



Catherine Chi Chase

Senior Scholar, SAL Digital Learning

Bio

BIO

Cathy Chase is a senior research scholar working for the Stanford Accelerator for Learning's Digital Learning Initiative. Cathy has over 15 years of experience doing research and design in the Learning Sciences, with an interdisciplinary focus on cognition, STEM education, and educational technology. Cathy has expertise in exploration and discovery-oriented learning activities, learning technologies like educational games and intelligent tutoring systems, and psychological constructs like transfer and motivation. She currently works on genAI-supported learning and sustainability education.

Prior to joining the TLA, Cathy was an assistant professor of Cognitive Science in Education at Columbia University's Teachers College. She is also a proud alum of the Learning Sciences and Technology Design program at the Stanford Graduate School of Education. She began her career in education as an elementary and middle school science teacher in Brooklyn, NY.

EDUCATION AND CERTIFICATIONS

- PhD, Stanford Graduate School of Education , Learning Sciences & Technology Design (2011)
- MS.Ed., Brooklyn College, CUNY , Elementary Education (2003)
- B.A.S., Stanford University , Biology and Psychology (2000)

Publications

PUBLICATIONS

- **Can typical game features have unintended consequences? A study of players' learning and reactions to challenge and failure in an educational programming game** *BRITISH JOURNAL OF EDUCATIONAL TECHNOLOGY*
Chase, C. C., Malkiewich, L. J., Lee, A., Slater, S., Choi, A., Xing, C.
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- **Impact of a prototyping intervention on middle school students' iterative practices and reactions to failure** *JOURNAL OF ENGINEERING EDUCATION*
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2019; 108 (4): 547-573
- **Seeking the General Explanation: A Test of Inductive Activities for Learning and Transfer** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*
Shemwell, J. T., Chase, C. C., Schwartz, D. L.
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- **Resisting Overzealous Transfer: Coordinating Previously Successful Routines With Needs for New Learning** *EDUCATIONAL PSYCHOLOGIST*

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- **Practicing Versus Inventing With Contrasting Cases: The Effects of Telling First on Learning and Transfer** *JOURNAL OF EDUCATIONAL PSYCHOLOGY*
Schwartz, D. L., Chase, C. C., Oppezzo, M. A., Chin, D. B.
2011; 103 (4): 759-775
- **Preparing students for future learning with Teachable Agents** *ETR&D-EDUCATIONAL TECHNOLOGY RESEARCH AND DEVELOPMENT*
Chin, D. B., Dohmen, I. M., Cheng, B. H., Oppezzo, M. A., Chase, C. C., Schwartz, D. L.
2010; 58 (6): 649-669
- **Teachable Agents and the Protege Effect: Increasing the Effort Towards Learning** *JOURNAL OF SCIENCE EDUCATION AND TECHNOLOGY*
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