. J.**, & Anderson, K. T. (2021). Fostering peer dialogic engagement in science classrooms with an educational videogame. *Research in Science Education*, 51(2), 865-889. doi: 10.1007/s11165-019-9842-z
- Jordan, M., Berniers*, J., & **Zuiker, S. J.** (2021). The future is open and shapeable: Using solar speculative fiction to foster learner agency. *Literacy Research: Theory, Method, & Practice*. doi: 10.1177/23813377211028263

- Jordan, M., **Zuiker, S. J.**, Wakefield*, W., & De La Rosa[@], 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*, 11(1), 1-26. doi: 10.7771/2157-9288.1294
- Zuiker, S. J.**, & Riske*, A. (2021). Designing for garden-based learning: Mapping practical and theoretical work through design. *Environmental Education Research*, 27(8), 1152-1171. doi: 10.1080/13504622.2021.1888886
- Merritt, E., Peterson*, A., Evans[@], S., Marston, S., & **Zuiker, S. J.** (2021). Learning about culture and sustainable harvesting of native plants. *Science & Children*, 58(4), 69-73. [[link](#)]
- Henrikson, D., Jordan, M., Foulger, T., **Zuiker, S. J.**, & Mishra, P. (2020). Essential tensions in facilitating design thinking: Collective reflections. *Journal of Formative Design in Learning*, 4(1), 5-16. doi: 10.1007/s41686-020-00045-3
- Zuiker, S. J.**, Jordan, M., 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
- Zuiker, S. J.**, Piepgrass*, N., Tefera, A., Anderson, K. T., Fischman, G., & Winn*, K. (2019). Advancing knowledge mobilization in colleges of education. *International Journal of Educational Policy & Leadership*, 15(1), 1-19. doi: 10.22230/ijep.2018v15n1a808
- McMullen, S., Winkler, F., & **Zuiker, S. J.** (2018). Gardens, machines, and education. *Leonardo*, 51(3), 296-297. doi: 10.1162/LEON_a_01531 [all authors contributed equally.]
- Fischman, G., Anderson, K. T., Tefera, A., & **Zuiker, S. J.** (2018). If mobilizing educational research is the answer, who can afford to ask the question? An analysis of knowledge mobilization for scholarship in education. *AERA Open*, 4(1), 1-17. doi: 10.1177/2332858417750133 [all authors contributed equally.]
- Zuiker, S. J.**, Anderson, K., Jordan, M., & Stewart*, O. (2016). Complementary lenses: Using theories of situativity and complexity to understand collaborative learning as systems-level social activity. *Learning, Culture, & Social Interaction*, 9, 80-94. doi: 10.1016/j.lcsi.2016.02.003
- Zuiker, S. J.**, & Wright*, K. (2015). Learning in and beyond school gardens with cyber-physical systems. *Interactive Learning Environments*, 23 (5), 556-577. doi:10.1080/10494820.2015.1063512
- Zuiker, S. J.** (2014). Visual communication in transition: Designing for new media literacies and visual culture art education. *E-Learning and Digital Media*, 11(6), 654-666. doi:10.2304/elea.2014.11.6.654
- Zuiker, S. J.**, & Whitaker, J. R. (2014). Refining inquiry with multi-form assessment: Formative and summative assessment functions for flexible inquiry. *International Journal of Science Education*, 36(6), 1037-1059. doi: 10.1080/09500693.2013.834489
- Zuiker, S. J.** (2013). Expanding assessment practices with educational videogames. *Journal of Applied Instructional Design*, 3(3), 45-50. [[link](#)]
- Zuiker, S. J.** (2012). Educational virtual environments as a lens for supporting and understanding both precise repeatability and specific variation in classroom learning. *British Journal of Educational Technology*, 43(6), 981-992. doi:10.1111/j.1467-8535.2011.01266.x

- Hickey, D. T., & **Zuiker, S. J.** (2012). Multi-level assessment for discourse, understanding, and achievement. *Journal of the Learning Sciences, 21*(4), 522-582. doi: 10.1080/10508406.2011.652320
- Zuiker, S. J.**, & Ang*, D. (2011). Virtual environments and the ongoing work of becoming a Singapore teacher. *Internet and Higher Education, 14*, 34-43. doi: 10.1016/j.iheduc.2010.05.006
- Anderson, K. T., & **Zuiker, S. J.** (2010). Performative identity as a resource for “being scientific”: Scientific Shane vs. Jimmy Neutron. *Journal of Language, Identity, and Education, 9*, 291-309. doi: 10.1080/15348458.2010.517708
- Barab, S. A., Scott, B., Siyahhan, S. Goldstone, R., Ingram-Goble, A., **Zuiker, S. J.**, & Warren, S. (2009). Transformational play as a curricular scaffold: Using videogames to support science education. *Journal of Science Education and Technology, 18* (4), 305-320. doi: 10.1007/s10956-009-9171-5
- Barab, S. A., **Zuiker, S. J.**, Warren, S., Hickey, D. T., Ingram-Goble, A., Kwon, E. J., Kouper, I., & Herring, S. (2007). Situationally embodied curriculum: Relating formalisms and contexts. *Science Education, 91* (5), 750-782. doi: 10.1002/sce.20217
- Anderson, K., **Zuiker, S. J.**, Taasobshirazi, G., & Hickey, D. T. (2007). Classroom discourse as a tool to enhance formative assessment and practice in science. *International Journal of Science Education, 29*(14), 1721–1744. doi: 10.1080/09500690701217295
- Barab, S. A., Sadler, T., Heiselt, C., Hickey, D. T., & **Zuiker, S. J.** (2007). Relating narrative, inquiry, and inscriptions: Supporting consequential play. *Journal of Science Education and Technology, 16* (1), 59-82. doi: 10.1007/s10956-006-9033-3
- Taasobshirazi, G., **Zuiker, S. J.**, Anderson, K., & Hickey, D. T. (2006). Enhancing inquiry, understanding, and achievement in an astronomy multimedia learning environment. *Journal of Science Education and Technology, 15* (5-6), 383-395. doi: 10.1007/s10956-006-9028-0
- Hickey, D. T., **Zuiker, S. J.**, Taasobshirazi, G., Schafer, N. J., & Michael, M. A. (2006). Balancing formative and summative assessment to attain systemic validity: Three is the magic number. *Studies in Educational Evaluation, 32* (3), 180-201. doi: 10.1016/j.stueduc.2006.08.006
- Hickey, D. T. & **Zuiker, S. J.** (2005). Engaged participation: A sociocultural model of motivation with implications for educational assessment. *Educational Assessment, 10* (3), 277–305. doi: 10.1207/s15326977ea1003_7
- Hickey, D. T. & **Zuiker, S. J.** (2003). A new perspective for evaluating innovative science learning environments. *Science Education, 87* (2), 539-563. doi:10.1002/sce.10087

EDITOR-REFEREED JOURNAL ARTICLES

- Zuiker, S. J.** (2016). Game over: Assessment as formative transitions through and beyond playful media. *Educational Technology, 56*(3), 48-53. <http://www.jstor.org/stable/44430493>
- Zuiker, S. J.** (2010). Think global | Design glocal. *Educational Technology, 50* (5), 37-42. <https://www.jstor.org/stable/44429858>

EDITOR-REFEREED BOOK CHAPTERS

- Zuiker, S. J.**, Jongewaard*, R., Meza-Torres*, C., Heal[@], M., & Jordan, M. (accepted), Classroom-Driven Participatory Climate Science in Courses, on Campuses, and with Communities. In R.

Beach, & J. Castek (Eds.), *Addressing the Climate Crisis for Transforming Schools and Communities*. Roman and Littlefield.

- Coats, C., Singha*, S., **Zuiker, S. J.**, & Riske*, A. (2023). Imagining our neighborhood of nonhuman residents: Sensorial attunement as ecological aesthetic inquiry. In M. Sharma & A. Alexander (Eds.), *Routledge Companion to Decolonizing Art, Craft & Visual Culture Education* (pp. 196-204). Routledge. ISBN: 9781032040158 DOI: 10.4324/9781003190530
- Jordan, M., lockmiller, c., & **Zuiker, S. J.** (2023). Centering utopia: Fostering youth climate change education by exploring and envisioning hopeful futures. In R. Beach & B. E. Smith (Eds.), *Youth Created Media on the Climate Crisis: Hear Our Voices* (pp. 37-59). Routledge. ISBN: 9781032369006 DOI: 10.4324/9781003335276-4
- Tobias, E. S., Bertlett*, K., Jordan, M. E., & **Zuiker, S. J.** (2023). Addressing climate change and sustainable energy futures Through creative music engagement. In R. Beach & B. E. Smith (Eds.), *Youth-produced Media Addressing the Climate Crisis: Hear Our Voices* (pp. 146-165). Routledge. ISBN: 9781032369006 DOI: 10.4324/9781003335276-10
- Zuiker, S. J.**, Piepgrass*, N., & Evans*, M. D. (2017). Expanding approaches to design research: From researcher ego-systems to stakeholder ecosystems. In J. M. Spector, B. B. Lockee, & M. D. Childress (Eds.), *Learning, Design, and Technology. An International Compendium of Theory, Research, Practice, and Policy* (pp. 1-28). New York: Springer. doi: 10.1007/978-3-319-17727-4_74-1
- Zuiker, S. J.**, & Jan, M. (2012). A cultural analysis of game-based learning for collective conceptual evolution. In C. B. Lee & D. Jonassen (Eds.), *Fostering conceptual change with technology: Asian perspectives* (pp. 225-260). Singapore: Cengage Learning Asia.
- Zuiker, S. J.** (2010). Digitizing scientific boundaries. In Y. J. Lee (Ed.), *Handbook of research in Science education research in Asia* (pp. 277-298). Rotterdam: Sense. ISBN: 978-94-6091-072-2
- Zuiker, S. J.**, & Anderson, K. T. (2010). Immersive learning environments. In Q. Wang & C. S. Chai (Eds.), *ICT for self-directed and collaborative learning* (pp. 349-365). Singapore: Pearson.
- CONFERENCE PROCEEDINGS - INTERNATIONAL
- Zuiker, S. J.**, Rebac*, S., & Jordan, M. (October 2025). Relational Pathways: Navigating Science, Education, and Partnership for Global Futures. *14th Conference on Research in Systemic Design*. Toronto, Ontario, Canada.
- Zuiker, S. J.**, Nxumalo, F., & Madkins, T. (October 2025). Community-Rooted, Ecoregion-Oriented Systemic Design for Climate-Resilient Food Systems. *14th Conference on Research in Systemic Design*. Toronto, Ontario, Canada.
- Cechanowicz, L., **Zuiker, S. J.**, Jordan, M., Finn, E., & Wylie, R. (September 2025). Framework for Ethical Worldbuilding with Solidarity-Driven Co-Design. In D. Jones, G. Gomes, M. Reis, S. Felix, S. Ala, & V. Clemente (eds.), *The 8th International Conference for Design Education Researchers*. Aveiro, Portugal.
- Jordan, M., **Zuiker, S. J.**, Potter-Simmons, K., Barron-Gafford, G., Honsberg, C., Meza-Torres*, C., Jongewaard*, R., Farrow⁺, E., Barrows⁺, J., Loya[@], B., Ankrum[@], J., Heal[@], M., Rapkiewicz[@], J., Jackson[@], T., Paz[@], T., Forrest⁺, K., Centanni[@], A., & Honsberg⁺, I. (2025). Agrivoltaics and

Education: Opportunities for Citizen Science. *2025 IEEE 53rd Photovoltaic Specialists Conference (PVSC)*, 1447–1449. <https://doi.org/10.1109/PVSC59419.2025.11133387>

- Jongewaard*, R., Jordan, M., **Zuiker, S. J.**, & Meza-Torres*, C. (2024). Teachers' Fostering of Real Work with Real Consequences through School-based Citizen Science. In Lindgren, R., Asino, T. I., Kyza, E. A., Looi, C. K., Keifert, D. T., & Suárez, E. (Eds.), *Proceedings of the 18th International Conference of the Learning Sciences - ICLS 2024* (pp. 1794-1797). International Society of the Learning Sciences. doi: [10.22318/icls2024.925616](https://doi.org/10.22318/icls2024.925616)
- Meza-Torres*, C., Jordan, M., **Zuiker, S. J.**, Jongewaard*, R., Adeloju*, E., & Spreitzer*, K. (2024). Examining Teacher Supports for Visibility, Believability, and Meaningfulness in Place-Based Citizen Science. In Lindgren, R., Asino, T. I., Kyza, E. A., Looi, C. K., Keifert, D. T., & Suárez, E. (Eds.), *Proceedings of the 18th International Conference of the Learning Sciences - ICLS 2024* (pp. 2409-2410). International Society of the Learning Sciences. doi: [10.22318/icls2024.920608](https://doi.org/10.22318/icls2024.920608)
- Jordan, M., *Bendok, S., *Nguyen, H., **Zuiker, S. J.**, Simmons-Potter, K., *Mesa-Torres, C., Honsberg, C., *Boyer, K., Jongewaard, R., @Loya, B., & @Ankrum, J. (2024). Sonoran Desert Photovoltaics Laboratory and Growing Green: A Networked Regional Approach to Agrivoltaics Citizen Science. *IEEE Conference Photovoltaic Specialists*. doi: [10.1109/PVSC57443.2024.10749646](https://doi.org/10.1109/PVSC57443.2024.10749646)
- Jongewaard*, R., Jordan, M., **Zuiker, S. J.**, & Meza-Torres*, C. (2023). *Expansive framing for citizen science: Use of a facilitated online platform to connect current and future teacher practices in STEM*. In Blikstein, P., Van Aalst, J., Kizito, R., & Brennan, K. (Eds.), *Proceedings of the 17th International Conference of the Learning Sciences - ICLS 2023* (pp. 1454-1457). International Society of the Learning Sciences. <https://repository.isls.org/handle/1/9945>
- Van Geffen*, B., **Zuiker, S. J.**, & Wylie, R. (2023). *Pragmatic imagination: A tool for seeding participatory design*. In Blikstein, P., Van Aalst, J., Kizito, R., & Brennan, K. (Eds.), *Proceedings of the 17th International Conference of the Learning Sciences - ICLS 2023* (pp. 2043-2044). International Society of the Learning Sciences. <https://repository.isls.org/handle/1/10152>
- Schmidt*, A., & **Zuiker, S. J.** (2022, June). Meaningful movement towards campus-based outdoor learning: Characterizing pre-scenery with stakeholder perspective. In C, Chinn, E. Tan, C. Chan, & Y. Kali (Eds.). *Proceedings of the 16th International Conference of the Learning Sciences - ICLS 2022* (pp. 2034-2035). International Society of the Learning Sciences: Hiroshima, Japan. ISBN: 978-1-7373306-5-3 <https://repository.isls.org/handle/1/8701>
- Zuiker, S. J.**, Williams, J. P., Kirschner*, D., Littlefield*, K. G., & Krishnamurthy*, M. (2010, October). Alone together in cyberworlds? In A., Sourin and O. Sourina (Eds.) *International Conference on Cyberworlds* (pp. 309-313). IEEE CS CPS Press: Washington, D.C. doi: 10.1109/CW.2010.43
- Zuiker, S. J.** (2010, July). How the world's largest biome cyber-stretches across the globe. In K. Gomez, L. Lyons, and J. Radinsky (Eds.). *Proceedings of the 9th International Conference of the Learning Sciences - ICLS 2010* (p. 263). International Society of the Learning Sciences: Chicago IL. <https://repository.isls.org/handle/1/2807>
- Saleh*, A., & **Zuiker, S. J.** (2010, July). The "other" curriculum: Constructing success and failure in a game-based learning environment. In K. Gomez, L. Lyons, and J. Radinsky (Eds.). *Learning in the Disciplines: Proceedings of the 9th International Conference of the Learning Sciences (ICLS 2010) - Volume 2, Short Papers, Symposia, and Selected Abstracts* (p. 441-442). International Society of the Learning Sciences: Chicago IL. <https://repository.isls.org/handle/1/2896>

- Tan, M., Tripathi*, N., **Zuiker, S. J.**, & Seah, H. S. (2010, April). *Building an online collaborative platform to advance creativity*. In M. Kuster (Ed.) *Proceedings of the 4th IEEE International Conference on Digital Ecosystems and Technologies* (pp. 421-426). IEEE CS CPS Press: Washington, D.C. doi: 10.1109/DEST.2010.5610610
- Tripathi*, N., Seah, H. S., **Zuiker, S. J.**, & Tan, M. (2009, October). Visuapedia: A social media-based visual encyclopedia. In S. Boll, S. C. H. Boi, J. Luo, R. Jin, I. King, & D. Xu (Eds.), *Proceedings of 1st ACM SIGMM International Workshop on Social Media* (pp. 89-96). Beijing: Association for Computing Machinery. doi: 10.1145/1631144.1631161
- Zuiker, S. J.**, Anderson, K.T., Lee*, J., Chee, Y. (2008, June). Designing for the epistemological entailments of physics through game-centered dialogical activity cycles. In P. Kirschner, F. Prins, V. Jonker, & G. Kanselaar (Eds.), *Proceedings of the 8th International Conference of the Learning Sciences: International Perspectives in the Learning Sciences: Creating a Learning World* (pp. 516-523, vol. 2). Utrecht: International Society of the Learning Sciences.
<https://repository.isls.org/handle/1/3198>
- Hickey, D. T., Barab, S. A., Ingram-Goble, A., & **Zuiker, S. J.** (2008, June). First things first: Design principles for worthwhile educational videogames. In P. Kirschner, F. Prins, V. Jonker, & G. Kanselaar (Eds.), *Proceedings of the 8th International Conference of the Learning Sciences: International Perspectives in the Learning Sciences: Creating a Learning World* (pp. 350-357). Utrecht: International Society of the Learning Sciences. <https://repository.isls.org/handle/1/3116>
- Zuiker, S. J.**, & Hickey, D. T. (2006, June). A multi-level assessment strategy: (Dis)continuity in making learning visible differently. In S. Barab, K. Hay, & D. Hickey (Eds.), *Proceedings of the 7th International Conference of the Learning Sciences: Making a Difference* (p. 1012-1013, vol. 2). Mahwah, NJ: Erlbaum. <https://repository.isls.org/handle/1/3468>
- Hickey, D. T., **Zuiker, S. J.**, & McGee, S. (2004, June). A multi-level/multi-type model for design-based alignment of instruction, assessment, and testing. In Y. Kafai, W. Sandoval, N. Enyedy, A. Nixon, & F. Herrera (Eds.), *Proceedings of the 6th International Conference of the Learning Sciences: Embracing Diversity in the Learning Sciences* (p. 607, vol. 2). Mahwah, NJ: Erlbaum.
<https://repository.isls.org/handle/1/4025>

CONFERENCE PROCEEDINGS - NATIONAL

- Jordan, M., Simmons-Potter, K., **Zuiker, S.**, & Gafford, G. (2024). Plants, Power, and People: Using Agrivoltaics Engineering to Create a Network of K-12 Teachers and Students Contributing to Sustainable Energy Transitions. *American Society of Engineering Education Annual Conference & Exposition*. Paper 44379 available at
<https://nemo.asee.org/public/conferences/344/papers/44379/view>
- Jordan, M., Ankrum@, J., Coates, M., @Carswell, C., @Centanni, A., @DeLaRosa, M., & **Zuiker, S. J.** (2023). Energizing the Engineering Pipeline with Agrivoltaics Citizen Science: Curriculum Share. *American Society of Engineering Education Annual Conference & Exposition*. [Paper 39397 available at <https://peer.asee.org/44655.pdf>]
- Zuiker, S. J.** (2013). Gaming the general consequences of learning. In C. C. Williams, A. Ochsner, J. Dietmeier, & C. Steinkhuehler (Eds.), *Proceedings of GLS 9.0 Games + Learning + Society Conference* (pp. 566-567). Pittsburgh, PA: ETC Press. ISSN 2164-6651

Subbiah, S., & **Zuiker, S. J.** (2009, April). A case study of simulation-based reasoning. In F-H. Wang (Ed.), *Proceedings of the American Society for Mechanical Engineers Asia-Pacific Engineering Education Conference* (pp. 17-22). Taipei: American Society of Mechanical Engineers.

BOOK REVIEWS

Zuiker, S. J., & Lok*, S. K. (2009). Review of *Electric Worlds in the Classroom*. *e-Learning and Digital Media*, 6(3), 298-299.

Roulston, K., & **Zuiker, S. J.** (2004). What's to look at in ethnomethodology's program? *Linguistics and Education*, 15(3), 311-314.

UNREFEREED

Meza-Torres*, C. Jongewaard*, R., **Zuiker, S.** & Jordan, M. (2023). Sonoran photovoltaics lab: Exploring agrivoltaics through citizen science projects. *Science Times: Arizona Science Teachers Association Circular*, 16(1), 36-39.

Zuiker, S. J. (2007). *Transforming Practice: Designing for Liminal Transitions along Trajectories of Participation*. Unpublished dissertation. Bloomington, IN: Indiana University.

MANUSCRIPTS

Jordan, M., Jongewaard*, R., Meza-Torres*, C, & **Zuiker, S. J.** (in review). Data Science Literacy through School-Based Participatory Science: A networked approach to K-12 regional STEM research. *Connected Science Learning*.

Zuiker, S. J., Jongewaard*, R., & Van Geffen*, B. (in review). Scaling by Design: Narrative, Imagination, and Knowledge in Systems of Action. *International Journal of Qualitative Studies in Education*.

Silova, I., Cechanowicz, L., Desimoni*, V., Karsgaard, C., Anayatova*, D., Nabulega*, S., Oster*, N., & **Zuiker, S. J.** (in review) Read this Before the Collapse: Speculative Lessons from Decarbonization Manifestos for Higher Education. *International Journal of Qualitative Studies in Education*

Riske, A., **Zuiker, S. J.**, & Coats, C. (in review). Digital sensors and human senses to reframe data: Emerging mathematics lessons. *Educational Studies in Mathematics*.

Zuiker, S. J., Bello, J. @, & Kallman, N. @ (in review). Learning Across Boundaries: Inter-Organizational Collaboration as Situated Social Practice in Education. *Learning, Culture, and Social Interaction*.

Jordan, M., DeLaRosa@, M., **Zuiker, S. J.**, & Cordon*, J. (in review), Using Networks of Support to Foster Knowledge-in-Action through Community Energy Engineering. In R. Beach, & J. Castek (Eds.), *Addressing the Climate Crisis for Transforming Schools and Communities*. Roman and Littlefield.

GRANTS

EXTERNALLY FUNDED

- Zuiker, S. J.**, Early, J., Pallenz, M. O., & Whitcomb, A., (2025-2026). *Step Outside-Sprouts Leadership Institute*. Sprouts Healthy Communities Foundation (\$9,966).
- Nxumbalo, F., Madkins, T., Nkonki-Madleni, B., **Zuiker, S. J.**, Lanza, K., Maddalena, D., Li, Y., & Ayisi, K. K. (2024-2026). *Participatory design for climate change adaptation: Intergenerational climate responsive school gardening as an approach to food security and climate literacy in South African communities*. Canada Research Coordinating Committee New Frontiers in Research Fund, [International Joint Initiative for Research in Climate Change Adaptation and Mitigation](#). (\$1,800,000).
- Zuiker, S. J.**, Early, J., & Cloutier, S. (2023-2024). *Teachers Connecting Campuses and Core Curricula*. Arizona Governor's Office, Negative Economic Impacts: Educational Disparities and Teacher Professional Development Grant Program - Award GR-ARPA-EDPD-ABORASU-05 (\$783,021).
- Basile, C., Madden, B., & Adams, K. (2021-2024). *US Department of Education*. (\$7,378,142). Research Team: Zuiker, S. J., Cullicott, C., Belanger, K., & Zielsdorf, K. (\$250,000 subcontract).
- Honsberg, C., Bowden, S., Jordan, M., & **Zuiker, S. J.** (2021-2024). *RET Site: Collaborative Research: Sonoran Photovoltaics Laboratory: Energizing the STEM Pipeline through Citizen Science*. National Science Foundation, Engineering Directorate – RET Program Award 2055726. (\$392,999).
- Honsberg, C. Jordan, M., **Zuiker, S. J.**, Bowden, S., & Miller, C. (2021). *REM: Urban Energy Engineering: Research Experiences and Mentorship for High School Scholars Leading Community Solar Energy Innovation*. National Science Foundation, Engineering Directorate – EEC program supplemental award 2005249. (\$96,056).
- Jordan, M., **Zuiker, S. J.**, & Miller, C. (2020-2022). *Co-Developing Community Energy Engineering After-School Programing with Latinx Youth*. Spencer Foundation Small Grant 202000196. (\$50,000).
- Zuiker, S. J.**, Merritt, E., & Marston, S. (2019-2021). *The school gardeners' southwest desert almanac: A conference for supporting, sustaining, and spreading garden-based science teaching*. National Science Foundation Grant, Education and Human Resources Directorate – DRK-12 Program Award 1908886. (\$99,905).
- Fischman, G., **Zuiker, S. J.**, Tefera, A., & Anderson, K. T. (2014-2016). *Education research: For whom and to what end? An analysis of knowledge mobilization strategies developed by Schools of Education*. Spencer Foundation Grant 201400208. (\$46,856)

INTERNALLY FUNDED

- Gilfillan, D., **Zuiker, S.**, Compitello, M., Meirelles, R., & Van Geffen*, B. (2026). *Soundscape Imaginaries: Exploring across Multispecies Boundaries*. ASU Humanities Institute. (\$11,954).
- Wiley, R., Jordan, M., **Zuiker, S.**, & Van Geffen*, B. (2024-2025). *Imagination and Futures Thinking for K12 Education*. Competitive internal grant awarded by Mary Lou Fulton Teachers College, Arizona State University. (\$15,000).
- Jordan, M., & **Zuiker, S. J.** (2024). *Co-designing hybrid systems of teaching and learning in support of real work with real consequences: Infrastructuring a network of classroom-based citizen*

scientists. Arizona State University, Institute for Social Science Research - Seed Grant Initiative. (\$7969).

- Wiley, R., Jordan, M., **Zuiker, S.**, & Van Geffen*, B. (2023-2024). Imagination and Futures Thinking for K12 Education. Competitive internal grant awarded by Mary Lou Fulton Teachers College, Arizona State University. (\$15,000).
- Wiley, R., Henriksen, D., Jordan, M., **Zuiker, S.**, Van Geffen*, B. (2022-2023). Imagination and Futures Thinking for K12 Education. Competitive internal grant awarded by Mary Lou Fulton Teachers College, Arizona State University. (\$9000).
- Vanos, J., Hess, A., Coseo, P., Cloutier, S., Cheng, C., **Zuiker, S. J.**, Coats, C., & Ross, A. (2019). *Reimagining Outdoor Play & Learning Environments*. Knowledge Exchange for Resilience, Arizona State University. (\$15,000).
- Zuiker, S. J.**, & Coats, C. (2019). *Green STEAM Studios: Designing Agential Ecologies for Wonder, Curiosity, and Interconnectedness through School Gardens*. Competitive internal grant awarded jointly by Herberger Institute for Design and the Arts and Mary Lou Fulton Teachers College, Arizona State University. (\$10,000).
- 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*. Competitive internal grant awarded jointly by Herberger Institute for Design and the Arts and Mary Lou Fulton Teachers College, Arizona State University. (\$10,000).
- Jordan, M., **Zuiker, S. J.**, & Miller, C. (2018). *Teacher-Student Teams for Community-based Energy Engineering Projects*. Competitive internal grant awarded by Mary Lou Fulton Teachers College, Arizona State University. (\$10,273)
- Zuiker, S. J.**, & Ingram-Goble, A. (2014). *Teachers Dispositions: Designing for Teaching and Learning*. Fulton Challenge Scholars competitive internal grant awarded by Mary Lou Fulton Teachers College, Arizona State University. (\$15,000)
- Zuiker, S. J.** (February, 2013). *Exploring an alternative approach to learning transfer with educational games: A contribution to what works, when, and how*. Competitive internal grant awarded by Mary Lou Fulton Teachers College, Arizona State University. (\$7,878)
- Zuiker, S. J.**, Seah, H S., & Tan, M., (2010). *Designing Collaborative Learning Studios for Visual Participatory Culture*. Competitive internal grant awarded by the Office of Educational Research, National Institute of Education, Singapore. (Singapore Dollars \$250,000)
- Zuiker, S. J.**, & Williams, P. (2010). *Mobilizing Transdisciplinary MMO Research at NTU*. Competitive internal grant awarded by the Institute for Media Innovation, Nanyang Technological University, Singapore (Singapore Dollars \$50,000).
- Zuiker, S. J.**, Yap, K. C., & Chatterjea, K. (2009). *Glocalizing Quest Atlantis: Globalizing and localizing an interactive digital medium for learning and teaching*. Competitive internal grant awarded by the Office of Educational Research, National Institute of Education, Singapore. (Singapore Dollars \$96,753)
- Zuiker, S. J.**, & Subiah, S. (2009). *Engineering laboratories: Conceptualizing digital laboratories for design and manufacturing*. Competitive internal grant awarded by the Institute for Media Innovation, Nanyang Technological University, Singapore (Singapore Dollars \$10,000).

Zuiker, S. J. (2008). *Leveling up: Cultivating learning ecologies for game-based learning in and out of schools*. Competitive internal grant R8019.735.LE10 from the Learning Sciences Lab, Singapore (Singapore Dollars \$31,200).

Zuiker, S. J., & Anderson, K. (2007). *Designing classroom ecologies for game-based learning*. Competitive internal grant 8019.735.CE05 from the Learning Sciences Lab, Singapore (Singapore Dollars \$47,405).

RESEARH SPONSORSHIPS

Zuiker, S. J. (December, 2014). *Research on educational technology and elementary school education*. Non-competitive private sponsorship via ASU Foundation, Arizona State University. (\$5,000)

Zuiker, S. J. (December, 2013). *Research on educational technology and elementary school education*. Non-competitive private sponsorship via ASU Foundation, Arizona State University. (\$5,500)

Zuiker, S. J. (January, 2013). *Research on educational technology and elementary school education*. Non-competitive private sponsorship via ASU Foundation, Arizona State University. (\$5,000)

CONFERENCE PRESENTATIONS

* denotes student co-author @ denotes practitioner co-author

INVITED

Zuiker, S. J. (2008, January). *Serious games for education*. Invited workshop presentation at the 5th Annual Asia Pacific Medical Education Conference. Singapore.

Zuiker, S. J. (2007, November). *Gaming boundaries through and for learning*. Invited presentation at the International Conference on Educational Technology. Singapore.

Hickey, D., **Zuiker, S. J.**, & Anderson, K.T. (2007, September). *Situative alignment of formative and summative assessment functions to maximize engagement and learning*. Invited presentation made at the bi-annual meeting of the European Association for Research on Learning and Instruction. Budapest, Hungary.

Zuiker, S. J. (2007, April). *The publishing process: How to successfully publish as graduate students and junior faculty members*. Graduate Student Council invited fireside chat at the annual meeting of the American Educational Research Association, Chicago, IL.

Zuiker, S. J. (2006, April). *Apprenticeship in "the game": Learning to publish before you perish*. Invited presentation during Publications Committee's Open Meeting at the annual meeting of the American Educational Research Association, San Francisco, CA.

KEYNOTE

Zuiker, S. J. (2011, February). *Game-based learning on a global stage*. National E-Learning Plenary Address at Chiang Mai University. Chiang Mai, Thailand.

Zuiker, S. J. (2008, April). *Virtual interaction and real participation: Tools for seeing the world through the disciplines*. Keynote Presentation at the International Conference on E-Learning, Kaohjiung, Taiwan.

INTERNATIONAL

- Van Geffen*, B., **Zuiker, S. J.**, Du*, D., Jongewaard*, R., & Gilfillan, D. (in review). *Mobilizing local knowledge to design systems of action for more-than-human futures in times of ecological crises*. Submitted to Anticipation Conference 2026, Milano, Italy.
- Zuiker, S. J.**, Nxumalo, F., Madkins, T., Maddalena, D., Lanza, K., Mogale, T., Mathebula, N., & Ikpomwosa, D. (2025, November). *Examining Solidarity-Driven Co-Design in a North-South University Partnership for Community Engaged Scholarship*. Poster presented at the South African Higher Education Community Engagement Forum Conference on Scholarship of Engagement. Mangosuthu University of Technology, Durban, South Africa.
- Zuiker, S. J.**, Nxumalo, F., & Madkins, T. (2025, October). Community-Rooted, Ecoregion-Oriented Systemic Design for Climate-Resilient Food Systems. *Relating Systems Thinking & Design*. Toronto, Canada.
- Nxumalo, F., **Zuiker, S. J.**, Madkins, T., & Mogale, Q. (2025, August). *Rooted in solidarity: Leveraging indigenous and local ecological knowledge for climate resilience through school garden co-design*. Presentation at the Transformations Community Conference. Johannesburg, South Africa.
- Jordan, M., Jongewaard*, R., Meza-Torres*, C., & **Zuiker, S.** (2025, March). *Building a regional network of school-based citizen scientists for sustainable energy futures*. Annual Meeting of the Comparative and International Education Society, Chicago, IL.
- Barron-Gafford, G., Bendoock*, S., Boyer*, K., Jongewaard*, R., Jordan, M., Lepley, K., Meza-Torres*, C., Simmons-Potter, K., Spreitzer*, K., & **Zuiker, S.** (2024, June). Increasing awareness of agrivoltaics through a regional network of small-scale community-based projects. Poster presented at AgriVoltaics World Conference, Denver, CO.
- 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.
- Zuiker, S. J.** (2015, July). *Connected Gardening: Data-Infused Gardening Projects for Elementary School Science Education*. Paper presented at the annual convention of the International Society for Technology Education, Philadelphia, PA.
- Zuiker, S. J.**, & Cirell*, A. M. (2014, May). *Critical design ethnography in the cloud: Learning transitions around and beyond a school district as physical place and digital space*. Presentation at the International Congress of Qualitative Inquiry. Champaign, IL.
- Jan, M., **Zuiker, S. J.**, Seah, H. S., & Tan, M. (2013, June). *Lessons learned from bringing new media to the secondary classrooms in Singapore*. Paper presented at the fifth biennial Redesigning Pedagogies International Conference. Singapore.
- Zuiker, S. J.** (2011, June). *A "VisuaPedia" of visual culture for art education*. Presentation at the fourth biennial Redesigning Pedagogies International Conference. Singapore.
- Saleh*, A., & **Zuiker, S. J.** (2009, July). *Play-styles and adoption of learning strategies in Quest Atlantis*. Poster presented at the International Simulations and Gaming Association Conference. Singapore.
- Zuiker, S. J.** (2009, June). *Glocalizing Quest Atlantis with Singapore teachers and students*. Presentation at the third annual Redesigning Pedagogies International Conference. Singapore.
- Zuiker, S. J.**, Hickey, D. T., Kwon, E. J., Chapman, R., & Barab, S. A. (2005, August). *Assessing student learning in, around, and for a multi-user virtual environment*. Presentation at the biennial

conference of the European Association for Research on Learning and Instruction, Nicosia, Cyprus.

- Zuiker, S. J.** (2005, May). *Opening up practice: A micro-analysis of formative assessment within the GenScope assessment project*. Paper presented at The First International Congress of Qualitative Research, Champaign-Urbana, IL.
- Zuiker, S. J.,** Hickey, D. T., Kwon, E. J., & Barab, S. A. (2005, April). *Framing Quest Atlantis: A multi-level/multi-type assessment framework for learning and assessment*. Presentation at the biennial Computer Assisted Learning conference, Bristol, England.
- Anderson, K., **Zuiker, S. J.,** Taasoobshirazi, G., Horne, M., Cross, D., Hendricks, S., & Hickey, D. T. (2005, April). *Discourse, understanding, and achievement: design research methods for maximizing and documenting learning in multi-media science environments*. Presentation at the bi-annual Computer-Assisted Learning conference, Bristol, England.
- Hickey, D. T., **Zuiker, S. J.,** Taasoobshirazi, G., Schafer, N. J., & Michael, M. A. (2004, June). *Balancing formative and summative assessment to attain system validity: Three is the magic number*. Paper presented at the second EARLI SIG Assessment Symposium, Bergen, Norway.
- Zuiker, S. J.** (2004, January). *The influence of context and identity in a formative feedback science activity*. Poster presented at the 17th Annual Conference on Interdisciplinary Qualitative Studies, Athens, GA.
- Zuiker, S. J.** (2002, February). *Sociocultural perspective on motivation in Tanzanian math classes*. Presentation at the annual meeting of the Comparative and International Education Society, Orlando, FL.
- NATIONAL
- Jordan, M., & **Zuiker, S. J.** (2026, April). *The Potential of English Language Arts Education for Restor(y)ing Hopeful Socioecological Futures*. Paper presented at the annual meeting of the American Educational Research Association. Los Angeles, CA.
- *Van Geffen, B., & **Zuiker, S. J.,** (2025, April). *Exploring Student Perspectives on a Learner-Centered School Environment*. Proposal submitted to the annual meeting of the American Educational Research Association. Denver, CO.
- *Meza-Torres, C., Jordan, M., *Jongewaard, R., & **Zuiker, S. J.** (2025, February). *Fostering Visibility, Believability, and Meaningfulness in School-based Citizen Science Data Analysis and Distribution*. Paper presented at the Data Science Education K-12: Research to Practice Conference. San Antonio, TX.
- *Meza-Torres, C., Jordan, M., & **Zuiker, S. J.** (2024, April). *Using Community Ethnography and Networks of Support to Foster Consequential Learning through Community-Centered Energy Engineering*. Paper presented at the Annual NARST Conference, Denver, Colorado.
- *Schmidt, A.C. & **Zuiker, S. J.** (2023, October). *Taking STEM Outside for Student Wellbeing: A Pilot Study* [Live Session]. Live session presentation at the 2023 North American Association for Environmental Education Conference. Tucson, AZ.
- Zuiker, S. J.,** Jordan, M., Jongewaard*, R., & Meza-Torres*, C. (2023, June). *Sonoran Photovoltaic Lab: Shaping Energy Transitions through Agrivoltaics at K-12 Schools*. Poster presented at the 2023 Association for Advancing Participatory Sciences Conference. Tempe, AZ.

- *Meza-Torres, C., Jordan, M., **Zuiker, S.**, *Jongewaard, R., & *Adeloju, E. (2023). *Fostering meaningfulness, visibility, and believability in youth engagement with place-based citizen science data*. Scholarly Consortium for Innovative Psychology in Education (SCIPIE). Portland, Oregon
- *Meza-Torres, C., Jordan, M., & **Zuiker, S. J.** (2023, April). *In Pursuit of consequential learning: Interrogating an informal community-based engineering program for middle and high school youth*. Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL. Virtual.
- Jordan, M., & **Zuiker, S. J.** (2022, November). *Youth speculative fiction: Locating energy futures at the intersections of geographical, environmental, and social space*. Presentation accepted for the Literacy Research Association 72nd Annual Conference. Phoenix, AZ.
- Jordan, M., **Zuiker, S. J.**, & Howard*, I. (2022, November). *Literacy for energy justice: Connecting local and global sustainability goals through community-based citizen science*. Presentation accepted for the Literacy Research Association 72nd Annual Conference. Phoenix, AZ.
- Bowden, S., Cordon⁺, J., Dykes⁺, M., Hernandez⁺, M., Jordan, M., Killam*, A., Castillo⁺, J., Park⁺, A., Pita⁺, A., Robledo⁺, M., & **Zuiker, S. J.** (2022, June). *AgriPV Citizen Science Lab: A Collaborative Model for Engineers, Youth Scholars and Communities*. Poster presented at the IEEE 49th Photovoltaic Specialists Conference. Philadelphia, PA.
- Zuiker, S. J.**, & Jordan, M. (2022, April). *Understanding community-oriented STEM learning as local value creation*. Paper presented at the annual meeting of the American Educational Research Association. San Diego, CA.
- Chriyaa, E. M.*, Jordan, M. J., & **Zuiker, S. J.** (2021, October). *Agency in located futures narratives*. Poster presented at the Biennial Conference of the Scholarly Consortium of Innovative Psychology in Education, virtual.
- Jongewaard*, R., Barab, A., Barab, S., **Zuiker, S. J.**, and Singha*, S. (2021, May). *Designing for expansive value: Fostering agency in professional development*. Paper presented at the annual meeting of the American Educational Research Association, virtual.
- Jordan, M. J., **Zuiker, S. J.**, Miller, C., DeLaRosa[@], M., Lashire*, A., & Lockmiller[@], M. C. (2020, December). *Imagining Solar Energy Futures: Using futures thinking strategies to position youth as sustainability leaders*. Paper presented at the annual meeting of the Literacy Research Association, virtual.
- Zuiker, S. J.**, Riske, A.*, Marston, S., Jordan, M., Wakefield, W.*, Weinberg, A., & Thompson, M.* (2020, October). *Gardening by design: Understanding and enhancing garden-based teaching in schools*. Poster submitted to the Annual Conference of the North American Association for Environmental Education, virtual.
- Merritt, E., Wolfe, H., Alvarez, E., Marston, S. **Zuiker, S. J.**, Thompson, M.*, Cashion, M., & McGehee, R. (2020, October). *Lessons from the school gardeners' southwest desert almanac*. Hands-on session to be presented at the Annual Conference of the North American Association for Environmental Education, virtual.
- Zuiker, S. J.**, & Riske, A.* (2020, April). *Integrating Gardens into Schools: Mapping Opportunities and Challenges through Design*. Paper accepted to the annual meeting of the American Educational Research Association, San Francisco, CA. Conference cancelled.

- Zuiker, S. J. & Parekh, P.*** (2017, October). *A school garden that connects plants, soil, and beyond*. Paper presented at Digital Media & Learning conference. Irvine, CA.
- Zuiker, S. J.** (2017, April). *School gardens as sites for project-based science*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Zuiker, S. J.** (2017, April). *Designing for learning transfer as formative transitions in, through, and beyond changing activity*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Elwood*, K., Jordan, M., & **Zuiker, S. J.** (2017, April). *An exploration of design thinking practices: Building a teacher education model from the ground up*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Zuiker, S. J., & Anderson, K.** (2016, April). *The warp and woof of game-centered dialogic activity cycles in a science inquiry unit*. Poster presented at the annual meeting of the American Educational Research Association, Washington, D.C.
- Jordan, M., Anderson, K., Stewart*, O., & **Zuiker, S. J.** (2016, April). *More than the sum of its parts: Understanding peer group interactional dynamics through complementarity between situativity and complexity theories*. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C.
- Elwood*, K. D., Jordan, M. E., & **Zuiker, S.** (2015, November). *Positively deviant: Developing an instrument to determine uncommon uses of design thinking in teacher educator programs*. Poster presented to the Scholarly Consortium of Innovative Psychology in Education. Albuquerque, N.M.
- Zuiker, S. J., & Wright*, K.** (2015, April). *Connected Gardening: Cultivating interest and investment in data-infused gardening*. Paper to be presented at the annual convention of the American Educational Research Association, Chicago, IL.
- Zuiker, S. J.** (2015, January). Expert panelist on cyberlearning evaluation expertise exchange. Panel at the Center for Innovative Research in Cyberlearning's Cyberlearning 2015: Connect, Collaborate, and Create the Future, Washington, D.C.
- Zuiker, S. J.** (2014, April). *Expansively framing game-based learning through transitions*. Paper presented at the annual convention of the American Educational Research Association, Philadelphia, PA.
- Zuiker, S. J.** (2013, April). *Enlisting dramatic conventions to support classroom engagement with a virtual worlds curriculum*. Poster presented at the annual convention of the American Educational Research Association, San Francisco, CA.
- Zuiker, S. J.** (2010, May). *Game changers: The role of epistemic reflexivity in the work of epistemic gaming*. Paper presented at the annual convention of the American Educational Research Association, Denver, CO.
- Zuiker, S. J.** (2010, May). *Leveling up in Singapore schools: Adoption and adaptation of game-based learning*. Paper presented at the annual convention of the American Educational Research Association, Denver, CO.
- Zuiker, S. J.** (2009, April). *Assessment for "learning to be" in educational videogames*. Paper presented at the annual convention of the American Educational Research Association, San Diego, CA.

- Zuiker, S. J.** (2009, April). *Looking across enactments of game-based learning in Singapore*. Paper presented at the annual convention of the American Educational Research Association, San Diego, CA.
- Anderson, K. T., **Zuiker, S. J.**, & Saleh*, A. (2008, November). *Virtual space, global place, and contested schooling practices in a multi-user virtual curriculum*. Paper presented at American Anthropological Association, San Francisco, CA.
- Zuiker, S. J.**, Barab, S. A., & Hickey, D. T. (2008, March). *Gaming science and its consequences with Quest Atlantis*. Symposium paper presented at the annual convention of the American Educational Research Association, New York, NY.
- Zuiker, S. J.** (2008, March). *Transforming practice: Designing for liminal transitions along trajectories of participation*. Paper presented at the annual convention of the American Educational Research Association, New York, NY.
- Anderson, K. T., & **Zuiker, S. J.** (2008, March). *Examining science talk for participation, positioning, and learning*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Zuiker, S. J.**, Barab, S., & Hickey, D. T. (2007, April). *Extending situativity: Liminal episodes in embodied experiences*. Paper presented at the annual convention of the American Educational Research Association, Chicago, IL.
- Zuiker, S. J.**, Barab, S., Warren, S., Hickey, D. T., Aricci, A., Ingram-Goble, A., Kwon, E. J., Herring, S., & Kouper, I. (2007, April). *Developing a theory of formalisms: Socioscientific inquiry for schools*. Paper presented at the annual convention of the American Educational Research Association, Chicago, IL.
- Scott, B., Barab, S., Ingram-Goble, A., Goldstone, R., **Zuiker, S. J.**, & Warren, S. (2007, April). *Embodiment as a curricular scaffold for transferable understanding*. Paper presented at the annual convention of the American Educational Research Association, Chicago, IL.
- Zuiker, S. J.**, Kwon, E. J. & Hickey, D. T. (2006, April). *Assessment as formative design—and vice versa*. Paper presented at the annual convention of the American Educational Research Association, San Francisco, CA.
- Anderson, K., **Zuiker, S. J.**, Hickey, D. T., & Taasobshirazi, G. (2005, April). *Discourse analysis for enhancing the formative value of classroom assessment practices in science*. Poster presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Hickey, D. T., & **Zuiker, S. J.** (2004, April). *Curricular overview and learning outcomes in the GenScope Assessment Project*. Poster presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Kruger, A., Schafer, N., Russell, H. A., **Zuiker, S. J.**, & Michael, M. (2004, April). *A comparison of four different ways of coding engagement in videos of classroom activity*. Poster presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Schafer, N., Kruger, A., Russell, H. A., Michael, M., & **Zuiker, S. J.** (2004, April). *Coaching and video feedback for enhancing classroom assessment conversation and learning*. Poster presented at the annual meeting of the American Educational Research Association, San Diego, CA.

- Zuiker, S. J., & Hickey, D. T.** (2004, April). *Identities for knowing: Analysis of discourse and transfer of learning during collaborative formative feedback activities*. Poster presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Hickey, D. T., **Zuiker, S. J.**, & McGee, S. (2004, April). *Defining levels and types of knowledge in educational design experimentation*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Hickey, D. T., & **Zuiker, S. J.** (2004, April). *Design experimentation with multiple levels of assessment and multiple types of outcomes*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Schafer, N. J., Hickey, D. T., **Zuiker, S. J.**, Kruger, A. C., & Russell, H. A. (2003, April). *Using video feedback to facilitate classroom assessment conversation*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Hickey, D. T., Kruger, A. C., Fredrick, L. D., Schafer, N. J., Russell, H. A., Bable, B., Hand, B., Micheal, M., & **Zuiker, S. J.** (2003, April). *Design experimentation using multiple perspectives*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

STATE / LOCAL

- Tobias, E., Jordan, M., & **Zuiker, S. J.** (2021, November). *The Weight of Light: Reasoning and Imagining with Present and Possible Energy Systems*. Fall 2021 Herberger Research and Sabbatical Showcase. Tempe, AZ.
- Coats, C. & **Zuiker, S. J.** (2021, November). *Green STEAM Studios: Designing Agential Ecologies for Wonder, Curiosity, and Interconnectedness through School Gardens*. Fall 2021 Herberger Research and Sabbatical Showcase. Tempe, AZ.
- Fraker, T. & **Zuiker, S. J.** (2021, October). Green STEAM studio-Curiosity to amplification. Presentation at the Arizona Science Teachers Association Annual Conference. Phoenix, AZ.
- Zuiker, S. J.**, & Jordan, M. (2019, February). Fostering a university-organization collaboratory to enact educational change. Presentation at the ASU social embeddedness network conference. Phoenix, AZ.
- 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. J.**, & Ingram-Goble, A. (2015, December). *Design in transition: Positioning pedagogical intentions at the center of professional development workshops*. Paper presented at the annual conference of the Arizona Educational Research Organization. Tempe, AZ.
- Zuiker, S. J.**, Tefera, A., Piepgrass*, N., Winn*, K., Anderson, K., & Fischman, G. (2015, December). *Building Two-Way Roads: Knowledge Mobilization in and beyond Arizona's Systems of Education*. Symposium presentation at the annual conference of the Arizona Educational Research Organization. Tempe, AZ.
- Zuiker, S. J.**, & Jordan, M. (2014, September). *The visionary pursuit of the learning sciences*. Presentation at the ASU EdCon 14 Conference. Phoenix, AZ.

INVITED PRESENTATIONS

- Zuiker, S. J.,** Goebel, J., & Schmidt, A. (2023, October). *Exploring school garden and outdoor education research in Arizona*. Presentation at the Annual Arizona Farm To School Gathering.
- Zuiker, S. J.** (2021, March). *Outdoor / Hybrid Learning Environments for Schools*. Association for Learning Environments, Arizona Chapter- Southwest Region.
- Zuiker, S. J.** (2011, May). *Drill or practice: Enlisting new media to engage institutional knowledge*. Civil Defense Institute, Singapore.
- Zuiker, S. J.** (2010, October). *Will the real digital generation please stand up*. Opening Address at Ministry of Education and the National Institute of Education's EduLab Launch Event, Singapore.
- Zuiker, S. J.** (2010, September). *Professional learning as reciprocal apprenticeships*. Keynote Presentation at Western Zone Centre of Excellence in ICT. Beacon Primary School, Singapore.
- Zuiker, S. J.** (2010, July). *Human mentor^{beta}*. Keynote Presentation at the Eastern Zone Centre of Excellence in ICT: Extravaganza III. Victoria School, Singapore.
- Zuiker, S. J.** (2010, March). *Growing a culture of participation: Digitizing boundaries of learning*. Keynote Presentation at the annual Hwa Chong Institution Educational Technology Seminar. Hwa Chong Institution, Singapore.
- Zuiker, S. J.** (2009, September). *New media in education: Redefining the digital architecture of classroom interaction*. Keynote Presentation at Festival Di Arts. Inova Junior College, Singapore.
- Zuiker, S. J.** (2008, November). *Interactive digital media and participatory learning*. Presentation to Wee Kim Wee School of Communications faculty and students. Nanyang Technological University, Singapore.

PROFESSIONAL DEVELOPMENT WORKSHOPS

INTERNATIONAL

- 2021 Invited Panelist. *Flexible Summative Assessment Webinar*. US-AID & Mary Lou Fulton Teachers College Higher Education Partnership–Morocco.

NATIONAL

- 2020 Invited Panelist. *Research Dissemination: Strategies for Supporting Knowledge Use and Disseminating your Research to Different Audiences Webinar*. NSF Community for Advancing Discovery Research in Education Fellows program.

INSTITUTIONAL

- 2020 Invited Presenter. presentation for Elementary Education Program Expertise Expansion Series (Instructors: Jessica Debiase).
- 2018 Invited Presenter, Expanding Design-Based Research presentation to Learning, Literacies, & Technology Doctoral Program Interdisciplinary Seminar (Instructors: Drs. James Gee & Brian Nelson).
- 2017 Organizer, Applied Projects Design Challenge for Graduate Program Coordinators (co-organized with Drs. Carl Hermanns and Sam DiGangi), Division of Educational Leadership & Innovation.

- 2016 Invited Presenter, Design-Based Research presentation to Learning, Literacies, & Technology Doctoral Program Interdisciplinary Seminar (Instructors: Drs. Frank Serafini & Ian Douglas).
- 2016 Organizer, Design Thinking Workshop (Co-organized with Drs. Michelle Jordan and Danah Henriksen), Teachers College Annual Summit.
- 2014 Invited Presenter, Design-Based Research presentation to Learning, Literacies, & Technology Doctoral Program Interdisciplinary Seminar (Instructors: Drs. Steve Graham & Betty Hayes).
- 2014 Organizer, Mapping Our Research Workshop (Co-Organized with Drs. Jeanne Wilcox and Audrey Ammerand-Beardsley), Teachers College Annual Summit.
- 2014 Organizer, Undergraduate Designing for Future Learning Internship Program,
- 2013 Invited Presenter, Design-Based Research presentation to Learning, Literacies, & Technology Doctoral Program Interdisciplinary Seminar (Instructors: Drs. Steve Graham & Betty Hayes).
- 2013 Invited Presenter, Educational Technology Doctoral Seminar (Instructor: Dr. Robert Atkinson).
- 2013 Panelist, *Learning Sciences* panel discussion for Division of Educational Leadership and Innovation faculty (October 11, 2013).
- 2013 Panelist, *Interdisciplinary Research*. Panel Discussion for Doctoral Program Campus Recruitment Visit (March 6, 2013).
- 2009 Chairperson & Conference Organizer, Nexus of Research & Practice Conference, National Institute of Education, Singapore.
- 2008 Chairperson & Conference Organizer, Digital Media & Learning Conference, Nanyang Technological University, Singapore.

LOCAL

- 2018 Co-convenor, School Leadership Garden Summit, Administrator workshop on cultivating student success with school gardens. Phoenix, Arizona.

AWARDS

PROFESSIONAL

- 2010 Recipient, Best Paper Award, 4th IEEE International Conference on Digital Ecosystems and Technologies
- 2008 Nominee, Best Paper Award, International Conference of the Learning Sciences
- 2006 Recipient, Reviewer of the Year Award, Educational Researcher.

INSTITUTIONAL

- 2019 Recipient, Excellence in Community-Engaged Research Award, Mary Lou Fulton Teachers College, Arizona State University
- 2017-2018 Dean Appointee, Leadership Academy, Arizona State University

COURSE TEACHING

ARIZONA STATE UNIVERSITY

- | | |
|---|---|
| DCI 691: Design-Based Research in Education | EDT 506: Educational Evaluation |
| DCI 691: Mixed Methods Research | EDT 530: Technology Integration Methods |

EDT 545: Using the Internet in Education
EDT 591: Designing for Future Learning
EDP 540: Theoretical Views of Learning
HUL 498: Humanities Lab
LSE 570: Case Exemplars of Learning Systems
LSE 591: Learning Sciences Pro-seminar
LSE 593: Applied Projects

LSE 599: Thesis
TEL 215: Child & Adolescent Development
TEL 313: Technology in an Educational Setting
TEL 504: Learning & Instruction
TEL 702: Dynamic Contexts of Education
TEL 704: Leadership for Organizational Change

UNIVERSITY OF HOUSTON
Research Methods in Education I

Research Methods in Education II

NATIONAL INSTITUTE OF EDUCATION, SINGAPORE

Qualitative Research Methods
Games & Simulations for Learning

Interactive Learning Environment Design
Educational Technology for Engaged Learning

INDIANA UNIVERSITY, BLOOMINGTON
Educational Psychology for Teachers

THE HERITAGE SCHOOL, NEW YORK CITY

Mathematics

Economics

HEDARU SECONDARY SCHOOL, TANZANIA

Mathematics

Physics

STUDENT MENTORING

DISSERTATION COMMITTEE CHAIR

Bregje Van Geffen. Arizona State University. Learning, Literacies, & Technology PhD program.

Annette Schmidt. Arizona State University. Learning, Literacies, & Technology PhD program. 2025.

Amanda Riske. Arizona State University. Learning, Literacies, & Technology PhD program. 2022.

Tome Martinez. Arizona State University. Educational Technology PhD Program. 2019.

James Thomas. Arizona State University. Educational Technology PhD Program. 2017.

DISSERTATION COMMITTEE MEMBER

Afua Ameley-Quaye. Arizona State University. Design, Environment, and the Arts PhD Program. 2025.

John Bello. Arizona State University. Educational Leadership & Innovation EdD Program. 2023.

Melissa Sacchetta. Arizona State University. Speech & Hearing Science PhD Program. 2022.

Cory Lomonte. Arizona State University. Educational Leadership & Innovation EdD Program. 2019.

Jennifer Vargas Wright. Arizona State University. Educational Technology PhD Program. 2018.

Priyanka Parekh. Arizona State University. Learning, Literacies, & Technology PhD program. 2018.

Dianna Lippincott. Arizona State University. Educational Leadership & Innovation EdD Program. 2017.

MASTER'S THESIS COMMITTEE CHAIR

Danielle Du. Arizona State University. Learning Sciences MA Program. 2025.

Rebekah Jongewaard. Arizona State University. Learning Sciences MA Program. 2021.
Siyuan Lee. Arizona State University. Learning Sciences MA Program. 2019.
Elizabeth Sanders. Arizona State University. Learning Sciences MA Program. 2019.

MASTER'S DEGREE THESIS COMMITTEE MEMBER

Isis Howard. Arizona State University. Learning Sciences MA Program. 2022.
Curtiss Brouthers. Arizona State University. Learning Sciences MA Program. 2021.
Digengni. Arizona State University. Learning Sciences MA Program. 2020.

BACHELOR'S DEGREE HONORS THESIS ADVISOR

Kameron Darre. Arizona State University. Barrett Honors College-Biology BS. 2026 (expected).
Elora Bevacqua. Arizona State University. Barrett Honors College-Sustainability BA. 2023.
Zoller Peffley. Arizona State University. Barrett Honors College-Sustainability BA. 2023.

EXTERNAL DISSERTATION EXAMINER

Doctoral candidate. National Institute of Education (Singapore), 2025.
Doctoral candidate. University of Haifa (Israel), 2023.
Doctoral candidate. Nanyang Technological University (Singapore), 2021.

SERVICE

COMMUNITY

2024 Member, Arizona Department of Education's Statewide Strategic Plan and Roadmap for Farm-to-School working group
2021 – 2025 Board Member, Pathways to Learning, Tonto Creek Camp, and Chauncey Ranch.

PROFESSIONAL

2018 – Present Editorial Board Member, *International Journal Educational Leadership & Policy*
2013 – Present Editorial Board Member, *Journal of Research on Technology in Education*
2007 – Present Ad Hoc Reviewer for *Journal of the Learning Sciences*, *Sage Open*, *Interactive Learning Environments*, *British Journal of Educational Technology*, *Journal of Science Education and Technology*, *Science Education*
2002 – Present Conference Reviewer for *International Conference of the Learning Sciences* and *American Education Research Association*.
2024 External Reviewer, Singapore Ministry of Education's *Education Research Funding Programme*

2020-2024 External Reviewer, Singapore Ministry of Education's *Tertiary Education Research Fund*

2018 Program Committee, *International Conference on Computers in Education*

2018, 2016, 2012 Grant Review Panelist, *National Science Foundation*

2016 – 2019 Board Member, *Arizona Educational Research Organization*.

2014 – 2017 Grant Review Panelist, *National Institute of Education, Singapore*.

2004 – 2006 Student Editorial Advisory Board Member, *Educational Researcher, Research News & Comment* section.

INSTITUTION

2023 – 2025 Member, ASU-Blackstone LaunchPad Stewardship Council

2023 – 2025 College Ambassador, ASU Global Futures Scholars and Scientists Network

2016 – 2021 Faculty Affiliate, Center for Advanced Studies in Global Education.

2012 – 2021 Faculty Affiliate, Center for Games & Impact.

2017 – 2019 Faculty Affiliate, Early Career Scholars of Teaching and Learning.

2015 – 2019 Faculty Affiliate, Institute for the Science of Teaching & Learning.

2016 – 2018 Faculty Affiliate, Center for the Art & Science of Teaching.

2012 – 2015 Faculty Affiliate, Learning Sciences Institute.

COLLEGE

2024-Present Elected Member, Personal Evaluation Committee for Tenure Eligible Faculty

2024 Chair, Environmental Education Clinical Faculty Search Committee

2023 Member, Global Futures Education Alliance Presidential Professor of Practice Search Committee.

2019 – 2020 Member, Teaching Excellence Committee.

2014 – 2017 Advisory Board Member, Professional Learning Library College Repository.

2013 – 2017 Faculty Affiliate, *edXchange* knowledge mobilization initiative.

DIVISION/DEPARTMENT

2015 – Present Program Coordinator, Learning Sciences Master's Degree Program.

2021-2022 Search Committee, Education Technology Presidential Professor Search Committee.

2016 – 2019 Admissions Committee Member, Learning, Literacies, & Technology PhD Program.

2013 – 2015 Program Committee Member, Learning, Literacies, & Technology PhD Program.

2014 – 2015	Program Planning Committee Chair, Learning Sciences MA Program.
2013 – 2015	Faculty Mentor, Educators Academy.
2014	Student Specialization Subcommittee Member, Learning, Literacies, & Technology Doctoral Program.
2014	Search Committee Member, Curriculum Studies Faculty Search.
2013 – 2014	Faculty Mentor, International Leaders in Education Program.
2013	Search Committee Member, Learning Sciences Faculty Search.
2012 – 2013	Review Committee Member, Graduate Student Fellowships.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Educational Research Association
International Society of the Learning Science