

# Melissa Warr

Assistant Professor of Education, Design, and Learning Technology  
New Mexico State University

[melissa-warr.com](http://melissa-warr.com)  
[Google Scholar profile](#)  
[warr@nmsu.edu](mailto:warr@nmsu.edu)

---

## Education

### **Doctor of Philosophy: Learning, Literacies, and Technologies**

Arizona State University, Tempe, AZ (2021)

Dissertation: Teachers as Designers: Epistemic Diversity and Sensemaking Amidst Indeterminacy

### **Master of Science: Instructional Psychology & Technology**

Brigham Young University, Provo, UT (2016)

Thesis: Teachers' Adoption of Learner-Centered Technology

### **Bachelor of Music: Secondary Music and Mathematics Education**

Brigham Young University, Provo, UT (2005)

---

## Publications

### **Articles in Peer-Reviewed Journals**

**Warr, M.**, Dicochea, L., Alvarez-Flores, S., Holmes, T., O'Connor, B., Garcia, D., Martinez Orozco, R., (in press). Leveraging interdisciplinary problem-based learning for social impact in graduate education

Warr, M., Oster, N., & Isaac, R. (2024). Implicit bias in large language models: Experimental proof and implications for education. *Journal of Research on Technology in Education*, 0(0), 1–24. <https://doi.org/10.1080/15391523.2024.2395295>

Allman, B., Kimmons, R., Dickson-Deane, C., Bozkurt, A., **Warr, M.**, Stefaniak, J., Dash, M., & Bondah, F. E. (2024). EdTechnica: A vision of an educational publishing community of practice that is accessible, flexible, and just. *International Journal of Educational Technology in Higher Education*, 21(1), 1–22. <https://doi.org/10.1186/s41239-024-00466-1>

Close, K., **Warr, M.**, & Mishra, P. (2023). The ethical consequences, contestations, and possibilities of designs in educational systems. *TechTrends*. <https://doi.org/10.1007/s11528-023-00900-7>

**Warr, M.**, & Mishra, P. (2023). Learning to see complexity: Teachers designing amidst indeterminacy. *Professional Development in Education*, 1–17. <https://doi.org/10.1080/19415257.2023.2253821>.

Mishra, P., **Warr, M.**, & Islam, R. (2023). TPACK in the age of ChatGPT and Generative AI. *Journal of Digital Learning in Teacher Education*. <https://doi.org/10.1080/21532974.2023.2247480>

**Warr, M.**, Driskell, S., Langran, E., Mouza, C., & Schmidt-Crawford, D. (2023). Curriculum design for technology infusion requires a continuous collaborative process. *Contemporary Issues in Technology and Teacher Education*, 23(1). <https://citejournal.org/volume-23/issue-1->

[23/general/curriculum-design-for-technology-infusion-requires-a-continuous-collaborative-process](#)

- Warr, M., & Mishra, P.** (2021). Integrating the discourse on teachers and design: An analysis of ten years of scholarship. *Teaching and Teacher Education*, 99(March 2021). <https://doi.org/10.1016/j.tate.2020.103274>
- Mishra, P., & **Warr, M.** (2021). Contextualizing TPACK within systems and cultures of practice. *Computers in Human Behavior*, 117, 106673. <https://doi.org/10.1016/j.chb.2020.106673>
- Donner, J., **Warr, M.**, Leahy, S. M., & Mishra, P. (2020). Embracing failure in a first-year technology course. *Revista de Tecnologia Educativa*, 1(3), 68. <https://doi.org/10.17345/ute.2020.3.2873>
- Weiner, S., **Warr, M.**, & Mishra, P. (2020). Fostering system-level perspective taking when designing for change in educational systems. *TechTrends*, 64, 779–788. <https://doi.org/10.1007/s11528-020-00529-w>
- Warr, M.**, & West, R. E. (2020). Bridging academic disciplines with interdisciplinary project-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 14(1). <https://doi.org/10.14434/ijpbl.v14i1.28590>
- Warr, M.**, & Sampson, C. (2020). Achieving critical dialogue in online doctoral programs: An exploration of student perceptions and experiences with multiple modalities. *TechTrends*, 64(6), 860–867. <https://doi.org/10.1007/s11528-020-00499-z>
- Warr, M.**, Mishra, P., & Scragg, B. (2020). Designing theory. *Educational Technology Research and Development*, 68(2), 601–632. <https://doi.org/10.1007/s11423-020-09746-9>
- Zaugg, H., & **Warr, M.** (2018). Integrating a creativity, innovation, and design studio within an academic library. *Library Management*, 39(3/4), 172–187. <https://doi.org/10.1108/LM-09-2017-0091>

## Articles as Parts of Series

- Warr, M.**, Mishra, P., Henriksen, D., & Woo, L. J. (2023). A chat about GPT3 (and other forms of alien intelligence) with Chris Dede. *TechTrends*. <https://doi.org/10.1007/s11528-023-00843-z>
- Keenan-Lechel, S. F., **Warr, M.**, Richardson, C., Mishra, P., Mehta, R., Henriksen, D., & Gruber, N. (2023). A decade of rethinking creativity, technology and learning: Reflections with the Deep-Play Research Group. *TechTrends*. <https://doi.org/10.1007/s11528-022-00817-7>
- Warr, M.**, Jungkind, E., & Mishra, P. (2022). Participatory creativity and maker empowerment: A conversation with Edward Clapp, Ed.D. *TechTrends*, 66(1), 12–16. <https://doi.org/10.1007/s11528-021-00687-5>
- Singha, S., **Warr, M.**, Mishra, P., Henriksen, D., & Deep-Play Research Group. (2020). Playing with creativity across the lifespan: A conversation with Dr. Sandra Russ. *TechTrends*, 64, 550–554. <https://doi.org/10.1007/s11528-020-00514-3>
- Warr, M.**, Henriksen, D., Mishra, P., & The Deep-Play Research Group. (2019). Creativity and expressive arts, performance, physicality and wellness: A conversation with Dr. Paula Thomson and Dr. Victoria Jaque. *TechTrends*, 63(2), 102–107. <https://doi.org/10.1007/s11528-019-00372-8>
- Warr, M.**, Henriksen, D., & Mishra, P. (2018). Creativity and flow in surgery, music, and cooking: An interview with neuroscientist Charles Limb. *TechTrends*, 62(2), 137–142. <https://doi.org/10.1007/s11528-018-0251-3>

Henriksen, D., Mishra, P., **Warr, M.**, & The Deep-Play Research Group. (2017). A cybernetic perspective on design and creativity: A conversation with Dr. Paul Pangaro. *TechTrends*, 62(1), 6–10. <https://doi.org/10.1007/s11528-017-0232-y>

**Warr, M.**, Nelson, K. R., & West, R. E. (2014). Educational technology research journals: Cognition and Instruction, 2003-2012. *Educational Technology*, March-April, 26–31.

## Articles in Editor-Reviewed Journals

**Warr, M.** (2004). Paul Rolland's spiral curriculum. *American String Teacher*, 54(4), 56–58. <https://doi.org/10.1177/000313130405400414>.

## Book Chapters

Chatterjee, S., & **Warr, M.** (2024). Connecting theory and practice: Large language models as tools for PCK development in teacher education. In R. Blankenship & T. Cherner (Eds.), *Research Highlights in Technology and Teacher Education*. AACE.

Clausen, J. M., Rutledge, D., Borthwick, A. C., Driscoll, S., Jin, Y., Sprague, D. R., **Warr, M.**, & Williams, M. K. (2024). Four pillars of technology infusion: Using Q methodology to examine candidate perspectives on their preparation to use technology. In T. Cherner & R. Blankenship (Eds.), *Research highlights in technology and teacher education* (Vol. 1, pp. 86–101). Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/p/224327/>

**Warr, M.** (2024). Blending generative AI, critical pedagogy, and teacher education to expose and challenge automated inequality. In R. Blankenship & T. Cherner (Eds.), *Research Highlights in Technology and Teacher Education*. AACE.

West, R.E., McDonald, J.K., **Warr, M.**, Mishra, P. (2024). Designing for creative Learning: How instructional designers can influence the 5 A's of creativity. *Oxford Handbook of Creativity and Education*.

**Warr, M.**, Close, K., & Mishra, P. (2023). What is is not what has to be: The five spaces framework as a lens for (re)design in education. In B. Hokanson, M. Schmidt, M. E. Exter, A. A. Tawfik, & Y. Earnshaw (Eds.), *Design thinking, growth mindset and community* (pp. 305–315). Springer, Cham. [https://doi.org/10.1007/978-3-031-41950-8\\_24](https://doi.org/10.1007/978-3-031-41950-8_24)

**Warr, M.**, & Wakefield, W. (2023). Supporting teachers in designing for intersectionality. In B. Hokanson, M. Exter, M. Schmidt, & A. Tawfik (Eds.), *Toward Inclusive Learning Design: Social Justice, Equity, and Community* (pp. 171–181). Springer, Cham. [https://doi.org/10.1007/978-3-031-37697-9\\_14](https://doi.org/10.1007/978-3-031-37697-9_14)

Mishra, P. & **Warr, M.** (2022). TPACK: The TPACK Technology Integration Framework. *EdTechnica: The Open Encyclopedia of Educational Technology*. <https://edtechbooks.org/encyclopedia/tpack>

Mishra, P., **Warr, M.**, & Scragg, B. (2022). Two possible futures of online learning. In S. P. McKenzie, L. Arulkadacham, J. Chung, & Z. Aziz (Eds.), *The future of online education: Advancements in learning and instruction*. Nova.

**Warr, M.**, Mishra, P., Scragg, B., Powers, J., Wong, L. (2022). Complicating design thinking in education: A university-school district partnership to design a school for the future. In Sanzo, K. L. & Scribner, J. P. (Eds.), *Design Thinking: Research, Innovation, and Implementation*. Information Age Publishing.

- Mishra, P., & **Warr, M.** (2020). Forward: A systems view of technology infusion. In A. C. Borthwick, T. S. Foulger, & K. J. Graziano (Eds.), *Championing technology infusion in teacher preparation: A framework for supporting future educators*. International Society for Technology in Education.
- Rich, P. J., West, R. E., & **Warr, M.** (2015). Innovating how we teach collaborative design through studio-based pedagogy. In M. Orey (Ed.), *Educational Media and Technology Handbook* (pp. 147–163). Springer International Publishing. [https://doi.org/10.1007/978-3-319-14188-6\\_11](https://doi.org/10.1007/978-3-319-14188-6_11)

## Other

- Warr, M.** (2021). *Teachers as designers: Epistemic diversity and sensemaking amidst indeterminacy* (P. Mishra (ed.)) [PhD, Arizona State University]. <https://www.proquest.com/docview/2532139792>
- Warr, M.** (2016). *Teachers' adoption of learner-centered technology* (Master of Science). (R. E. West, Ed.). Brigham Young University. <https://scholarsarchive.byu.edu/etd/6569/>
- Warr, M.** (2006). High School Orchestra Assessment. *Utah American String Teacher Newsletter*.
- Warr, M.** (2005). Re-establishing and developing the BYU chapter of the American String Teachers' Association. *Brigham Young University Journal of Undergraduate Research*. <http://jur.byu.edu/?p=6030>

## Under Review

- Warr, M.,** Pivovarova, M., Mishra, P., Oster, N. (under review). Is ChatGPT racially biased? The case of evaluating student writing.

---

## Presentations

### International Peer-Reviewed Presentations

- Clausen, J. M., Rutledge, D., Borthwick, A. C., Driscoll, S., Jin, Y., Sprague, D. R., **Warr, M.,** & Williams, M. K. (2024). Four pillars of technology infusion: Using Q methodology to examine candidate perspectives on their preparation to use technology. In J. Cohen & G. Solano (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 2477–2486). Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/primary/p/224327/>
- Mishra, P., & **Warr, M.** (2024). Mapping the true nature of generative AI: Applications in educational research & Practice. In J. Cohen & G. Solano (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 826–831). Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/primary/p/224047/>
- Warr, M.** (2024). Beat bias? Personalization, bias, and generative Ai. In J. Cohen & G. Solano (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference* (pp. 1481–1488). Association for the Advancement of Computing in Education (AACE). <https://www.learntechlib.org/primary/p/224163/>
- Warr, M.,** Rutledge, D., Lowenthal, P., Cifuentes, L., Pina, A. A., Martindale, T. (2023, October 17) *Is Quality Matters a procrustean bed for higher education?* [Conference session]. Association for

Educational Communications and Technology International Conference, Orlando, Florida, United States.

Allman, B., Bozkurt, A., Dickson-Deane, C., Kimmons, R., Stefaniak, J., **Warr, M.**, (2023, October 16). *EdTechnica: Open educational resource and open educational practice* [Conference session]. Association for Educational Communications and Technology International Conference, Orlando, Florida, United States.

Close, K., **Warr, M.**, Mishra, P. (2023, October 16). *The ethical consequences, contestations, and possibilities of design in educational systems* [Conference presentation]. Association for Educational Communications and Technology International Conference, Orlando, Florida, United States.

**Warr, M.** (2023, August 24). Learning to see complexity: A case study of teachers designing in diverse contexts. *The European Conference on Educational Research*. The European Conference on Educational Research, Glasgow, Scotland.

**Warr, M.**, Mishra, P. (2023, August 22). *The five spaces for design in education*. The European Conference on Educational Research, Glasgow, Scotland.

Crawford, D., Driskell, S., Graziano, K., Langran, E., Mouza, C., & **Warr, M.** (2023, June 24). *Designing your teacher preparation program curriculum for technology infusion*. ISTE Live 23.

Borthwick, A., Foulger, T. S., Graziano, K. J., Jin, Y., Sprague, D. R., **Warr, M.**, & Williams, M. K. (2023). A deep dive into the four pillars of technology-infused teacher preparation programs. *Society for Information Technology & Teacher Education International Conference*, 1112–1116. <https://www.learntechlib.org/p/221972/>

**Warr, M.** (2023). EdTechnica: Open educational resource and open educational practice. *Society for Information Technology & Teacher Education International Conference*, 456–457. <https://www.learntechlib.org/p/222180/>

**Warr, M.**, & Mishra, P. (2023). Exploring technological contextual knowing. *Society for Information Technology & Teacher Education International Conference*, 2506–2509. <https://www.learntechlib.org/p/222232/>

**Warr, M.** (2022). *Design and technology integration: Making it concrete* [Conference session]. Association for Educational Communications and Technology International Conference, Las Vegas, Nevada, United States.

**Warr, M.** (2022). *A [new-to-design] process for supporting generative design critiques* [Conference session]. Association for Educational Communications and Technology International Conference, Las Vegas, Nevada.

**Warr, M.**, & EdTechnica Editorial Board (2022). *Developing a shared knowledge foundation for educational technology: Introducing EdTechnica* [Conference session]. Society for Information Technology & Teacher Education Interactive Conference, Las Vegas, Nevada, United States..

Blankenship, R., Mourlam, D., Berson, I., Berson, M., Lee, C.-Y., Peng, L.-W., Jin, Y., Lyublinskaya, I., Du, X., **Warr, M.**, Mishra, P., Williams, M., & Hatfield, T. (2022). Reimagining practical applications of the TPACK framework in the new digital era. *Society for Information Technology*

& *Teacher Education International Conference*, 2198–2203.  
<https://www.learntechlib.org/p/221011/>

- Butler, A., & Warr, M. (2022). Utilizing your resources: The diversification of learning through shifts in the teacher planning process. *Society for Information Technology & Teacher Education International Conference*, 2290–2293. <https://www.learntechlib.org/p/221024/>
- Warr, M., Butler, A., & Hatfield, T. (2022). Mixing it up: Technology integration through creative learning design. *Society for Information Technology & Teacher Education International Conference*, 1327–1331. <https://www.learntechlib.org/p/220890/>
- Warr, M. (2021, November). *Applying design principles to design for responsive professional development: A case study* [Conference session]. Association for Educational Communications and Technology International Conference.
- Warr, M. (2021, November). “*Seeing things differently*”: *Using diverse representations to promote epistemic diversity and fluency* [Conference session]. Association for Educational Communications and Technology International Conference.
- Warr, M., & Mishra, P. (2021, March). Why Design Thinking Sucks (in Education). In *Society for Information Technology & Teacher Education International Conference* (pp. 1035-1040).
- Warr, M., & Starrett, E. (2021, March). Exploring Technology Adoption Amidst Uncertainty. In *Society for Information Technology & Teacher Education International Conference* (pp. 801-810). Association for the Advancement of Computing in Education (AACE).
- Warr, M. (2020). *Learning design for contextually-anchored professional development* [Conference session]. Association for Educational Communications and Technology International Conference.
- Warr, M., & Close, K. (2020). *Designing culture for learning* [Conference session]. Association for Educational Communications and Technology International Conference.
- Donner, J., Warr, M., & Mishra, P. (2020). *Collaboration, creation, and community: A virtual community of practice for teacher educators* [Paper presentation]. Society for Information Technology and Teacher Education Virtual Conference.
- Warr, M., Mishra, P., & Scragg, B. (2019). *The five discourses of design: A model for systemic change in education* [Conference session]. Association for Educational Communications and Technology International Conference, Las Vegas, NV.
- Warr, M., & Sampson, C. (2019). *Critical dialogue: Can it happen online?* [Conference session]. Association for Educational Communications and Technology International Conference, Las Vegas, NV.
- Jordan, M., Wakefield, W., & Warr, M. (2019). *Exploring models of responsive professional development: How might we help teachers negotiate identity and expand agency?* [Conference session]. Scholarly Consortium for Innovation Psychology in Education National Conference, Savannah, Georgia.
- Warr, M. (2019). *Learning professional ways of being: A design approach to professional learning* [Poster presentation]. Scholarly Consortium for Innovative Psychology in Education National Conference, Savannah, Georgia.
- Warr, M., & Mishra, P. (2019). Teachers and design: A literature review. In *Society for Information Technology & Teacher Education International Conference* (pp. 949–956). Association for the Advancement of Computing in Education (AACE).

- Warr, M., Mishra, P., & Scragg, B.** (2019). Beyond TPACK: Expanding technology and teacher education to systems and culture. In *Society for Information Technology & Teacher Education International Conference* (pp. 2233–2237). Association for the Advancement of Computing in Education (AACE).
- Warr, M., & Mishra, P.** (2019). *Teachers as designers: Many threads of meaning* [Paper presentation]. Annual Meeting of the American Educational Research Association, Toronto, Canada.
- Mishra, P., Scragg, B., & **Warr, M.** (2018). The 5 Discourses of Design in e-learning. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1362–1365). Association for the Advancement of Computing in Education (AACE).
- Warr, M., Henriksen, D., & Mishra, P.** (2018). What do we mean when we “design” e-learning solutions? An analysis of the discourses on education and design. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 717–722). Association for the Advancement of Computing in Education (AACE).
- Warr, M., & Sampson, C.** (2018). Designing for critical dialogue online: Challenges and opportunities. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1303–1308). Association for the Advancement of Computing in Education (AACE).
- Warr, M., & Carter, N.** (2017). Best practices in implementing an online learning program for elementary literacy intervention. In P. Resta & S. Smith (Eds.), *Society for Information Technology & Teacher Education International Conference* (Vol. 2017, pp. 718–723). Association for the Advancement of Computing in Education (AACE).
- Warr, M., & West, R. E.** (2017). How do I know It’s working? A teacher's search for evidence. In P. Resta & S. Smith (Eds.), *Society for Information Technology & Teacher Education International Conference* (pp. 1093–1098). Association for the Advancement of Computing in Education (AACE).
- Zaugg, H., & **Warr, M.** (2017). *Integrating a creativity, innovation, and design studio within an academic library* [Paper presentation]. 12th Performance Measurement in Libraries (Northumbria) Conference, Oxford, England.

## State and University Research Presentations

- MacGregor-Mendoza, P., Gherardi, S., Allred, T., **Warr, M.** (2024). *R.I.S.E. to teaching excellence: A value-based framework*. New Mexico Higher Education Assessment and Retention Conference (NMHEAR).
- Warr, M. Beyond Cheating: Teaching with LLMs. *Research and Creativity Week*. New Mexico State University.
- Warr, M., Chatterjee, S. (2024). Custom GPT Models Role in Developing Pedagogical Content Knowledge in Teacher Candidates. *Research and Creativity Week*. New Mexico State University.
- Warr, M. (2024). Bias in LLMs: It’s not what you think. *Research and Creativity Week*. New Mexico State University.

## Invited Workshops and Presentations

**Warr, M., & Mishra, P. (2024).** *Stranger skills: Critical practices for generative AI in teaching and learning*. International Society for Technology in Teacher Education, Denver, Colorado.

Mishra, P., & **Warr, M. (2024).** *TPACK in the age of ChatGPT and generative AI*. International Society for Technology in Education, Denver, Colorado.

**Ethics and Bias in AI.** (2024, Arizona State University). The AI in Education Learning Futures Collaborative. <https://my.education.asu.edu/ai#series>

**Stranger Skills: Purpose-Driven Use of AI in Online Teaching and Learning.** (2024, March 22, New Mexico State University). Let's Talk Online Teaching series.

**Stranger Skills: Learning Inside-Out with ChatGPT** (2024, February 29, Albuquerque, New Mexico). Educators' Rising State Conference.

**AI in Education Statewide Summit: AI, Ethics, and Education** (2024, Arizona State University). Invited panelist

**Generative AI in Education** (2023, November 3, Arizona State University). Uncovering implicit bias in ChatGPT.

**Just an Hour: Starting a New Line of Research** (2023, October 9, Arizona State University). Available at <https://youtu.be/AAmVxeB2mDk?si=4Y208jJSfHTJm1fB>

**Just an Hour: Exploring the Meaning of Transdisciplinary Scholarship** (2022, September 9, Arizona State University). Available at <https://youtu.be/4Ah668CWVdE?si=D0uuY-0CV2pkp-dX>

**An Exploration of Creativity, Learning, and Educational Technology** (2022, Society for Information Technology and Teacher Education Interactive Conference).

**Enhancing Creativity, Beverly Taylor Sorenson Arts Campus Connection** (2021, Provo, UT). Led 30 Utah arts educators in a virtual session on expanding creative methods.

**Seminar Workshops, Brigham Young University Instructional Psychology and Technology Department** (2020, Provo, UT). Led three virtual workshops on creativity, design, and learning for 80 graduate level students.

**Pre-Convention Writers' Workshop for the Formative Design and Design Thinking Journal** (2019, Las Vegas, NV). Led workshop in collaboration with Robert Kennedy, Glenda Gunter, Michelle Jordan, and Danah Henriksen.

---

## **Teaching and Advising**

### **Faculty Development**

**Peer Observer** (September–December 2023, New Mexico State University). Assisted in developing a framework and instrument for peer teaching observations. Observed and provided feedback on courses of nine NMSU instructors.

**Digital Faculty Fellow** (July–December 2023, New Mexico State University). Coached seven NMSU faculty in improving their course designs.

**University of Louisiana System Online Bootcamp** (June–August 2021, Monroe, LA)

Co-designed and facilitated online course for faculty members across the University of Louisiana system. Course focused on developing competencies for online and hybrid course design with an



emphasis on Backwards Design, Universal Design for Learning, and alternative assessment approaches.

## Graduate Level Teaching

**EDLT 6230 Technology, Society, and Education [Online]** (2024, New Mexico State University)

*Course Description:* Investigates models of the change process, examines speculations related to the directions and dynamics of change in an era of electronic technologies, explores shifts in the cultural and personal activities and relations of humans, and speculates on concomitant educational implications.

*Role:* Course design, instructor

**EDLT 5220 Culturally Sustaining Teaching with Technology [Online]** (2024, New Mexico State University)

*Course Description:* Use of inquiry and problem-based learning supported by computer-based applications. Critical analysis of multiple forms of electronic media.

*Role:* Course design, instructor

**EDLT 5230 Designing Online Environments [Online]** (2024, New Mexico State University)

*Course Description:* Explores the theories, models, approaches, technologies, and methods of online teaching and adult learning. Provides a foundation for examining the roles and characteristics of the online teacher and learner for those teaching adults in higher education, business, or government settings. May be repeated up to 3 credits.

*Role:* Course re-design, instructor

**EDLT 5992 Designing Transmedia Learning Environments [Online]** (2024, New Mexico State University)

*Course Description:* In this course, we will explore the relationship between media (images, audio, video, web design, and more) and learning. Our core project will be designing a transmedia learning environment. You will choose some concept and design several types of media that help show different aspects of that concept. Along the way, we will learn about how to apply learning theory to media design, making learning media accessible, and the design and critique process.

*Role:* Course design, instructor

**EDLT 5110 Foundations of Learning Design and Technology [Online]** (2023, New Mexico State University)

*Course Description:* This course provides a high-level overview of the field of instructional design and technology, including the history of the field, core theories, and instructional design processes. Students complete a basic instructional design project.

*Role:* Course re-design, instructor

**EDUC 6410** **Current Research in Education [Online]** (2023, New Mexico State University)

*Course Description:* This course explores current research in education with an emphasis on understanding and evaluating research from diverse epistemological perspectives. Students also create an annotated bibliography, research questions, basic methods, and a literature review related to their current dissertation ideas.

*Role:* Course re-design, instructor

**EDLT 5220** **Culturally Responsive Teaching with Technology [Online]** (2023, New Mexico State University)

*Course Description:* This course explores the use of critical pedagogy, culturally sustaining pedagogy, and project-based learning supported by computer-based applications. We will also conduct a critical analysis of multiple forms of electronic media.

*Role:* Course re-design, instructor

**EDLT 5140** **Fostering Online Learning Communities [Online]** (2023, New Mexico State University)

*Course Description:* Examines theoretical and practical aspects of communication and collaboration and their impact on the formation of online learning communities for those teaching adults in higher education, business, or government settings.

*Role:* Course re-design, instructor

**EDUC 5130** **Technology and Pedagogy [Online]** (2022, 2024 New Mexico State University)

*Course Description:* Critical analysis, design, and evaluation of computer-based technologies in teaching and learning for diverse communities.

*Role:* Course re-design, instructor

**CURR 5018** **Technology Integration and Portfolio Development [Online]** (2021, 2022, University of Louisiana at Monroe)

*Course Description:* This course broadly explores technologies that are being developed or applied as educational tools and applications and prepares candidates for implementation and best practices related to the application of instructional technology in a variety of situations, in libraries, schools, instructional settings, institutional resource centers, and corporate training programs.

*Role:* Course re-design, instructor

**EDIT 5055** **Instructional Design and Program Development [Online]** (2021, University of Louisiana at Monroe)

*Course Description:* Candidates apply instructional design principles dealing with instruction and performance problems in school and non-school environments by developing online experiences in instructional program development, curriculum design, integration of state and national school technology standards and planning, design, and the implementation of professional development activities appropriate for professional organizational environments.

*Role:* Course re-design, instructor

**EDFN 5024**     **Utilization of Instructional Technologies [Online]** (2021, 2022, University of Louisiana at Monroe)

*Course Description:* This course provides instruction in the selection, organization, and integration of technology-based instructional materials into instructional settings.

*Role:* Course re-design, instructor

**EDFN 5028**     **Instructional Media Development, [Online]** (2021, University of Louisiana at Monroe)

*Course Description:* Provides instruction in organization, design, preparation and application of technology-based production of instructional materials for print and web-based distribution.

*Role:* Course re-design, instructor

**DCI 791**     **Education by Design [Online]** (2020, Co-teacher with Punya Mishra, Arizona State University)

*Course Description:* A small class emphasizing discussion, presentations by students, and written research papers.

*Role:* Assisted in designing course, selecting readings, preparing lectures, and providing feedback on student work.

**LSE 542**     **Research Methods in the Learning Sciences [Hybrid]** (2020, Teaching Associate with Michelle Jordan, Arizona State University)

*Course Description:* Develops a strong methodological toolkit for building, testing and advancing learning theory through innovations that achieve meaningful impact. The field of the learning sciences is interdisciplinary, drawing on multiple theoretical perspectives and research paradigms to build understandings of the nature and conditions of learning, cognition and development.

*Role:* Lectured on data analysis methods including multi-modal data analysis and qualitative data analysis software, supported students in design-based research study, provided feedback on student work.

**DCI 791**     **Education by Design** (2018, Co-teacher for Punya Mishra, Arizona State University)

*Course Description:* A small class emphasizing discussion, presentations by students, and written research papers.

*Role:* Assisted in designing course, selecting readings, preparing lectures, and providing feedback on student work.

**DCI 780**     **Design in the Real World** (2017, Co-teacher with Punya Mishra, Arizona State University)

*Course description:* Structured practical experience in design in education, including design theory and educational applications.

*Role:* Assisted in designing course, selecting readings, guiding discussions, preparing lectures, and evaluating student work.

**IPT 520**      **Foundations in Instructional Design** (2016, Co-teacher with Richard E. West, Brigham Young University)

*Course description:* Introduction to instructional psychology and technology theory and practice: psychological foundations of human performance technology and learning sciences. Current research issues, professional organization of the field, and ethical issues.

*Role:* Lectured on k-12 technology integration, innovation adoption, school change, and issues in online and distance learning; evaluated student work; provided feedback on student writing.

**IPT 653**      **Introduction to Qualitative Research** (2016, Co-teacher with Richard E. West, Brigham Young University)

*Course description:* Introduction to qualitative inquiry in education, emphasizing major assumptions of qualitative research, a survey of prominent qualitative approaches, differences between various qualitative approaches and more traditional qualitative strategies, and practice with basic qualitative research skills such as interviewing, transcription, data analysis, and report writing.

*Role:* Lectured on coding practices, qualitative analysis, computer-assisted qualitative data analysis (CAQDAS), and interviewing and observation techniques; provided feedback on student work; led online discussions; assisted students in identifying research questions and designing studies.

## **Undergraduate Teaching**

**EDT 180**      **Technology Literacy: Problem Solving using Digital Technology Applications [Hybrid]** (2020, Arizona State University)

*Course Description:* Introducing and exploring new and emerging technologies through hands-on engagement to consider the futures of learning. Provides experiences in developing a collection of skills, knowledge, and competencies focusing on the learner, content, and data through analysis, creation, and communication using a diverse set of technologies.

*Role:* Instructor of record, designer for adapting this freshman-level educational technology literacy course for flexible in-person and online delivery.

**EDT 180**      **Technology Literacy: Problem Solving using Digital Technology Applications** (2019, Arizona State University)

*Course Description:* Introducing digital technologies and their place in society. Applies 21st-century skills to problem solving using digital technology applications including spreadsheets and databases.

*Role:* Instructor of record, co-designer for pilot version of this freshman-level educational technology literacy course.

**EDP 311**      **Educational Psychology for Future Teachers [Online]** (2019, Teaching Associate for Michelle Jordan, Arizona State University)

*Course Description:* Planning and conducting effective instruction based on learning theories and principles.

*Role:* Assisted in redesigning course for online implementation, evaluating and providing feedback on student work, troubleshooting technical problems, and supporting students.

## **K–12 Teaching**

**Director of Education** (2010–2011, Sylvan Learning Center, Taylorsville, UT)

**Advanced Math, Reading, and Writing Tutor** (2009–2014, Sylvan Learning Center, UT)

**Orchestra Director** (2011, American Preparatory Academy, West Valley, UT)

**Orchestra Director** (2005–2008, Payson Middle School, Mt. Nebo Junior High School, and Payson High School, Payson, UT)

---

## **Scholarly Service and Leadership**

**Co-Chair of AI Special Interest Group** (2024–present). Society for Information Technology and Teacher Education

**Educators Rising Faculty Advisor** (2023–present). New Mexico State University

**Grant Consultant: Design Thinking** (2023–present). Arizona State University

**Vice President of Communications** (2022–present) Design and Development Division, Association for Educational Communications & Technology

**Board Member** (2022–present) *EdTechnica Encyclopedia*

**Digital Faculty Fellow** (2023). New Mexico State University

**Search Committee Member: Academic Dean of Research** (2023). New Mexico State University

**Editor** (2019–2022, *Talking About Design* website and blog)

**Doctoral Executive Council member** (2020–2021) Mary Lou Fulton Teachers College, Arizona State University

**Learning, Literacies, and Technologies Program Committee member** (2020–2021), Mary Lou Fulton Teachers College, Arizona State University

**Peer Reviewer** (2019–2021) Graduate and Professional Student Association, Arizona State University, Tempe, AZ

**Treasurer** (2014–2015) Instructional Psychology and Technology Student Organization; Provo, UT

**Member-At-Large** (2006–2009) Utah Chapter of the American String Teacher Association, Salt Lake City, UT

**President** (2004–2005) Brigham Young University Chapter of the American String Teacher Association, Provo, UT

## **Grants**

**Warr, M.,** Rutledge, D., Kew, K. (2023). *Preparing future teachers for technology integration: Teacher educators' perceptions of technology in teacher education. NMSU Teacher Pipeline Small Grant. (\$5000)*

**Dissertation Grant** (2020, Learning, Literacies, and Technologies Program, Arizona State University)  
Dissertation grant (\$1000)

**MLFTC Travel Grant** (2020, Mary Lou Fulton Teachers College, Arizona State University)  
Grant to attend 2020 Society for Information Technology and Teacher Education Annual Conference (SITE). (\$750)

**GPSA Travel Grant** (2019, Graduate and Professional Student Association, Arizona State University)  
Grant to attend 2019 Association for Educational Communications and Technology (AECT) Annual Conference, Las Vegas, NV. (\$950)

**MLFTC Travel Grant** (2019, Mary Lou Fulton Teachers College, Arizona State University)  
Grant to attend 2019 Scholarly Consortium for Innovation Psychology (SCIPIE) in Education, Savannah, Georgia. (\$750)

**MLFTC Travel Grant** (2019, Mary Lou Fulton Teachers College, Arizona State University)  
Grant to attend 2019 American Educational Research Association (AERA) Annual Meeting, Vancouver, Canada. (\$750)

**GPSA Travel Grant** (2019, Graduate and Professional Student Association, Arizona State University)  
Grant to attend 2019 American Educational Research Association (AERA) Annual Meeting, Vancouver, Canada. (\$950)

**AACE Student Scholarship** (2019, Association for Advancement of Computing in Education)  
Conference registration grant for 2019 Society for Information Technology and Teacher Education (SITE) Annual Conference, Las Vegas, NV.

**GPSA Travel Grant** (2019, Graduate and Professional Student Association, Arizona State University)  
Grant to attend 2019 Society for Information Technology and Teacher Education (SITE) Annual Conference, Las Vegas, NV. (\$950)

**ORCA Grant** (2005, Office of Research and Creative Activities, Brigham Young University)  
Research grant to build BYU branch of the American String Teachers' Association, attend the American String Teachers' National Conference, and report on resulting student benefits

**Oscarson Discovery Grant** (2003, Brigham Young University) Grant to attend and present at the 2003 International Music Education Workshop in Biarritz, France

---

## **Advising**

### **Doctoral Degree Committees**

Karen Toralba (May 2023), University of Louisiana at Monroe, "Multicultural Competence and Culturally Responsive Teaching of a Transnational Curriculum in Thailand"

### **Master's degree Committees**

Mahdia Ahmadi (April 2024), Asian University for Women, Chittagong, Bangladesh, “Afghanistan’s Education System and the Investigation of its Causes and Factors: Political, Social, Cultural, and Religious”

James R. Batchler (April 2024), New Mexico State University, “Utilizing The Universal Design For Learning to Increase The Diffusion of Research Media: Combining Technology and Pedagogy”

Bethany Meyers (December 2023), New Mexico State University, “Determining Essential Competencies of Agriculture Teachers in Management of Greenhouse Laboratories in Maryland”

---

## **Awards**

**Outstanding Research Paper Award** (2024, International Society for Technology in Education)

**AECT Design and Development Presidential Service Award** (2023, Association for Educational Communications and Technology)

**AECT Early Career Symposium Invitation** (2021, Association for Educational Communications and Technology)  
Awarded by the Research and Theory Division (\$545)

**Excellence in Teaching Award** (2019, Arizona State University)  
Awarded by Graduate and Professional Student Association. (\$750)

**Early Career Mentoring Scholarship Recipient** (2019, American Educational Research Association-AERA)  
Awarded by Design and Technology Special Interest Group (\$200)

**IP&T Outstanding Master’s Student Research Award** (2017, Brigham Young University)  
Annual award from the Instructional Psychology and Technology Department. (\$500)

---

## **Program Evaluation**

**Educational Design and Learning Technologies Masters’ Program** (2023, New Mexico State University, Las Cruces, New Mexico)

**Educational Technology Masters Programs** (2023, Miami University, Oxford, Ohio).

## **Course Designs**

**Technology, Society, and Education** (2024, New Mexico State University, Las Cruces, NM)  
Online doctoral course exploring the intersection of technology, society, and education

**Culturally Sustaining Teaching with Technology** (2024, New Mexico State University, Las Cruces, NM)  
Online master's course focused on technology-enhanced culturally sustaining pedagogy.

**Designing Online Environments** (2024, New Mexico State University, Las Cruces, NM)  
Online master's level course focused on building online courses.

**Designing Transmedia Learning Environments** (2024, New Mexico State University, Las Cruces, NM)  
Online master's level course in educational media development.

**Foundations of Learning Design and Technology** (2023, New Mexico State University, Las Cruces, NM)  
Online master's level course focused on overview of the field of instructional design and technology.

**Current Research in Education** (2023, New Mexico State University, Las Cruces, NM)  
Online doctoral level course on finding, evaluating, and developing educational research from diverse perspectives.

**Culturally Responsive Teaching with Technology** (2023, New Mexico State University, Las Cruces, NM)  
Online master's level course on culturally sustaining pedagogy with an emphasis on the relationship between electronic media and critical pedagogy.

**Fostering Online Learning Communities** (2023, New Mexico State University, Las Cruces, NM)  
Online master's level course focused on diverse approaches for building socially-supported learning in online courses.

**Technology and Pedagogy** (2022, New Mexico State University, Las Cruces, NM)  
Online master's level course on the role technology can play in teaching and learning as well as basics of media design.

**Technology integration and Portfolio Development** (2021, University of Louisiana-Monroe, Monroe, LA)  
Online master's level course on technology integration with an emphasis on media and technology literacy.

**Instructional Design and Program Development** (2021, University of Louisiana-Monroe, Monroe, LA)  
Online master's level course on instructional design, curriculum design, and designing for teacher technology standards.

**Instructional Media Development** (2021, University of Louisiana-Monroe, Monroe, LA)  
Online master's level course exploring media design and development for online and print sources. Course included a focus on transmedia design and learning.



**Utilization of Instructional Technologies** (2021, University of Louisiana-Monroe, Monroe, LA)  
Online master's level course focused on educational technology use and integration.

**Learning by Design** (2020, Arizona State University, Tempe, AZ)  
Online in-service teacher education course exploring design in teaching and learning, including backward design and learning assessment.

**Technology Literacy: Problem Solving using Digital Technology Applications** (2019–2020, Arizona State University, Tempe, AZ)  
First year technology literacy course for education majors. This course explores using technology for inquiry, communication, construction, and expression. Initially piloted in Fall 2019 and adapted for a hybrid format in Fall 2020.

**Educational Psychology for Future Teachers** (2019, Arizona State University, Tempe, AZ)  
Assisted in redesigning this pre-service educational psychology course for online delivery.

**Educational Technology Implementation** (2017, Imagine Learning, Provo, UT)  
Online in-service teacher training modules supporting planning and implementing educational technology programs in PK-6 classrooms.

**Dual Language Immersion Proficiency Training** (2014–2015, Utah State Office of Education)  
Designed and piloted training modules for evaluating student language proficiency.

---

## **Research Experience**

**Assistant Professor** (2022–present, New Mexico State University, Las Cruces, New Mexico)

**Assistant Professor** (2021–2022, University of Louisiana at Monroe, Monroe, Louisiana)

**Graduate Research Assistant** (2017–2021, Punya Mishra, Arizona State University, Tempe, AZ)  
Conducted research and wrote a variety of literature with Punya Mishra on the topics of creativity, design, and educational technology.

**Graduate Research Assistant** (2021, Ron Beghetto, Arizona State University, Tempe, AZ)  
Conducted a multi-timescale ideational pathways analysis of research data.

**Graduate Research Assistant** (2018–2019, Carrie Sampson, Arizona State University, Tempe, AZ)  
Conducted literature review and data analysis at supporting critical dialogue in an online doctoral course. Proposed and presented two conference proposals.

**Graduate Research Assistant** (2018, Danah Henriksen, Arizona State University, Tempe, AZ).  
Conducted literature review and data analysis on creative educational administrators

**Efficacy Research** (2015–2017, Imagine Learning, Provo, UT)  
Conducted literature reviews on a variety of educational technology topics. Designed research and evaluation studies. Created observation, survey, and research interview protocols. Trained field employees on observation techniques. Managed research data across multiple projects and research sites. Conducted research observations and interviews with teachers and students. Performed thematic qualitative analyses of interview and observational data. Analyzed quantitative data, including cleaning data and performing statistical analyses using R, Excel, and STATA. Reported results of quantitative and qualitative research through presentations, internal reports, customer-facing reports, and academic journal articles. Applied research findings by designing and developing resources for teachers, including online learning modules.

**Graduate Research Assistant** (2015–2017, Brigham Young University, Provo, UT)

Conducted research on teacher technology adoption and beliefs, including conducting literature reviews, interviewing teachers, observing classrooms, analyzing data, and reporting findings.

**Graduate Research Assistant** (2014–2015, Brigham Young University, Provo, UT)

Designed and implemented an evaluation of the interdisciplinary design studio at Brigham Young University. Collected data through interviews, observations, surveys, and document analysis. Analyzed data and made recommendations for program modification. Presented findings to stakeholders.

---

## **Community Volunteer Activities**

**Resource Parent** (2024 – present, New Mexico Children, Youth, and Family Department, Las Cruces, NM)

**Violinist** (2023 – present, Las Cruces Symphony Orchestra, Las Cruces, NM)

**Violinist** (2021–2022, Monroe Symphony Orchestra, Monroe, LA)

**Hurricane Ida Crisis Support Worker** (2021, Monroe, LA)

**Violinist** (2019–2020, Tempe Symphony Orchestra, Tempe, AZ)

**Child Mentor** (2014–2017, Children’s Justice Center, Provo, UT)

**Violinist** (2006–2010, Orchestra at Temple Square, Salt Lake City, UT)

**Concert Mistress** (2006–2008, Nebo Philharmonic Orchestra, Spanish Fork, UT)