May 29, 2025

CURRICULUM VITAE

David DeLiema

IDENTIFYING INFORMATION

Academic Rank

Assistant Professor - Department of Educational Psychology

Education

Degree	Institution	Date Degree Granted
B.A.	University of California, Los Angeles Communication Studies	2008
Ph.D.	University of California, Los Angeles Graduate School of Education and Information Studies Dissertation Chair: Noel Enyedy Dissertation Committee: William Sandoval, Charles Goodwin, Louis Gomez, Francis Steen	2015

Positions/Employment

University of Minnesota, Twin Cities
Assistant Professor — 2019 – present

University of California, Berkeley
Postdoctoral Researcher — 2016-2019

University of California, Los Angeles
Postdoctoral Researcher — 2015-2016

Current Membership in Professional Organizations

- American Educational Research Association (AERA)
- AERA, Special Interest Group – Learning Sciences
- International Society of the Learning Sciences (ISLS)

HONORS AND AWARDS FOR RESEARCH/CREATIVE WORK, TEACHING, PUBLIC ENGAGEMENT, AND SERVICE

University of Minnesota

- UMN's Thank a Teacher certificate through the Center for Educational Innovation (2021 & 2023)
- University of Minnesota's Center for Educational Innovation's Certificate for Outstanding Teaching and Dedication to Helping Students' Learn (2020)

External Sources

- Honorable Mention for the 2024 Jan Hawkins Award for Early Career Contributions to Humanistic Research and Scholarship in Learning Technologies
- Recognition in 2022 for Outstanding Service to the Journal of Educational Psychology
- Journal of the Learning Sciences Reviewer of the Year (received March, 2021)
- Facilitators' Choice Award, 2018 NSF STEM For All Video Showcase, Debugging Failure
- Participant, Early Career Workshop at ICLS 2016
- Participant, ICLS 2014 Doctoral Consortium
- Nominated, 2013 CSCL Best Design Paper (with Noel Enyedy and Joshua Danish)

RESEARCH, SCHOLARSHIP, AND CREATIVE WORK

Grants and Contracts

External Sources

Received at the University of Minnesota

Principal Investigator: Marjorie Bequette
Co-PIs: Megan Goeke & **David DeLiema**
Status: Funded
Sponsoring Organization: NSF AISL
Project Title: Practitioner-Driven Synthesis of Museum Family Learning Conversations Research
Award Dates: 9/1/2024 – 8/31/2027
Award Total: $499,743
Direct Amount: $386,976
Indirect Amount $112,767

Principal Investigator: Craig Anderson
Co-PI: **David DeLiema**
Status: Active
Sponsoring Organization: Carina Initiatives
Project Title: Playful Puzzle Mechanics
Award Dates: 09/2023 - 08/2025
Funded Amount: $613,778
Direct Amount: $557,980
Indirect Amount: $55,798

Principal Investigator: Cassie Scharber
Co-PIs: **David DeLiema** & Bodong Chen
Status: Active
Sponsoring Organization: National Science Foundation, DRK-12
Award type: Supplemental funding
Project Title: DataX: Exploring Justice-Oriented Data Science with Secondary School Students
Award Dates: 04/18/2023 - 12/31/2024
Funded Amount: $89,664
Direct Amount: $69,138

Indirect Amount: $20,526

Principal Investigator: Bodong Chen
Co-PIs: Cassie Scharber & **David DeLiema**
Status: Active
Sponsoring Organization: National Science Foundation, DRK-12
Project Title: DataX: Exploring Justice-Oriented Data Science with Secondary School Students
Award Dates: 07/01/2021 - 06/30/2024
Funded Amount: $449,199
Direct Amount: $310,712
Indirect Amount: $138,487

Principal Investigator: **David DeLiema**
UMN Co-PIs: Bodong Chen and Keisha Varma
External Co-Is: Shima Salehi, Matthew Bernacki, and Craig Anderson
Status: Active
Sponsoring Organization: Carina Initiatives
Project Title: *Playful Problem Solving*
Award Dates: 9/1/2020 – 08/30/2024
Funded Amount: $990,700
Direct Amount: $927,994
Indirect Amount: $62,730

Principal Investigator: **David DeLiema**
Status: Complete
Sponsoring Organization: NAEd/Spencer Foundation
Project Title: *Longitudinal Research on Collaborative Approaches to Failure in Youth Computer Science Workshops*
Award Dates: 9/1/2020 – 8/31/2022
Funded Amount: $70,000
Direct Amount: $70,000
Indirect Amount: $0

Received at another institution

Principal investigator: **David DeLiema**
National Science Foundation
Graduate Research Fellowship Program (GRFP) Fellowship
$90,000

Principal investigator: **David DeLiema**
University of California, Los Angeles
2011 Graduate Summer Research Mentorship (GSRM) Fellowship
$4,000

Principal investigator: **David DeLiema**
University of California, Los Angeles
2010 Graduate Summer Research Mentorship (GSRM) Fellowship
$4,000

Unfunded submissions at the University of Minnesota

Principal Investigator: **David DeLiema**
Co-Investigators: Laura Allen & Panayiota Kendeou
Status: Unfunded
Sponsoring Organization: NSF RITEL
Project Title: From black box to PRISM: Modeling and disrupting epistemic cognition and online search processes
Award Dates: 9/1/2024 – 8/31/2027 Award Total: $899,689
Direct Amount: $609,344
Indirect Amount $290,344

Principal Investigator: Panayiota Kendeou
Co-Investigators: **David DeLiema** & Laura Allen
Status: Unfunded
Sponsoring Organization: IES
Project Title: Project PRISM: Enhancing APT Epistemic Performance Amongst High School Students
Award Dates: 8/1/2024 – 7/31/2028 Award Total: $1,999,979
Direct Amount: $1,342,596
Indirect Amount $657,384

Principal Investigator: Laura Allen
Co-Principal Investigator: **David DeLiema** & Jeff Bye
Status: Unfunded
Sponsoring Organization: National Science Foundation, Sci of Lrng & Augmented Intel
Project Title: Collaborative Research: Improving and Scaling Team-Based Software Engineering Education Using an Assistive Agent
Award Dates: 9/1/2023 – 8/30/2026 Award Total: $479,941
Direct Amount: $328,195
Indirect Amount $151,746

Principal Investigator: **David DeLiema**
Co-Principal Investigator: Marjorie Bequette (Science Museum of Minnesota)
Status: Unfunded
Sponsoring Organization: National Science Foundation, AISL
Project Title: *Scoping Review of the Museum Family Learning Conversations Research*
Award Dates: 9/1/23 – 8/31/25
Direct Amount: $261,767
Indirect Amount: $120,588

Principal Investigator: Savana Bak
UMN Co-PIs: **David DeLiema**
Status: Unfunded
Sponsoring Organization: National Institute of Health, R03
Project Title: *Multimodal Communicative Interaction of NV Autistic Children*
Direct Amount: $100,000

Principal Investigator: Savana Bak
UMN Co-PIs: **David DeLiema,** LeAnne Johnson, & Seungwon Chung
Status: Unfunded

Sponsoring Organization: Department of Defense
Project Title: *Developing a Multi-modal Communication Assessment for Children with Autism*

Principal Investigator: Alp Sehirlioglu
Co-PIs: **David DeLiema**, Mark Griswold, Michael-Jon A. Hore, Fey Parrill
Status: Unfunded
Sponsoring Organization: National Science Foundation, Cyberlearn & Future Learn Tech
Project Title: *Design, Development, and Evaluation of 3D Teaching of 3D Concepts via Augmented Reality*
Award Dates: 09/01/21 – 08-31/24
Proposed Award Amount: $228,074 (Subaward to UMN); Total project: 849,862
Direct Amount: $161,717
Indirect Amount: $66,357

Principal Investigator: **David DeLiema**
Co-PIs: Bodong Chen, Keisha Varma, Panayiota Kendeou, & Sashank Varma
Status: Unfunded
Sponsoring Organization: National Science Foundation, Sci of Lrng & Augmented Intel
Project Title: *Informed Search in the Post-Truth Era: Teaching Students to Navigate the Information Landscape of Socioscientific Issues*
Award Dates: 6/1/2021 - 5/31/24
Proposed Amount: $1,006,188
Direct Amount: $714,394
Indirect Amount: $292,697

Principal Investigator: Cassie Scharber
Co-PIs: **David DeLiema**, Lana Peterson, Andrea Wilson Vazquez
Status: Unfunded
Sponsoring Organization: National Science Foundation, DRL – CS for All
Project Title: *Code for Equity: A Minnesota RPP Supporting High School Educators, District Allies, and English Learners in Introductory Computer Science Education*
Award Dates: 1/1/21 – 12/31/24
Proposal Amount: $999,915
Direct Amount: $727,581
Indirect Amount: $272,334

Under review submissions at the University of Minnesota

Principal Investigator: Elizabeth Sumida Huaman
Co-PIs: G.-H. Crystal Ng, Bhaskar Upadhyay, Joseph Bump, Forest Isbell, John Phillips, Sharon Nelson-Barber, Claire Halpert, **David DeLiema**, Michael Dockry
Status: Under review
Sponsoring Organization: Spencer Foundation – Transformative Reearch Grant
Project Title: Building a critical mass of Tribal scientists with Tribal Colleges and Universities
Award Dates: 9/1/2025 – 8/31/2028 Award Total: $3,499,997
Direct Amount: $1,977,942
Indirect Amount $296,691

Principal Investigator: **David DeLiema**
Co-PIs: Laura Allen & Panayiota Kendeou
Senior Personnel: Xiaoran Sun & Dongyeop Kang
Status: Under review
Sponsoring Organization: NSF RITEL
Project Title: From black box to PRISM: Modeling and disrupting epistemic cognition and online search processes
Award Dates: 9/1/2025 – 8/31/2028 Award Total: $899,812
Direct Amount: $610,404
Indirect Amount $289,408

Principal Investigator: Panayiota Kendeou
Co-PIs: **David DeLiema** & Laura Allen
Senior Personnel: Nana Kim & Xiaoran Sun
Status: Under review
Sponsoring Organization: NSF DRK-12
Project Title: Project PRISM: Bursting Filter Bubbles to Strengthen STEM Epistemic Performance
Award Dates: 8/1/2025 – 7/31/2029
Award Total: $2,453,428
Direct Amount: $1,645,954
Indirect Amount $807,474

Principal Investigator: Laura Allen
Co-PIs: Panayiota Kendeou & **David DeLiema**
Co-Is: Caitlin Mills & Nana Kim
Status: Under review
Sponsoring Organization: IES
Project Title: OpenDM: Enhancing AI Literacy for Middle School Students
Award Dates: 8/1/2025 – 7/31/2029 Award Total: $1,999,979
Direct Amount: $1,999,254.00
Indirect Amount $649,218

University Sources

Received at the University of Minnesota

Principal Investigator: **David DeLiema**
Status: Funded
Sponsoring Organization: UMN Grant-in-Aid
Project Title: *Supporting Computational Literacy for the Social Sciences and Humanities through a Network Improvement Community*
Award Dates: 01/01/2025 – 6/30/2026
Funded Amount: $44,865

Principal Investigator: **David DeLiema**
Co-Investigator: Jeff Bye
Status: Complete
Sponsoring Organization: UMN Grant-in-Aid
Project Title: *Developing and Testing an Expansive Debugging Pedagogy to Support Students' Learning through Failure*

Award Dates: 01/01/2022 – 8/31/2023
Funded Amount: $40,450

Principal Investigator: **David DeLiema** & Panayiota Kendeou
Status: Complete
Sponsoring Organization: UMN Department of Educational Psychology
Project Title: *Eye-tracking dynamic regions of interest: Studying problem solving in interactive learning environments*
Award Dates: 10/4/2021 – 8/31/2022
Funded Amount: $2,400
Direct Amount: $2,400
Indirect Amount: $0

Principal Investigator: **David DeLiema**
Status: Complete
Sponsoring Organization: UMN Sustainable Development Goals Initiative
Project Title: *Parent-child Discourse in Outdoor Inquiry: Understanding Autonomy, Risk, and Failure during Learning*
Award Dates: 9/1/2020 – 1/31/2021
Funded Amount: $5,000
Direct Amount: $5,000
Indirect Amount: $0

Principal Investigator: **David DeLiema**
Status: Complete
Sponsoring Organization: UMN Department of Educational Psychology
Project Title: *Parent-child Discourse in Outdoor Inquiry: Understanding Children's Agency during Moments of Play, Failure, and Risk-taking*
Award Dates: 6/1/2020 – 8/31/2020
Funded Amount: $3,000
Direct Amount: $3,000
Indirect Amount: $0

Publications (underlined names denote mentee/student author; for clarity and consistency, my annotations beneath each research product follow the CRediT conventions from CASRAI: https://casrai.org/credit/)

Refereed Journal Articles

DeLiema, D., Hufnagle, A. S., Ovies-Bocanegra, M. (2025). Contrasting stances at the crossroads of debugging learning opportunities. *British Journal of Educational Psychology, 95*(1), 73-91.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

Pan, Q., Bak, M. Y. S., **DeLiema, D.**, Symons, F., Dueñas, A (2024). Using interactional and quantitative analysis to examine the effects of video modeling on play of a preschooler with autism. *Journal of Behavioral Education.* DOI: https://doi.org/10.1007/s10864-024-09550-y

Contributed to conceptualization, formal analysis, investigation, methodology, visualization, writing (original draft), and writing (review & editing)

Carpenter, Z., & **DeLiema, D.** (2024). Linking epistemic stance and problem-solving with self-confidence during play in a puzzle-based video game. *Computers and Education*, *216*, 105042.

Contributed to conceptualization, formal analysis, investigation, methodology, project administration, resources, supervision, and writing (review & editing).

DeLiema, D., Bye, J., & Marupudi, V. (2024). Debugging pathways: Open-ended discrepancy noticing, causal reasoning, and intervening. *ACM Transactions on Computing Education, 24*(2), 1-34.

Contributed to conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

Goeke, M. & **DeLiema, D.** (2023). Uncovering maker educators' heterogenous professional visions of agency within goal setting interactions. *Educational Technology Research & Development, 72,* 359-384.

Contributed to conceptualization, formal analysis, investigation, methodology, supervision, and writing (review & editing)

Fong, M. M., **DeLiema, D.**, Flood, V. J., & Walker-van Aalst, O. (2023). Contesting sociocomputational norms: Computer programming instructors and students' co-operative stance-taking around refactoring. *International Journal of Computer-supported Collaborative Learning.* DOI: 10.1007/s11412-023-09392-2

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

Ryan, Z., & **DeLiema, D.** (2023). Reflections on sustained debugging support: Conjecture mapping as a point of departure for instructor feedback on design. *Instructional Science, 51,* 1043-1078.

Contributed to conceptualization, formal analysis, investigation, methodology, project administration, resources, supervision, writing (original draft), and writing (review & editing)

DeLiema, D., Hufnagle, A. S., Rao, V. N. V., Baker, J., Valerie, J., & Kim, J. (2023). Methodological innovations at the intersection of video-based educational research traditions: Reflections on relevance, data selection, and phenomena of interest. *International Journal of Research & Method in Education*, *46*(1), 19-36.

Contributed to conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

DeLiema, D., Kwon, Y., Chisholm, A., Williams, I., Dahn, M., Flood, V., Abrahamson, D., & Steen, F. (2023). A multi-dimensional framework for documenting students' heterogeneous experiences with programming bugs. *Cognition & Instruction, 41*(2), 158-200.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

Baker, J., **DeLiema, D.**, Hufnagle, A. S., Carlson, S. M., Sharrat, A., & Williams Ridge, S. (2022). Impasses in the wild: Autonomy support in naturalistic, parent-child outdoor play. *Frontiers in Education, 7*, 1-28.

Contributed to conceptualization, formal analysis, funding acquisition, investigation, methodology, supervision, writing (original draft), and writing (review & editing)

Lindgren, R., & **DeLiema, D.** (2022). Viewpoint, embodiment, and roles in STEM learning technologies. *Educational Technology Research and Development, 70*, 1009–1034.

Contributed to conceptualization, formal analysis, investigation, methodology, visualization, writing (original draft), and writing (review & editing)

Lee, U.-S., **DeLiema, D.**, & Gomez, K. (2022). Equity conjectures: A methodological tool for centering social change in learning and design. *Cognition & Instruction, 40*(1), 77-99.

Contributed to conceptualization, methodology, writing (original draft), and writing (review & editing)

DeLiema, D., Enyedy, N., Steen, F., Danish, J. A. (2021). Integrating viewpoint and space: How lamination across gesture, body movement, language, and material resources shapes learning. *Cognition & Instruction, 39*(3), 328-365.

Contributed to conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

Dahn, M., & **DeLiema, D.** (2020). Dynamics of emotion, problem solving, and identity: Portraits of three girl coders. *Computer Science Education, 30*(3), 362-389.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, supervision, writing (original draft), and writing (review & editing)

Dahn, M., **DeLiema, D.,** & Enyedy, N. (2020). Art as a point of departure for storytelling about the experience of learning to code. *Teachers College Record, 122*(8).

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, supervision, writing (original draft), and writing (review & editing)

DeLiema, D., Enyedy, N., & Danish, J. A. (2019). Roles, rules, and keys: How different play configurations shape collaborative science inquiry. *Journal of the Learning Sciences, 28*(4-5), 513-555.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, visualization, writing (original draft), and writing (review & editing)

Hoey, E. M., **DeLiema, D.**, Chen, R., Flood, V. J. (2018). Imitation in children's locomotor play. *Research on Children in Social Interaction, 2*(1), 1-24.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, visualization, writing (original draft), and writing (review & editing)

DeLiema, D. (2017). Co-constructed failure narratives in mathematics tutoring. *Instructional Science, 45*(6), 709-735.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

Xiao, S., & **DeLiema, D.** (2017). Video-based analysis of learning processes: Rationale and method. *Journal of East China Normal University (Educational Sciences), 35*(5), 55–71.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, visualization, writing (original draft).

Enyedy, N., Danish, J. A., **DeLiema, D.** (2015). Constructing liminal blends in a collaborative augmented-reality learning environment. *Int'l. Journal of Computer Supported Collaborative Learning, 10*(1), 7-34.

Contributed to conceptualization, data curation, formal analysis, methodology, visualization, writing (original draft), and writing (review & editing)

Kawasaki, J., **DeLiema, D.**, Sandoval, W. (2014). The influence of non-epistemic features of settings on epistemic cognition. *Canadian Journal of Science, Math, and Technology Education, 14*(2), 207-221.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

Refereed Book Chapters

DeLiema, D., Dahn, M. Flood, V. J., Asuncion, A., Abrahamson, D., Enyedy, N., Steen, F. F. (2020). Debugging as a context for fostering reflection on critical thinking and emotion. In E. Manolo (Ed.), *Deeper Learning, Communicative Competence, and Critical Thinking: Innovative, Research-Based Strategies for Development in 21st Century Classrooms* (pp. 209-228). New York: Routledge.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, supervision, visualization, writing (original draft), and writing (review & editing)

DeLiema, D., Lee, V., Danish, J., Enyedy, N., & Brown, N. (2015). A microlatitudinal/microlongitudinal analysis of speech, gesture, and representation use in a student's repeated scientific explanations of phase change. In A. A. diSessa, M. Levin, & N. J. S. Brown (Eds.). *Knowledge and interaction: A synthetic agenda for the learning sciences* (pp. 133-159). New York, NY: Routledge.

Contributed to conceptualization, data curation, formal analysis, visualization, writing (original draft), and writing (review & editing)

DeLiema, D. & Steen, F. F. (2014). Thinking with the body: conceptual integration through gesture in multiviewpoint model construction. In M. Borkent, B. Dancygier, Hinnell, J. (Ed.) *Language and the Creative Mind* (pp. 275-294). Stanford, CA: CSLI Publications.

Contributed to conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, visualization, writing (original draft), and writing (review & editing)

Refereed Proceedings of Conferences as Part of Paper Sessions

Anderson, C. G., Hussein, B., Carpenter, Z., & **DeLiema, D.** (2024). Show or tell? A comparison of direct instruction tutorial and learn by doing increased impasse versions of initial levels of a puzzle game. In proceedings of the conference on *Foundations of Digital Games 2024*. Massachusetts, USA: ACM.

Wang, K. D., Liu, H., **DeLiema, D.**, Haber, N., Salehi, S. (2024). Discovering players' problem-solving behavioral characteristics in a puzzle game through sequence mining. In *The 14th International Learning Analytics and Knowledge Conference* (pp. 498-506). Kyoto, Japan.

Wilson Vasquez, A., **DeLiema, D.,** Goeke, M., & Bye, J. (2023). Debugging debugging pathways: A research-practice partnership in K-8 computer science education. In *17th International Conference of the Learning Sciences (ICLS) 2023* (pp. 2276-2279). Montreal, Canada: International Society of the Learning Sciences.

Carpenter, Z., & **DeLiema, D.** (2023). Learning through play at the intersection of problem-solving, epistemic (un)certainty, and emotion. In *17th International Conference of the Learning Sciences (ICLS) 2023* (pp. 1178-1181). Montreal, Canada: International Society of the Learning Sciences.

DeLiema, D., Goeke, M., Hussein, B., Valerie, J., Anderson, C. G., Varma, K., Chen, B., Salehi, S., & Bernacki, M. (2022). Playful learning following deviations: A mixture of tinkering, causal explanations, and revision rationales. In C. Chinn, D. Tan, C. Chan, & Y. Kali (Eds.), *16th International Conference of the Learning Sciences (ICLS) 2022* (pp. 1421-1424). Hiroshima, Japan: International Society of the Learning Sciences.

Goeke, M. & **DeLiema, D.** (2022). Attenuation and amplification of agency through goal announcements in a makerspace. In C. Chinn, D. Tan, C. Chan, & Y. Kali (Eds.), *16th International Conference of the Learning Sciences (ICLS) 2022* (pp. 211-218). Hiroshima, Japan: International Society of the Learning Sciences.

Anderson, C. G., Goeke, M., Hussein, B., Carpenter, Z. L., Salehi, S., **DeLiema, D.** (2022). Baba is hint - Designing a scaffolding guidebook for game-based learning. In Proceedings of the *Games+Learning+Society Conference 2022*. Irvine CA.

Elliott, C. H., Radke, S., **DeLiema, D.**, Silvis, D., Vogelstein, L. (2020). Whose video?: Surveying implications for participants' engagement in video recording practices in ethnographic research. In M. Gresalfi, M. & I. S. Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 2* (pp. 414-421). Nashville, TN: International Society of the Learning Sciences.

Kafai, Y., **DeLiema, D.**, Fields, D. A., Lewandowski, G., & Lewis, C. (2019). Rethinking debugging as productive failure for CS education. In *Proceedings of the ACM Special Interest Group on Computer Science Education* (pp. 169-170). Minneapolis, MN: ACM.

Flood, V. J., **DeLiema, D.**, & Abrahamson, D. (2018). Bringing static code to life: The instructional work of animating computer programs with the body. In J. Kay & R. Luckin (Eds.), *"Rethinking learning in the digital age: Making the Learning Sciences count," Proceedings of the 13th International Conference of the Learning Sciences* (Vol. 2, pp. 1085-1088). London: International Society of the Learning Sciences.

Keifert, D., Lee, C., Dahn, M., Illum, R., **DeLiema, D.**, Enyedy, N., & Danish, J. (2017). Agency, embodiment, & affect during play in a mixed-reality learning environment. *Proceedings of the 16th Interaction Child & Design Conference* (pp. 268-277), Palo Alto CA.

Nathan, M. J., Williams-Pierce, C., Abrahamson, D., Ottmar, E. R., Landy, D., Smith, C., Walkington, C., **DeLiema, D.**, Soto-Johnson, H., Alibali, M., & Boncoddo, R. (2017). Embodied Mathematical Imagination and Cognition (EMIC) Working Group. In E. Galindo & J. Newton (Eds.), *"Synergy at the crossroads" -- Proceedings of the 39th*

annual conference of the North-American chapter of the International Group for the Psychology of Mathematics Education (Ch. 14 [Working groups], pp. 1497-1506). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators.

Enyedy, N., Danish, J., **DeLiema, D.**, Saleh, A., Lee, C., Morris, N., and Illum, R. (2017). Social affordances of mixed reality learning environments: A case from the science through technology enhanced play project. In the *50th Proceedings of the Hawaii International Conference on System Science* (pp. 2096-2105). University of Hawaii, Honolulu, Hawaii: University of Hawaii Press.

DeLiema, D., Saleh, A., Lee, C., Enyedy, N., Danish, J. A., Illum, R., Dahn, M., Humburg, M., & Mahoney, C. (2016). Blending play and inquiry in augmented reality: A comparison of playing a video game to playing within a participatory model. In C-K. Looi, J. Polman, U. Cress, & P. Reimann (Eds.) *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016, Volume 2* (pp. 1421-1425). Singapore: International Society of the Learning Sciences.

Enyedy, N., Danish, J. A., **DeLiema, D.** (2013). Constructing and deconstructing materially-anchored conceptual blends in an augmented reality collaborative learning environment. In. N. Rummel, M. Kapur, M. Nathan, & S. Puntambekar (Eds.) *To See the World and a Grain of Sand: Learning across Levels of Space, Time, and Scale: CSCL 2013 Conference Proceedings Volume 1 — Full Papers & Symposia* (pp. 192-199). Madison, WI: International Society of the Learning Sciences.

DeLiema, D., Kawasaki, J., & Sandoval, W. A. (2012). High school students' epistemic engagement in producing documentaries about public science concerns. In. J. van Aalst, K. Thompson, M. J. Jacobson, & P. Reimann, (Eds.) *The Future of Learning: Proceedings of the 10th International Conference of the Learning Sciences (ICLS 2012) – Volume 2* (pp. 311-315). Sydney, NSW, Australia: International Society of the Learning Sciences.

Abrahamson, D., Petrick, C., **DeLiema, D.**, Johnson–Glenberg, M., Birchfield, D., Koziupa, T. Savio-Ramos, C., Cruse, J., Lindgren, R., Fadjo, C., Black, J., & Eisenberg, M. (2012). You're it! Body, action, and object in STEM learning. In. J. van Aalst, K. Thompson, M. J. Jacobson, & P. Reimann, (Eds.) *The Future of Learning: Proceedings of the 10th International Conference of the Learning Sciences (ICLS 2012) – Volume 2* (pp. 99-109). Sydney, NSW, Australia: International Society of the Learning Sciences.

Refereed Proceedings of Conferences as Part of Poster/Symposia Sessions

DeLiema, D., Goeke, M., Bye, J. K., Carpenter, Z., Wilson Vasquez, A., & Marupudi, V. (2024). Expansive and flexible video reflection: Straddling IA, video-cued ethnography, and pedagogical imaginings in an RPP focused on debugging. In Pierson, A., & Keifert, D. T. (Co-Chairs) Co-Research in Video Analysis: Shifts Towards Ethical Validity. *International Conference of the Learning Sciences* (1894-1901). Buffalo, NY.

Chen, B., **DeLiema, D.**, Scharber, C., & Bartucz, J. (2024). Supporting learning pathways of justice-oriented data science in secondary science and history classes: Teachers' perspectives. *International Conference of the Learning Sciences* (pp. 2243-2244). Buffalo, NY.

Carpenter, Z., Wang, Y., **DeLiema, D.**, Kendeou, P., & Shaffer, D. W. (2023). Using multi-modal network models to visualize and understand how players learn a mechanic in a problem-solving game [Poster presentation]. In companion proceedings of *The 13th International Learning Analytics and Knowledge Conference* (pp. 99-101). Arlington, TX.

Baker, J. & **DeLiema, D.** (2022). Mathematizing embodied play and failure. In A. Simpson, C. Williams-Pierce, E. Shokeen, & N. Katirci (Co-organizers), The nature(s) of embodied mathematical failure. In *15th International Conference of the Learning Sciences (ICLS)* (pp. 1787-1794), Hiroshima, Japan: International Society of the Learning Sciences.

DeLiema, D., Enyedy, N., Steen, F., & Danish, J. A. (2021). Meadow bees, hive bees, and a moving sun: Tensions and affordances in learning between embodied point of view and spatial frames of reference. In A. Wagh & A. Dickes (Chairs), Expansive modeling: Broadening the scope of modeling in K-12 education. In de Vries, E., Hod, Y., & Ahn J. (Eds.), P*roceedings of the 15th International Conference of the Learning Sciences - ICLS 2021.* Bochum, Germany: International Society of the Learning Sciences.

DeLiema, D., & Dahn, M. (2020). Envisioning debugging cultures at the intersection of emotion, problem solving, and identity. In D. Weintrop, G. W. Choi, A. Maltese, & M. Tissenbaum (Organizers), What does computer science and maker education look like in 2030? In M. Gresalfi, M. & I. S. Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 2* (pp. 1519-1524). Nashville, TN: International Society of the Learning Sciences.

DeLiema, D., Sharma, G., Valerie, J., Cabrera, A., & Smith, S. (2020). Temporal and geographical features of programming substrates: Navigating code structure, behavior, and function during debugging. In D. Keifert (Chair), Analytical designs: Goodwin's substrates as a tool for studying learning. In M. Gresalfi, M. & I. S. Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 2* (pp. 1471-1478). Nashville, TN: International Society of the Learning Sciences.

Fong, M., Aalst, O. W-V., Flood, V., & **DeLiema, D.** (2020). When features become bugs: Stance-taking around refactoring in a coding classroom. In Y. Kafai (Chair), Turning bugs into learning opportunities: Understanding debugging processes, perspectives, and pedagogies. In M. Gresalfi, M. & I. S. Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 2* (pp. 374-381). Nashville, TN: International Society of the Learning Sciences.

Flood, V. J., **DeLiema, D.**, Harrer, B. W., & Abrahamson, D. (2018). Enskilment in the digital age: The interactional work of learning to debug. In J. Kay & R. Luckin (Eds.), *"Rethinking learning in the digital age: Making the Learning Sciences count," Proceedings of the 13th International Conference of the Learning Sciences* (Vol. 3, pp. 1405-1406). London: International Society of the Learning Sciences.

Refereed Proceedings of Conferences as Part of Career Workshops

DeLiema, D. (2016). The social organization of play, embodied cognition, and failure in STEM education. In C-K. Looi, J. Polman, U. Cress, & P. Reimann (Eds.) *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences*

(ICLS) 2016, Volume 2 (pp. 1364-1365). Singapore: International Society of the Learning Sciences.

DeLiema, D. (2014). Attributions and epistemology in conversation: How math tutors and students co-construct accounts of failure and knowledge. In J. L. Polman, E. A. Kyza, D. K. O'Neill, I. Tabak, W. R. Penuel, & A. S. Jurow (Eds.) *Learning and becoming in practice: The International Conference of the Learning Sciences (ICLS) 2014, Volume 3* (pp. 1750). Boulder, CO: International Society of the Learning Sciences.

Presentations, Posters, and Exhibits

Invited Presentations at Professional Meetings, Conferences, etc.

DeLiema, D. (2024). *From interaction analysis to pedagogical imagining: Teachers and researchers' boundary crossing around open-ended debugging pathways.* UMN CS&E's Human-Centered Computing Seminar, Dec 13, 2024.

DeLiema, D. (2024). *Reflections on "productive" failure and learning.* UK Educator Program at University of Minnesota, May 29, 2024.

DeLiema, D., Hufnagle, A., & Ovies-Bocanegra, M. (2024). *"Every time I get stuck in the code"... "But you know how to debug it now": The crossroads of debugging learning opportunities.* Breakout session at MN Virtual Codes Summit, April 13, 2024.

Anderson, C., & **DeLiema, D.** (2024). *Playful problem solving – What puzzle game research teaches us about player problem solving.* ThinkyCon, Virtual conference, April 4, 2024.

DeLiema, D. (2024). *Reflections on debugging teaching and learning.* Code.org's Professional Learning Team, March, 5, 2024.

DeLiema, D., Bye, J., & Marupudi, V.+ (2021, 2022, 2023). *Teaching debugging: Noticing problems, proposing causes, and testing solutions.* Invited session at MNCodes Cohort, March 11, 2021, March 10, 2022, & Nov 11, 2023.

DeLiema, D. (2022). *Debugging failure: A multi-dimensional framework for documenting newcomers' experiences with obstacles.* Invited session to Stat Chat group, October 9, 2022.

Dahn, M. & **DeLiema, D.** (2021). *Dynamics of emotion, problem solving, and identity: Portraits of three girl coders.* Invited talk at University of North Florida's School of Computing, Diversity and Inclusion Committee, January 19, 2021.

DeLiema, D., Bye, J., & Marupudi, V.+ (2020). *Programming instructors and students' active (and partial) debugging: Deviation noticing, causal modeling, and intervening.* Breakout session at MN Virtual Codes Summit, November 14, 2020.

DeLiema, D. (2020). *Debugging Failure: A Multi-dimensional Framework for Documenting Newcomers' Experiences with Obstacles.* Plenary Speaker, MNCodes Digital CS PD & Meet Up, May 16, 2020.

DeLiema, D. (2020). *Big picture ideas for teaching debugging.* Invited presentation, Code Savvy MNCodes Cohort Meeting, March 12, 2020.

DeLiema, D. (2019). *Integrating points of view and frames of reference: How laminated gestures drive learning*. Invited presentation, University of Minnesota, Center for Cognitive Science Symposium on Learning, November 1, 2019.

DeLiema, D. (2019). *Navigating code form, flow, and output during debugging*. Invited presentation, University of Minnesota, Psych Foundations Brown Bag, September 25, 2019.

DeLiema, D. (2017). *Debugging failure: Teacher-student interactions around obstacles*. Invited presentation, Stanford University, Paulo Blikstein's Research Lab, October 18, 2017.

DeLiema, D. (2017). *Teacher-student interactions during debugging*. Invited presentation, University of San Francisco, Cognitive Brown Bag Research Colloquium, San Francisco. September 29, 2017.

Ryoo, J., Hadad, R., & **DeLiema, D.** (2017). *Monthly discussion of failure in making*. Invited presentation, Online meeting hosted by Adam Maltese (Indiana University), Alice Anderson (Science Museum of Minnesota), and Amber Simpson (Indiana University).

DeLiema, D. (2016). *Debugging failure*. Invited presentation, UC Berkeley Graduate School of Education Colloquium. October 17, 2016.

DeLiema, D. (2015). *Failure and epistemic cognition*. Invited presentation, Research Lab of Judit Moschkovich, University of California, Santa Cruz. January 14, 2016.

DeLiema, D. (2015). *Modeling-play and game-play in participatory simulations*. Invited presentation, Embodied Design Research Laboratory (D. Abrahamson, Director), University of California, Berkeley. December 1, 2015.

DeLiema, D. (2015). *Failure storytelling*. Shanghai Municipal Education Commission's Project of Children's Basic Competencies of Learning and Innovation. Shanghai, China, September 23rd.

DeLiema, D. (2015). *Fostering a modeling practice in school*. Shanghai Municipal Education Commission's Project of Children's Basic Competencies of Learning and Innovation. Shanghai, China, September 22nd.

Steen, F. F., Treynor, W., **DeLiema, D.**, & Jeong, D. (2009). *Participatory knowledge and transformative understanding: Bridging some gaps between the sciences and the humanities*. University of California, Santa Barbara, CA, October 19.

Refereed Papers Presented at Professional Meetings, Conferences, etc. (use any standard format that the candidate's field uses)

Melchionne-Martinez, D., **DeLiema, D.**, Clark, L., (2025, June). *SP feedback environments: Stepping into the twilight.* 2025 ASPE Annual Conference, Montreal, Canada.

DeLiema, D., Goeke, M., Bye, J. K., Carpenter, Z., & Wilson Vasquez, A. (2024, April). *Collaborative teacher-researcher interaction analysis as ethical, practical, and epistemological.* In A. Pierson (Chair), Expanding participatory video analysis for ecological and ethical validity. Symposium presented at the 2024 American Educational Research Association Annual Meeting, Philadelphia, PA.

DeLiema, D., Hufnagle, A., & Ovies-Bocanegra, M. (2024, April). *Contrasting stances at the crossroads of debugging learning opportunities*. In P. Sengupta (Chair), Centering care and affect in computing education. Symposium presented at the 2024 American Educational Research Association Annual Meeting, Philadelphia, PA.

Chen, B., Bartucz, J., Scharber, C., Rao, V. V., & **DeLiema, D.** (2023, April). *Toward a framework for justice-oriented data science education in K–12 schools.* Paper presented as part of a structured poster session at The American Educational Research Association, Chicago, Illinois.

Steen, F.., **DeLiema, D.,** & Miao, G. C. (2023, June). *"Remember...you can always just": Approaching the zone of proximal development.* 73rd Annual International Communication Association Conference. Toronto, Canada.

Dahn, M., & **DeLiema, D.** (2022, April). *Design considerations for centering emotion and failure in problem solving.* In M. Gresalfi (Chair), Inclusion in computer science education: Documenting, designing, and supporting transformative learning in computer science classrooms. Paper presented at the meeting of The American Educational Research Association, San Diego, California.

Baker, J., **DeLiema, D.,** Sharratt, A., Hufnagle, A.+, & Carlson, S. (2021, July). *Understanding autonomy support: A group reflection on video data of parents and children playing together outdoors.* Paper and workshop held at the Natural Start 2021 Conference, Virtual Meeting.

The Link Tank+ (2021, July). *The promise of video-based research methods in psychology*. The 36th Annual Psychology Postgraduate Affairs Group Conference, online. 6 scholars (alphabetical order): Baker, J., **DeLiema, D.**, Hufnagle, A., Kim, J., Rao, V.N.V., & Valerie, J.

DeLiema, D., Bye, J., & Marupudi, V. (2021, April). *Programming instructors and students' active (and partial) debugging: Deviation noticing, causal modeling, and intervening.* Paper presented at the annual conference of the American Educational Research Association, Virtual Meeting, Virtual Annual Meeting.

DeLiema, D. (2019, October). *Navigating code form, flow, and output during debugging*. Paper presented at the Big 10+ Maker & CS Education Research Conference, Bloomington, Indiana.

Dahn, M., & **DeLiema, D.** (2019, October). *What it's like: Stories about learning to code through art making*. Paper presented at the Connected Learning Summit, Irvine, California.

Aalst, O. W-V., **DeLiema, D.**, Flood, V., & Abrahamson, D. (2018, May). *Peer conversations about refactoring computer code: Negotiating reflective abstraction through narrative,*

affect, and play. Paper presented at the Jean Piaget Society Annual Meeting, Amsterdam, The Netherlands.

Danish, J. A., Enyedy, N., Saleh, A., Humburg, M., **DeLiema, D.**, Dahn, M., & Lee, C. (2017, April). *STEP-Bees: Coordinating embodied interaction with peers, teachers, and computer simulation to support learning*. Paper presented at the annual conference of the American Educational Research Association, San Antonio, TX.

DeLiema, D. & Sweetser, E. (2016, July). *Rethinking gestural viewpoint as multidimensional rather than a dichotomy*. Paper presented at the International Society of Gesture Studies conference, Paris, France.

Lee, C., **DeLiema, D.**, & Enyedy, N. (2016, July). *Learning through physical action and gestural reflection in a first-person augmented reality science simulation*. Paper presented at the International Society of Gesture Studies conference, Paris, France.

Enyedy, N., Danish, J. A., Lee, C., **DeLiema, D.**, Saleh, A., Dahn, M., Illum, R. (2016, April). *Learning about states of matter through multiple correspondences among the body, abstractions, and reality*. Paper presented at the Annual Meeting of The American Educational Research Association, Washington, D.C.

Enyedy, N., Danish, J., **DeLiema, D.**, Lee, C., Illum, R., et al. (2015, August). *Science through technology enhanced play*. Paper presented at the CREST Conference 2015, Redondo Beach, California.

Steen, F., Turner, M. & **DeLiema, D.** (2014, Novermber). *Extending blended viewpoint in multimodal communication*. Paper presented at the Twelfth Conceptual Structures and Discourse in Language conference, Santa Barbara, California.

DeLiema, D. (2014, July). Teachers and students' collaborative work to render pointing gestures intelligible. In C. Goodwin, *The intelligibility of gesture as a situated accomplishment.* Symposium conducted at the International Society of Gesture Studies conference, San Diego, California.

DeLiema, D., & Steen, F. F. (2012, April). *The evolution of gestural blends around learning a new technical system.* Paper presented at the Eleventh Conceptual Structures and Discourse in Language conference, Vancouver, Canada.

DeLiema, D., Steen, F. F., & Turner, M. (2012, April). *Language, gesture, and audiovisual communication: a massive online database for researching multimodal constructions*. Workshop conducted at the Eleventh Conceptual Structures and Discourse in Language conference, Vancouver, Canada.

Kawasaki, J., **DeLiema, D.**, & Sandoval, W. (2012, April). *Using media production as a lever for critical source evaluation*. In C. Chinn, Learning from Others: Advancing Theory and Research on Learning from Sources. Symposium conducted at the Annual Meeting of The American Educational Research Association, Vancouver, Canada.

Brown, N. J. S., Danish, J., **DeLiema, D.**, Engle, R. A., Enyedy, N., Lee, V. R., & Parnafes, O. (2012, April). *Representations, interlocutors, and their influences on apparent knowledgeability*. In M. Levin, Integrating Issues of Knowledge and Interaction in

Analyses of Cognition and Learning. Symposium conducted at the meeting of The American Educational Research Association, Vancouver, Canada.

Referred Posters, Roundtables, or Exhibitions

Pan, Q., Bak, M. Y. S., **DeLiema, D.**, Symons, F., & Dueñas, A. (2024). *Effects of video modeling on play of a preschooler with autism: A mixed-method analysis.* Roundtable paper presented at the 2024 American Educational Research Association Annual Meeting, Philadelphia, PA.

Goeke, M., & **DeLiema D.** (2023, April). *"Well that's up to you": Professional visions of agency in makerspace interactions.* In V. Svihla (Chair), Whose agency? What learning? Whence power? Poster presented as part of a structured poster session at The American Educational Research Association, Chicago, Illinois.

Keifert, D., Marin, A., & **DeLiema, D.** (2022, April). *Foregrounding expansive relations: Toward methods of assembly and weaving in longitudinal interaction analysis.* In. D. Silvis (Chair), What's next for interaction analysis of learning?: Aligning analytical approaches with theoretical turns. Roundtable conducted at the meeting of The American Educational Research Association, San Diego, California.

Marin, A., Shapiro, B. R., Hennessy Elliott, C., **DeLiema, D.**, Silvis, D., Radke, S. C., & Vogelstein, L. (2022, April). *Everyday interaction analysis: Public forms and public forums for making sense of video.* In. D. Silvis (Chair), What's next for interaction analysis of learning?: Aligning analytical approaches with theoretical turns. Roundtable conducted at the meeting of The American Educational Research Association, San Diego, California.

Goeke, M. & **DeLiema, D.** (2021, November 13-14). *"Well that's up to you": Family negotiation of social authority in making*. Poster presented at the Building Community for Grad Students in the Learning Sciences: 2021 Learning Sciences Graduate Student Conference, online.

Valerie, J., Goeke, M., Hussein, B., Varma, K., Chen, B., & **DeLiema, D.** (2021, November 13-14). *Solving CHANGELESS by Changing the Problems: Problem Formation in a Video-Game Environment*. Poster presented at the Building Community for Grad Students in the Learning Sciences: 2021 Learning Sciences Graduate Student Conference, online.

DeLiema, D. (2021). *"Toucan has failed me": Peer-to-peer playful discourse during debugging.* In A. Saleh (Chair), Orchestrating Collaborative Play for Diverse Participation Across Contexts and Disciplines. Poster presented as part of a structured poster session at the annual conference of the American Educational Research Association, Virtual Meeting.

DeLiema, D. & Hufnagle, A. (2021). *Longitudinal debugging growth: Interaction analyses of collaborative approaches to failure in a series of youth computer science workshops*. In G. L. Wimberly (Chari), Excellence in Education Research: Early Career Scholars and Their Work. Poster presented as part of a structured poster session at the annual conference of the American Educational Research Association, Virtual Meeting.

DeLiema, D. (2019, May). *Envisioning a blended math-cs exploration of geometric constructions and definitions through movement, failure, and play*. Poster presented at The Future of Embodied Design for Mathematical Imagination & Cognition, Madison, Wisconsin.

Lin, K., & **DeLiema, D.** (2019, April). *Subgoals, problem solving phases, and sources of knowledge.* Poster presented at the ACM Special Interest Group on Computer Science Education (p. 1292). Minneapolis, MN: ACM.

Ryan, Z., **DeLiema, D.**, & Abrahamson, D. (2019, April). *Understanding instructors' reflections on conjecture maps and their impact on design-based research*. In F. S. Azevedo (Session Organizer), *STEM Teacher Education and Cognition*. Roundtable session conducted at the annual meeting of the American Educational Research Association, Toronto, Canada.

Dahn, M., **DeLiema, D.**, & Enyedy, N. (2019, April). *Using art to tell stories about failure when learning to code*. Poster presented at the annual meeting of the American Educational Research Association, Toronto, Canada.

DeLiema, D., Abrahamson, D., Enyedy, N., Steen, F., Dahn, M., Flood, V. J., Taylor, J., & Lee, L. (2018, April). *Measuring debugging: How late elementary and middle school students handle broken code.* In D. A.-L. Lui & Y. Kafai (Chairs & Organizers), Measuring making: Methods, tools, and strategies for capturing learning, participation, and engagement in maker activities. Structured poster session conducted at the annual meeting of the American Educational Research Association, New York City.

DeLiema, D., Smith, M., Goodwin, C. (2015, April). *Sources of knowledge in interaction: How geology and math students laminate resources in the process of knowing*. Poster presented at the Annual Meeting of The American Educational Research Association, Chicago, Illinois.

DeLiema, D. (2012, April). *A study of the live evolution of mental models through gesture*. Poster presented at the Annual Meeting of The American Educational Research Association, Vancouver, Canada.

Websites

Personal research webpage: http://www.david-deliema.com/.

TEACHING AND CURRICULUM DEVELOPMENT

University of Minnesota

Courses, seminars, and instructional units taught:

Instructor – College of Education and Human Development, University of Minnesota
(Fall 2024)
EDHD 1525W: First-year Experience Course

Instructor – Department of Educational Psychology, University of Minnesota

(Fall 2021, Spring 2024)
EPSY 8114: Introduction to the Learning Sciences

Instructor – Department of Educational Psychology, University of Minnesota
(Fall 2020, Fall 2022)
EPSY 8114: Play-based Learning

Instructor – Department of Educational Psychology, University of Minnesota
(Spring 2020; Fall 2021; Spring 2023; Fall 2024)
EPSY 8114: Video-based Educational Research: Micro-longitudinal Methods for Documenting and Studying Learning

Instructor – Department of Educational Psychology, University of Minnesota
(Fall 2019; Fall 2021)
EPSY 5121: Debugging Failure in Learning

Curriculum Development

EDHD 1525W: First-year Experience Course
EPSY 5121: Debugging Failure in Learning
EPSY 8119: Video-Based Microlongitudinal Research in Learning
EPSY 8121: Play-based Learning
EPSY 8114: Introduction to the Learning Sciences

Collaborative Efforts and Activities

Invited discussion on academic careers in Caitlin Mill's EPSY 3303 course focused on undergraduate research. April 22, 2024.

Invited presentation on writing to UMN EdPsych's Creating Inclusive Cohort's group, May 6, 2022

Guest panelist for UMN School of Architecture's "BeTheChange" final student presentations, October 18, 2022

Invited guest lecture on design-based research to UMN Human Factors & Ergonomics graduate seminar (HUMF.8901), October 8, 2021

Invited guest lecture on mixed methods, University of Minnesota, Savana Bak and Jason Wolff's EPSY 8694 Research in Special Education course, April 8, 2020.

Invited guest discussion about the Learning Sciences, University of Minnesota, Panayiota Kendeou's research lab, September, 25th, 2019.

Invited guest lecture, titled, “Debugging failure: A multi-dimensional framework for documenting newcomers’ experiences with obstacles,” University of Minnesota, Peter Demerath’s course on Case Studies for Policy Research, September, 30th, 2019.

Faculty Development Activities regarding teaching

Co-led with Dr. Debbie Golos an Ed workshop for faculty focused on writing Diversity, Equity, and Inclusion statements in course syllabi (Fall 2021)

Participated in a teaching evaluation (planning sessions, course observations, data debriefs, and student evaluations) through the University of Minnesota’s Center for Educational Innovation (Spring 2020).

University of California, Los Angeles

Courses, seminars, and instructional units taught

Instructor – Communication Studies, UCLA (Summers 2011 - 2015)
COMMST 183 – Media and Mind

Instructor – Communication Studies, UCLA (Summer 2015)
COMMST 128 – Entertainment and Play

Teaching Assistant – Graduate School of Education and Information Studies, UCLA (2013, 2014)
EDUC 127 – Educational Psychology

Teaching Assistant – Communication Studies, UCLA (Spring 2013)
Course titles: The Gaming Mind; Social Communication & New Technology

Collaborative Efforts and Activities

DeLiema, D. (2015). The interpersonal organization of knowledge. Invited presentation, ESL Techniques in Content Subject Classrooms (Anna-Eunhee Lee Chee, Instructor), Cal State Los Angeles, May 18, 2015.

ADVISING AND MENTORING

Graduate Student Activities

Master’s Student Advisees
Vimal Rao (completed 2023)
Hareem Khan (completed 2024)
Brooke Herman (2024)
Nasim Eshgarf (current)

David Melchionne-Martinez (current)

Master's Committees Served on
Jesslyn Valerie (completed 2020)
Tayler Loiselle (completed 2021)
Megan Goeke (completed 2022)
Miguel Ovies-Bocanegra (2022)
Zachary Carpenter (completed 2023)
Regina Lisinker (completed 2023)
Seokyung Kim (completed 2023)
Brooke Herman (completed 2024)
Hareem Khan (completed 2024)

Doctoral Students Advised (Academic advising for all or part of graduate student's program)
Ashley Hufnagle (completed 2023)
Justin Baker (completed 2023)
Jesslyn Valerie (completed 2024)
Basel Hussein (completed 2024)
Megan Goeke (current)
Zachary Carpenter (current)
Alexis Tarter (current)
Regina Lisinker (current)
David Melchionne-Martinez (current)

Doctoral Committees Served on
Valerie Barbaro (completed 2021)
Nicolaas VanMeerten (completed 2022)
Ashley Hufnagle (completed 2023)
Justin Baker (completed 2023)
Rukmini M Avadhanam (completed 2023)
Elizabeth Stretch (completed 2023)
Hong Shui (completed 2024)
Xinran Zhu (completed 2024)
Jesslyn Valerie (completed 2024)
Seokyung Kim (current)
Marisa Peczuh (current)
Jasmine Kim (current)
Victoria Johnson (current)
Zachary Ryan (current)

Post-doctoral fellows supervised
Craig Anderson, 2021 - present

SERVICE AND PUBLIC OUTREACH

Service To The Discipline/Profession/Interdisciplinary Area(s)

Editorships/Journal Reviewer Experience

Consulting Editors Board, *Journal of Educational Psychology,* 2022 – present
Principal Reviewer, *Journal of Educational Psychology,* 2020 – 2021
Reviewer, *Journal of the Learning Sciences*, 2016 – present
Reviewer, *Cognition & Instruction,* 2015 – present
Reviewer, *Journal of Virtual Worlds Research,* 2018
Reviewer, *Education Studies in Mathematics*, 2017
Reviewer in training, *Educational Psychologist,* 2014

Conference Reviewer Experience

Reviewer, Best Paper Award for LS and ATL SIGS at Annual American Educational Research Association Conference (2023, 2024)
Reviewer, *International Conference of the Learning Sciences*, 2014 – present
Reviewer, *AERA Learning Sciences SIG,* 2018 – present
Reviewer, *Computer-supported Collaborative Learning Conference,* 2018 – 2020
Reviewer, *AERA Informal Learning Environments SIG,* 2018
Reviewer, *UCLA GSE&IS Research & Inquiry Conference*, 2014-2015

Book Reviewer Experience

Reviewer, Routledge Taylor & Francis (2020)
Reviewer, MIT Press (2018)

Review panels for external funding agencies, foundations, etc.

Panel Reviewer, *National Science Foundation*, Solicitation focused on STEM-education (anonymous), Spring 2023

Organization of conferences, workshops, panels, symposia

DeLiema, D., Donaldson, M., Morales-Navarro, L., Hennessy Elliott, C. Simpson, A. (2024; Chairs & Organizers). A gathering to synthesize, critically examine, and envision new horizons for learning sciences research on "failure" and learning. Workshop at the *2024 International Conference of the Learning Sciences Annual Meeting*. Buffalo, NY.

D'Angelo, C., **DeLiema, D.**, Marin, A., Shapiro, B., & Worsley, M. (2020; Chairs & Organizers). Multimodal learning analytics and interaction analysis. In M. Gresalfi, M. & I. S. Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 2* (pp. 2661). Nashville, TN: International Society of the Learning Sciences.

DeLiema, D., Dahn, M. Enyedy, N., Abrahamson, D., Steen, F., Flood, V. J., & Taylor, J. (2019, April). Debugging failure: 5th-10th grade students' journal reflections, coding, and artwork about broken code. In D. A.-L. Lui, D. DeLiema, J. Ryoo, & Y. Kafai (Chairs & Organizers), *Failure in the learning process: How learners experience and overcome*

obstacles through resources and supports. Structured poster session conducted at the annual meeting of the American Educational Research Association, Toronto, Canada.

Federal Grant Advisory Boards

Advisory Board Member, NSF AISL, "The Notion of Failure and Maker Programming for Youth: Supporting the Professional Development, Reflection, and Learning of Informal Educators," 2021-present, PI Simpson, A., Co-PIs Maltese, A., & Anderson, A.
Advisory Board Member, NSF ECR-EDU Core Research, "Dialogic Gesture in Collaborative Sense-making in Physics," 2022 – present, PI Flood, V. J., Co-PI Harrer, B. K.
Advisory Board Member, NSF AISL, "EXPANSE: EXPanding Activities for Nature Situated Engineering," 2022-present, PI Marjorie Bequette, Co-PIs Robby Schreiber and Bette Schmit.

Service To The University/College/Department

University of Minnesota

Collegiate Service and Intercollegiate Service
- UMN CEHD Diversity Advisory Council, 2024-present
- UMN Learning Sciences Certificate Faculty Contact, 2022-present
- UMN Learning Informatics Lab, Core Faculty, 2019-present

Department/Unit Service
- UMN Psych Foundations Program Coordinator, 2025-present

Committee service
- EPSY CAT-IDEA Committee, 2024-2025
- EPSY Professional Development and Recognition Committee, Chair, 2022-2024
- EPSY Graduate Advisory Council; Committee member, Fall 2019 – Spring 2022

Search committee service
- EPSY Special Education Open Rank Professor Search Committee member, Fall 2022-Spring 2023
- C&I Learning Technologies Open Rank Professor Search Committee member, Fall 2022-Spring 2023
- EPSY Psych Foundations Assistant Professor Search Committee member, Fall 2021-Spring 2022
- EPSY QME Assistant Professor Search Committee member, Fall 2019-Spring 2020

Public And Other Service

Community

- UMN 2024 Advisor in the UMN McNair Scholar Program
- UMN 2023 Diversity in Psychology panel and breakout session
- UMN Diversity in Psychology Mentor to two students in Fall 2022
- Panelist on UMN's NextGen Psych Scholars Program presentation on Grad School Admissions 101 panel, November 8, 2021 & October 20, 2022
- Panelist on UC Berkeley Visiting Scholar and Postdoc Affairs (VSPA) Postdoc Alumni Career Panel, September 20, 2022.

- Research talk on debugging education given to Code.org's curriculum developers, May 17, 2022
- Organized a gathering of UMN graduate students and researchers at Minneapolis Institute of Art to discuss best practices for supporting students with failures during maker space activities (Fall, 2019).
- Presented research on productive failure at the *Beyond Science Symposium* gathering of hundreds of middle school students at University of California, Los Angeles, CA (February 4, 2015).