

Grace Y. Xu

University at Buffalo, The State University of New York
2007 Villas Drive West, Unit 2007, Buffalo, NY 14228
480-665-2439, yukunxu@buffalo.edu
<https://orcid.org/0009-0008-9497-2420>

Education

Ph.D. in Curriculum, Instruction, and Science of Learning (Expected May 2030)

University at Buffalo, The State University of New York

- Advisor: X. Christine Wang

M.S. in Learning, Design, and Technology (September 2025)

Stanford University

- Advisor: Jennifer Osuna
- Master's Project: [Teacher Owlet](#)

B.S. in Elementary Education (May 2024)

Vanderbilt University

- Second major: Child Development
- Minor: Data Science

Research Interests

Elementary education, learning sciences, cybersecurity, educational technology, design-based research, computational thinking

Awards and Honors

- GSE Graduate Presidential Fellowship (8 semesters), University at Buffalo
- Dean's List (6 semesters), Vanderbilt University

Peer-Reviewed Publications

- Xu, Y. and Li, H. (2025). Cybersecurity matters for primary school students: A scoping review of the trends, challenges, and opportunities. *IEEE Transactions on Learning Technologies*, 18, 513-529. doi: 10.1109/TLT.2025.3564610.

Manuscripts Under Review / In Revision

- Xiong, X., Cao, S., Gao, T., Xu, G. Y., Feng, X., & Li, H. (under review). AI and digital leadership among Chinese kindergarten principals: A case study of Guangxi.
- Xiong, X., Cao, S., Gao, T., Xu, G. Y., Hou, Y., & Li, H. (under review). Are Sherpas ready for Mount Everest? Latent profiles and predictors of AI literacy among Chinese teaching-research officers.
- Xiong, X., Cao, S., Gao, T., Hou, Y., Xu, G. Y., & Li, H. (under review). Ready or not? Assessing the digital leadership preparedness of Chinese educational administrators for the AI era.

Conference Papers and Presentations

- Xu, G. Y., Xing, G. Y., Guo, J. Dantu, K., & Wang, X. C. (under review). From planned lessons to emergent learning: Teachers' noticing and responses to teachable moments in an AI curriculum. */SLS 2026*.

- Xing, G. Y., Yamamoto, Y. Cai, Z. J., **Xu, G. Y.**, & Wang, X. C. (under review). Evolving engagement: young children's affective, behavioral, and cognitive interactions with intelligent agents. */SLS 2026*.
- Xiong, X., Cao, S., Gao, T., Feng, X., **Xu, G. Y.**, & Li, H. (2026, April 8-12). From hesitant beginners to confident experts: AI literacy among preschool teachers in Guangxi, China. Poster, American Educational Research Association, Los Angeles, CA.
- **Xu, Y.** (2025, May 9). *Teacher Owlet: Supporting pre-service teachers in developing classroom management skills*. Presentation, SWAYWO 2025, Stanford, CA.

Research Experience

PlayfulAI, University at Buffalo

2025 – present, Supervisor: Dr. X. Christine Wang

- Graduate Research Assistant
 - Create and codesign with children an AI curriculum for developing AI tools.

CELaRAI, University at Buffalo

2025 – present, Supervisor: Dr. X. Christine Wang

- Graduate Research Assistant
 - Lead a group of Doctoral students in analyzing ~30 tools designed for young children (ages 3-8) to acquire early literacy skills.
 - Design a framework for evaluating the engagement aspect for AI-supported, early literacy apps.

Stanford Project on Adaptation and Resilience in Kids, Stanford University

2024 – 2025, Supervisor: Dr. Jelena Obradović

- Research Assistant
 - Conducted interactive sessions with approximately 40 preschool children (ages 3-5) to assess their problem-solving and creativity skills.
 - Analyzed and coded qualitative data from preschool participants to identify patterns in creative thinking and problem-solving approaches.
 - Evaluated existing assessment tools and provided evidence-based feedback to enhance measurement of children's creativity and problem-solving abilities.

The Education University of Hong Kong

2024, Supervisor: Dr. Hui Li

- Research Assistant
 - Conducted Chinese, English, and Raven's Standard Progressive Matrices tests with 4- to 7-year-old students at a local kindergarten.
 - Utilized fNIRS devices to explore how children's brain reacts differently to language (English) and coding-related (Chinese) videos.
 - Produced reports for parents regarding their children's participation in the experiment.

The Education University of Hong Kong

2023, Supervisor: Dr. Dandan Wu

- Research Assistant
 - Created lesson plans for college-level programs that address students' questioning skills using ChatGPT.
 - Conducted a literature review with regard to technology use and related assessment tools.
 - Translated study participation consent forms from Chinese to English.

The New Jersey Families Study, Vanderbilt University

2022 – 2024, Supervisor: Dr. Joanne W. Golann

- Research Assistant

- Analyzed and coded the 3- to 4-year-old focal child's interactions with parents and family members in the provided videos, which document 24/7 hours of daily interactions.
- Participated in weekly discussions with research assistants to explore new findings and differences between families.
- Analyzed how different parenting styles may impact children's responses, as shown by parent-child food-related negotiations, through video ethnographic examination.

BRIDGES Project: Broadening Identities in STEM, Vanderbilt University

2022, Supervisor: Dr. Heidi Carbone

- Volunteer

- Observed and noted students' behavior in the provided videos and conducted behavior analysis using six modes of engagement.
- Proposed possible new categories for recurring actions of the students.

Teaching Experience

Teaching Assistant Position

- Spring 2023, PSY-PC 1111: First Year Writing Seminar - Harry Potter & Child Dev (Supervisor: Georgene Troseth)
 - Assisted the instructor in conducting classes and substituted during the teacher's absence.
 - Assessed students' writing abilities and graded their response sheets and reaction papers.
 - Created a portfolio ([URL](#)) to showcase my learnings about classroom organization and management.

Other Teaching Experience

- May 2025, The Things You Don't Notice Your Teachers Do (SPLASH), Volunteer Teacher
 - Facilitated two introductory sessions (each with 20 high school students) on teaching practices and classroom routines.
 - Designed and led an interactive activity illustrating the challenges of fostering classroom engagement.
- Spring 2024, Full-time Student-Teacher (Charlotte Park Elementary School)
 - Taught in 1st grade and 4th grade, engaging students in learning English, Math, Social Studies, and Science.
 - Selected instructional goals and developed effective lesson plans appropriate to target students under the guidance of cooperating teachers.
 - Managed classroom procedures and student behavior, creating a smooth-running classroom to promote students' access to resources and learning outcomes.
- Summer 2022, Assistant Teacher (Vanderbilt Child and Family Center)
 - Provided daily care for children aged 6 months to 5 years and resolved conflicts.
 - Established relationships with the children through activity design, observed their interests, analyzed their behavioral/language characteristics, and ensured information and resources were accessible to them to satisfy their curiosity.
 - Communicated effectively and appropriately with teachers and directors.
 - Introduced children to various objects (e.g., Dams) using playground objects.
 - Introduced children to writing and encouraged students to fine-tune motor abilities such as writing their names.

License(s)

- Practitioner Teacher (Spring 2024, Full-time Student-Teacher (elementary)), Tennessee

Service Activities

National

2025, Peer Reviewer

- AI, Brain, and Child
- Early Education and Development
- International Conference of the Learning Sciences 2026