Liru Hu, Ph.D.

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PROFESSIONAL EXPERIENCE

2023–Now **Assistant Professor**, STEM Education, the University of Texas at El Paso

2023 **Research Manager** (Assistant Research Officer), the University of Hong Kong
- Project: *Scaling-up C-For-Chinese@JC in Kindergarten Sector to Cultivate Culturally Responsive Education* (The Hong Kong Jockey Club Charities Trust)
- PI: Dr. Sau Yan Hui (Home and Community Engagement and Support)
- Project aim: The "C-for-Chinese@JC" project aims to create culturally responsive education for kindergartens in Hong Kong. By 2026, the project aims to support 42,000 kindergarten students, including 5,100 non-Chinese-speaking and ethnic-minority students and their families, and support their transitions to primary education.

2021–2023 **Research Assistant**, the University of Hong Kong
- Project: **A Visualization-enhanced Video-based e-learning Platform (V2 e-Platform) for Teachers and Students (**FBL, #ITB/FBL/7026/20/P, HKD 3,647,464)
- PI: Dr. Gaowei Chen
- Project aim: Transform educational videos into high-efficacy, low-cost resources for improving teaching and learning, ultimately benefitting a wide range of teachers and students at the local, regional and international levels

2017–2018 **Research Assistant**, the University of Hong Kong
- Project: **Technology-Supported Teacher Learning about Effective Classroom Talk: Impact on Students' Participation and Achievement in Mathematics** (GRF/ECS, #27606915, HKD 679,000)
- PI: Dr. Gaowei Chen
- Project aim: Promote teachers' professional development in effective classroom talk based on a learning analytical tool called Classroom Discourse Analyzer

2017 **Product manager**, LAIX Inc., Shanghai
- Analyzed log data to assess users' experience of Dongni, an intelligent adaptive English learning system
- Investigated the designs of similar adaptive learning systems and compared them to the design of Dongni
- Assisted with the test of the adaptivity of Dongni Beta by answering testers' questions and collecting testers' feedback
- Proposed new design features for Dongni

2012–2014 **Planning supervisor**, Strategy Planning Department in CEO's Office, Suning Commerce Group Co., Ltd., Jiangsu
- Managed the size of personnel force by controlling the staffing quotas of branch companies
- Investigated the communication efficiency of branches and the headquarter to propose solutions for more efficient procedures
- Assisted in changing the organization structures to support online business

2012 **Training specialist,** Suning University, Suning Commerce Group Co., Ltd., Jiangsu
- Assisted in training new staffs and newly promoted managers
- Investigated the training needs of various departments and helped them develop training courses

EDUCATION

2022–2027 School of Complex Adaptive Systems, **Arizona State University**, **M.S.** in Complex Systems Science, Current GPA: 4.0/4.0

2017–2023 Academic Unit of Human Communication, Development, and Information Sciences, Faculty of Education, **The University of Hong Kong, Ph.D.**
Research focus: Dialogic collaborative problem solving; computer-supported collaborative learning; dialogic education; visual learning analytics
Doctoral thesis: Developing productive peer talk in dialogic collaborative problem solving: A participatory visual learning analytical approach
Supervisors: Dr. Gaowei Chen; Prof. Carol K. K. Chan

2021 Summer School, **Carnegie Mellon University**
Topic: Intelligent tutoring system

2021 Summer School, **Radboud University**
Topics: Complexity methods for behavioral science, human-computer interaction, and clinical skills in the treatment of anxiety and depression.

2016–2017 School of Education and Human Development, **University of Massachusetts Boston**
Transfer graduate student

2014–2017 School of Education, **Shaanxi Normal University, M.S.,** GPA: 90/100; Rank: 1/23
Research focus: Learning sciences and technology
Master's thesis: Application strategy of students as co-creators: A design-based research study on a graduate bilingual course of educational technology research methods
Supervisor: Prof. Baohui Zhang

2016 Summer School, **Peking University**
Topic: Learning sciences and future education

2015 Summer School, **Peking University**
Topic: Learning sciences and technologies

2008–2012 Institute of Education, **Nanjing University, B.S.**, GPA: 4.42/5.00, Rank: 1/7
Bachelor's thesis: The development status and quality evaluation of edutainment at home and abroad
Supervisor: Prof. Hongxia Zhang
Minor Degree in Management Science

EXTERNAL FUNDING

2023–2027 **Co-Principal Investigator,** *Postdoctoral Fellows as Leaders in Next-Generation Computer Science Education Research-Practice Partnerships Serving Minoritized Communities* (**National Science Foundation** DGE 2329579/226101165A, USD 1,202,712). Principal Investigator: Johannes Strobel (2023-2025), Pei-Ling Hsu (2025-2027). Co-Principal Investigator: Justice T. Walker (2023-2025), Pei-Ling Hsu (2023-2025), Elsa Villa (2023-2025), Liru Hu (2025-2027), David Carrejo (2025-2027).
Project aim: This project aims to strengthen the capacity (i.e., knowledge, skills, practices) of postdoctoral scholars in researching in the intersection of Computer Science (CS) and other STEM disciplines in K-12 environments.

2025-2027 **Co-Principal Investigator,** Empowering K-12 Artificial Intelligence Teams Through Collaborative Project-based Learning (**National Science Foundation** DGE 2329579/226101165A, USD 24,999). Principal Investigator: Pei-Ling Hsu (2025-2027). Co-Principal Investigator: Liru Hu (2025-2027), David Carrejo (2025-2027).
Project aim: Supplemental funding. The effort will organize and mentor teams of students and educators as they participate in the Presidential AI Challenge, using

project-based learning to address locally defined challenges.

INTERNAL FUNDING

2025–2026 **Co-Principal Investigator,** *Cross Computer Science Education and AI Literacy for K-12 Learners* (University of Texas at El Paso, Research Venture Fund, USD 5000)
Project aim: This project aims to collaborate for three external grant submissions focusing on advancing K-12 learners' computer science education and/or AI literacy.

2025 **Principal Investigator,** *Cross-Cultural Adaptation of Teachers' Self-Efficacy in Engaging Students in Effective STEM Talk* (UTEP-UTRGV Joint Venture Fund, USD 6000)
Project aim: This project aims to address the lack of validated tools for assessing teachers' self-efficacy in dialogic teaching, particularly in STEM classrooms, by translating and validating an existing self-efficacy instrument originally developed in Hong Kong for use in U.S. classrooms.

2024 **Principal Investigator,** *Empowering Math Discourse: A Tech-Enhanced Program for Productive Peer Talk in Collaborative Problem Solving* (UTEP University Research Institute Grant, USD 6030)
Project aim: This study aims to develop a peer-talk teaching program called mathematics dialogue and thinking to promote academically productive discussions among primary school students.

2011–2012 **Principal Investigator,** *Investigation Project on the Major Abolishment* (Nanjing University, RMB 3,000)
Project aim: Investigate the reasons for the closure of the Educational Technology major at Nanjing University, conclude its achievements and lessons, explore suggestions for its future development and enlightenment for other universities in China
Project achievements: over 500 pages of a report with a 7-minute CD

EXTERNAL GRANT APPLIED

July 2026 (PENDING) The Lego Foundation Fellowship #SSRC-53244: *Who Should Do What? Helping Children Learn to Divide Cognitive Work with AI*, USD $300,000, **PI: Liru Hu**

July 2026 (PENDING) National Science Foundation CAREER Grant #2637621: *CAREER: Simulating Group Cognition in Grade 4 Mathematics Collaboration: Collaborative Value and Individual Appropriation,* USD $785,350, **PI: Liru Hu**

July 2026 (PENDING) National Science Foundation STEM K-12 Grant # 2630370: *CO-DESIGN AI: Empowering Youth Through Cogenerative Mentorship to Co-Design AI Solutions with Scientists for Community Challenges,* USD 749,999, **PI: Pei-Ling Hsu**, Co-PI: Aritran Piplai, Liru Hu, Marianne Karplus, Juan Noveron.

Mar. 2026 (DECLINED) National Science Foundation CAMEL-CN Grant # 2621490: *Phase I CAMEL-CN: K-12 Mathematical Discourse Collaboratory: Mapping Mathematical Thinking and Learning Through Discourse Across Teachers, Students, and Caregivers,* USD 749,999, **PI: Liru Hu**, Co-PI: Song An, Daniel Tillman, Anantaa Kotal, Josefina Tinajero.

Dec. 2025 (DECLINED) National Science Foundation STEM K-12 Grant # 293705: *Transforming Peer Talk in Collaborative Problem Solving by Engaging Students as Talk Analysts,* USD 750,000, **PI: Liru Hu**, Co-PI: Song An, Daniel Tillman, Aritran Piplai, Josefina Tinajero

Nov. 2025 (PENDNIG) National Science Foundation RITEL Grant # 2604566: *Collaborative Research: Edge-AI Enabled Observational Real-time Analytics for Classroom Learning and Engagement (ORACLE),* USD 900,000, PI: Bill Tseng, **Co-PI: Liru Hu**, Chin-Yih Lin, Rong Pan (Arizona State University)

Oct. 2025 (CANCELLED) National Science Foundation DGE Grant #2603118: *Postdoctoral Fellows as Leaders in Next-Generation Computer Science Education Research-Practice Partnerships Serving Minoritized Communities – Supplemental Fund*, USD 31,320 US, 2/1/262-1/31/2027, PI: Pei-Ling Hsu, **Co-PI: Liru Hu**, David Carrejo

Nov. 2024 (DECLINED) National Science Foundation RITEL Grant #2507197: *Virtual Teacher Residency: An AI-enhanced STEM Teacher Learning Simulation System for Academically Productive Talk,* $899,999, 9/1/2025-8/31/2028, **PI: Liru Hu**, Co-PI: Aritran Piplai, Joyce Asing Cashman, Olga Kosheleva

Nov. 2024 (DECLINED) National Science Foundation DRK-12 Grant #2509908: *Developing Productive Peer Talk in Dialogic Collaborative Problem-Solving: Empowering Fourth-Grade Students as Visual Analysts of Their Mathematical Dialogue,* USD 2,999,649, 9/1/2025-8/31/2029, **PI: Liru Hu**, Co-PI: Aritran Piplai, Daniel Tillman, Song An

July 2024 (DECLINED) National Science Foundation CAREER Grant #2443933: *Unraveling Dialogue Dynamics: Visualizing and Analyzing Temporal Patterns of Mathematics Talk among Primary School Students, Teachers and Caregivers,* USD $675,328, 02/01/2025-01/31/2030, **PI: Liru Hu**

June 2024 (DECLINED) National Science Foundation CSforALL Grant #2434920: *Dialogue to Learn: Understanding the Role of Talk in Shaping Hispanic High School Students Computer Science Identity and Computational Thinking in Internships,* USD 749,983, 02/01/2025-01/31/2028, PI: Pei-Ling Hsu, **Co-PI: Liru Hu**, Rodrigo Romero, Johannes Strobel

Jan. 2024 (DECLINED) National Science Foundation RITEL Grant #2418710 *Virtual Teacher Residency: A Virtual-Reality-Based STEM Teacher Learning System for Academically Productive Talk,* USD 899,817, 9/1/2024-8/31/2027, **PI: Liru Hu**, Co-PI: Aritran Piplai, Joyce Asing Cashman, Olga Kosheleva

INTERNAL GRANT APPLIED

June 2025 (CANCELLED) Hopper Dean Center Grant: *Community-Based AI Literacy Learning Program for Young Learners in El Paso,* $15,000 US, 6/16/2025-8/31/2028, **PI: Liru Hu**, CoPI: Pei-Ling Hsu, Melissa Perez, College of Education, UTEP

June 2025 (CANCELLED) Hopper Dean Center Grant: *Enhancing High School Students' Computational Thinking and Computer Science Identity Through Dialogic Storytelling Practices in A Summer Internship,* $15,000 US, 6/16/2025-8/31/2027, PI: Pei-Ling Hsu, **Co-PI: Liru Hu**, Rodrigo Romeno, Melissa Perez, College of Education, UTEP

PUBLICATIONS: PEER REVIEWED JOURNAL ARTICLES

22. ***Hu, L.** & Chen, G. (2025). Dialogic collaborative problem solving: A theoretical framework for analyzing students' dialogic interaction in collaborative problem solving. *Research Paper in Education* **(IF 2024: 1.8)**. *https://doi.org/10.1080/02671522.2025.2610216*
21. ***Hu, L.,** Chen, G., & Wu, J. (2024). Improving participation equity in dialogic collaborative problem solving: A participatory visual learning analytical approach. *Journal of Computer Assisted Learning* (**IF 2023: 5.0**), 1–26. https://doi.org/10.1111/jcal.12975.
20. *__Hu, L.,__ Chen, G., & Wu, J. (2023). Teaching talk for thinking: The efficacy of a peer talk teaching program for improving group thinking. *Thinking Skills and Creativity* **(IF 2023: 3.7)**, *48*, 101291.
19. ***Hu, L.**, & Chen, G. (2023). A systematic review and meta-analysis of productive peer talk moves. *Journal of Behavioral Education* **(IF 2022: 2.0)**, 1-33.
18. *__Hu, L.__, Wu, J., & Chen, G (2022). iTalk–iSee: A participatory visual learning analytical tool for productive peer talk. *International Journal of Computer Supported Collaborative Learning* **(IF: 5.611)**, 1–29. https://doi.org/10.1007/s11412-022-09374-w

17. *__Hu, L.__ & Chen, G. (2022). Exploring turn-taking patterns during dialogic collaborative problem solving. *Instructional Science* **(IF 2022: 2.5)**, *50*(1), 63–88. https://doi.org/10.1007/s11251-021-09565-2
16. *__Hu, L.__ & Chen, G. (2021). Towards a complex systems perspective on the temporal patterns of dialogic collaborative problem solving. *Frontiers in Psychology* **(IF: 4.232)**, *12, 735534.* https://doi.org/10.3389/fpsyg.2021.735534
15. *__Hu, L.__ & Chen, G. (2021). A systematic review of visual representations for analyzing collaborative discourse. *Educational Research Review* **(IF 2023: 11.7)**, *34*, 100403. https://doi.org/10.1016/j.edurev.2021.100403
14. *__Hu, L.__ (2021). Conceptualization and operationalization of group thinking sustainability in dialogic collaborative problem solving. *Thinking Skills and Creativity* **(IF 2023: 3.7)**, *42*, 100964. https://doi.org/10.1016/j.tsc.2021.100964
13. ***Hu, L.,** Chen, G., Li, P., & Huang, J. (2021). Multimedia effect in problem solving: A meta-analysis. *Educational Psychology Review* **(IF 2022: 10.1)**, *33*(4), 1717–1747. https://doi.org/10.1007/s10648-021-09610-z
12. *Chen, G., Lo, C. K., & **Hu, L.** (2020). Sustaining online academic discussions: Identifying the characteristics of messages that receive responses. *Computers & Education* **(IF 2023: 12.0)**, *156*, 103938. https://doi.org/10.1016/j.compedu.2020.103938
11. *__Hu, L.,__ & Chen, G. (2020). Visual learning analytics: Exploring the role of visualization in learning analytics. *Open Education Research* **(CSSCI)**, *26*(2), 63–74. *(In Chinese).*
10. *Zhang, B., **Hu, L.,** Li, P., Qin, J. (2017). Implementation of Students as Co-Creators of Curricula: A design-based study on a graduate bilingual course Educational Research Methods. *Open Education Research* **(CSSCI)**, *23*(6), 36–48. (*In Chinese*).
9. ***Hu, L.,** Zhang, B., Cheng, L., & Zhang, J. (2017). Problems of educational technology undergraduate major construction in comprehensive research university: Based on the investigation research on major abolishment in A University. *Modern Distance Education Research* **(CSSCI)**, (2), 77–87. (*In Chinese*).
8. ***Hu, L.** (2016). Deconstruct and reconstruct high school information technology elective courses based on maker culture. e-*Education in Primary and Secondary Schools,* (1), 26–29. (*In Chinese*).
7. *Han Y., Zhang, B., & **Hu, L.** (2016). Analysis of interaction-based participatory instructional design and implementation effects for graduate students. *Graduate Students Education* **(CSSCI)**, (1), 36–43. (*In Chinese*).
6. ***Hu, L.,** & Zhang, B. (2016). Flipped classroom and flipped learning: Analyze the efficacy of "flipping". *Journal of Distance Education* **(CSSCI)**, *34*(4), 52–58. (*In Chinese*).
5. ***Hu, L.,** Zhang, B., & Zhou, R. (2016). Trends of online learning platform development: From the perspective of the evolution of software. *e-Education Research* **(CSSCI)**, *37*(1), 72–78. (*In Chinese*).
4. ***Hu, L.,** M. J., Zhang, B. & Song, L. (2016). To flip or not to flip? Beyond an educational fad to research-based classrooms: An interview with Professor Michael J. Jacobson from the University of Sydney. *Chinese e-Educational Research* **(CSSCI)**, (5), 138–141. (*In Chinese*).
3. ***Hu, L,** Ding J., Ma, Y., & Zhang, B. (2016). Impact of time constraints on flow experience: An empirical study on educational game. *Open Education Research* **(CSSCI)**, *22*(2), 113–120. (*In Chinese*).
2. ***Hu, L.,** & Zhang, B. (2016). Blended learning: Toward technology-enhanced pedagogical structure design. *Modern Distance Education Research* **(CSSCI)**, (4), 21–31. (*In Chinese*).
1. ***Hu, L.** (2015). Five contradictions on domestic edutainment. e-*Education in Primary and Secondary Schools,* (9), 39–42. (*In Chinese*).

JOURNAL ARTICLES (UNDER REVIEW & IN PREPARATION)

16. Hu, L., Wang, P., Zhang, J., Yu, Y., Zhang, Y., An, S. A. (Submitted) Reproducing and Reshaping Silent Participation in Small- Group Mathematical Problem Solving: A Process Account of Dialogic Collaboration. *Cognition and Instruction.*
15. Wang, P., **Hu, L.,** Li, Ke., Chen, G. (Submitted). (Misaligning) teacher beliefs and talk moves: A comparative case study of classroom discourse. *Professional Development in Education.*
14. Zhang, Y., *Chen, G., **Hu, L.** (Submitted). Orchestrating Dialogic Teaching in Technology-Rich Mathematics Classrooms: A Dynamic-Visualization-supported-Dialogic-Teaching (DVsDT) Framework for Preservice Teacher Professional Development. *Journal of Learning Sciences.*
13. *An, S. A., **Hu, L.,** Kim. S., &, Tillman, D. A. (Under Review). Where shapes meet sums: Preservice teachers explore teaching number sense through geometry-embedded hundreds chart. *Journal of Early Childhood Teacher Education.*
12. ***Hu, L.,** Wang, P., Yu, Y., Zhang, J., Zhang, Y., An, S. A. Reproducing and Reshaping Silent Participation in Small-Group Mathematical Problem Solving: A Process Account of Dialogic Collaboration. *Cognition and Instruction* (Submitted).
11. ***Hu, L.,** Wu, J., Yang, C., Chen, G., Hsu, P.-L. Do we need to teach students how to talk? Understanding the value and trajectory of learning productive peer talk. *Journal of Learning Sciences*. *(Under Review*)
10. *An, S. A., **Hu, L.,** Kim. S., Tillman, D. A., & Tinajeo, J. (Under Review). Dual-mode agency: Investigating early childhood educators' parental and teacher identities in risky play in the US-Mexico borderlands. *International Journal of Early Childhood.*
9. Yao, C.; *Wang, D.; Chua, Y. P.; Chen, G.; **Hu, L.** *(*Under Review*).* Text-to-Image AI as a Shared Representational Resource in CSCL: An Exploratory Study of Collaborative Scientific Visualization. *Journal of Educational Computing Research.*
8. *An, S. A., **Hu, L.,** Tillman, D. A., & Hachey, A. (Under Review). "A whole new level": Preservice teachers learn mathematics pedagogy by choreographing unplugged drone shows. *Journal of Mathematics Education at Teachers College.*
7. **Hu, L.,** *Wu, J., An, S., Wang, P., Zhang, Y., Chen, G. Teachers' cognitive processes in orchestrating whole-class discussions in AI-simulated classrooms. *Cognition and Instruction* (Submitted)
6. **Hu, L.,** *Wu, J., Zhang, Y., Tao, Y., Wang, P., Zhang, J., Chen, G. Orienting, Disciplining, and Supporting (ODS): How Discipline-Specific Probes Enable Academically Productive Science Talk. *Science Education* (Under Review)
5. ***Hu, L.,** Han, E., Hsu, P.-L., Aguilar, J. J., Acquach, A., Chen, G. Measuring Mathematics Teachers' Self-Efficacy for Dialogic Teaching: Translation, Cognitive Interviewing, and Validation. Educational Studies in Mathematics (Submitted).
4. ***Hu, L.** Mahmood R., Tillman D. A., Wu J., An, S. A. Generative AI-Simulated Classrooms as a Research Method: A Virtual Teaching Lab for Investigating Dialogic Teaching. Teaching and Teacher Education (Under Review)
3. ***Hu, L.** A Systematic Review of Artificial Intelligence Literacy Programs in K-5 (in preparation, to be submitted in Nov. 2026)
2. ***Hu, L.** Generative AI Simulations in Teacher Education and Teacher Learning Research: A Systematic Literature Review (in preparation, to be submitted in Oct., 2026)
1. *Tillman, D., An, Song, **Hu, L.** Risky Play in Artificial Intelligence in Education. (in preparation).

PUBLICATIONS: CONFERENCE PAPERS

15. Wang, P., **Hu, L.**, Li, K., & Chen, G. (2026, June 15-19). (Mis)aligning dialogic practices and beliefs: Teacher change during video-based professional development. In B. K. Litts, D. DeLiema, C. Lee, S. Krist, A. Mawasi, L. Martin, & K. Kumpulainen (Eds.), *Proceedings of the 20th International Conference of the Learning Sciences – ICLS 2026* (pp. 1597–1601). International Society of the Learning Sciences.
14. **Hu, L**. & Wu, J. (2024, June 10–14). Analyzing participation equity criteria: A fresh perspective via turn-taking simulation. *Proceedings of the International Society of the Learning Sciences*

(ISLS) Annual Meeting 2024 (pp.147-154). New York, USA.

13. **Hu, L**., Wu, J., & Chen, G. (2023, June 10–15). iTalk–iSee: A participatory visual learning analytical tool for productive peer talk. *Proceedings of the International Society of the Learning Sciences (ISLS) Annual Meeting 2023* (p.13). Montréal, Canada.
12. **Hu, L.,** Chen, G., & Wu, J. (2023, June 10–15). Exploring the Trajectory of Learning and Using Productive Peer Talk Moves. In *Proceedings of the 16th International Conference on Computer-Supported Collaborative Learning-CSCL 2023, pp. 193-196*. International Society of the Learning Sciences.
11. **Hu, L.** (2021, June 7–11). Turn-usurping in dialogic collaborative problem solving. *Proceedings of the International Society of the Learning Sciences (ISLS) Annual Meeting 2021* (pp. 59–66). Online. **[Runner-up of Best Student Paper Award]**
10. **Hu, L.** (2021, Apr 13–16) Explore the participation of students of few words in dialogic collaborative problem-solving [Roundtable Session]. *AERA Annual Meeting*, online.
9. **Hu, L.** (2020, June 19–23). When productive talk fails to generate good outcome: temporality of peer talk in dialogic collaborative problem solving. *Proceedings of the 14th International Conference of the Learning Sciences* (ICLS2020) (pp. 905–906), Nashville, TN, USA
8. Chen, G., Lo, C. K., & **Hu, L.** (2020, June 19-23). Message responsiveness during online discussions. *Proceedings of the 14th International Conference of the Learning Sciences (ICLS2020)* (pp. 130–137), Nashville, TN, USA
7. **Hu, L.** (2020, June 19–23). Conceptualization and quantification of thinking sustainability in dialogic collaborative problem solving. *Proceedings of the 14th International Conference of the Learning Sciences (ICLS2020)* (pp. 333–340), Nashville, TN, USA
6. **Hu, L.** & Chen, G. (2020, Apr 17–21) Turn-taking patterns in dialogic collaborative problem solving [Roundtable Session]. *AERA Annual Meeting* San Francisco, CA
5. **Hu, L.,** Chen, G., & Chan, C. K. K. (2019, June 17–21). Temporal patterns and visualizations of peer talk: Toward understanding the process and performance of dialogic collaborative problem-solving [Doctoral Consortium]. *Proceedings of the 13th International Conference on Computer Supported Collaborative Learning (CSCL)*, Lyon, France.
4. *Chen, G., Chan, K., Chan, C., Yu, J., **Hu, L.**, Wu, J., & Resnick, L. (2019, June 17–21). Designing learning analytics for teacher learning: An analytics-supported teacher professional development (ASTPD) approach. *Proceedings of the 13th International Conference on Computer Supported Collaborative Learning (CSCL)* (pp. 959–960), Lyon, France.
3. *Chen, G., Chan, C. K. K., Yu, J., **Hu, L.**, Clarke, S., & Resnick, L. B. (2018, June 24-27). The impact of evidence-based professional development on classroom dynamics. *Proceedings of the 13th International Conference of the Learning Sciences (ICLS)* (pp.1769–1770), London, UK.
2. **Hu, L.** & Zhang, B. (2018, May 25–29). Implementation of students as co-creators of curricula: A design-based study on a bilingual graduate course Research Methods in Educational Technology. *Doctoral Student Forum Proceedings of the 22nd Global Chinese Conference on Computers in Education (GCCCE 2018)* (pp.5–8). Guangzhou: South China Normal University. (*In Chinese*).
1. **Hu, L.** (2016, July). Blended learning: Beyond technology to pedagogical structure design. *Proceedings of the International Conference on Blending Learning* (pp. 221–232). Springer International Publishing.

CONFERENCE PAPERS (UNDER REVIEW & IN PREPARATION)

3. Wang, P., **Hu, L.,** Li, K. & Chen, G. (2026, June). Orienting, Disciplining, and Supporting: How Discipline-Specific Probes Enable Academically Productive Science Talk, *the International Society of the Learning Sciences (ISLS) Annual Meeting 2026, California, USA.*
2. **Hu, L.,** Wu, J., Hsu, P.-L., & Yang, C. (2026, June). Orienting, Disciplining, and Supporting: How Discipline-Specific Probes Enable Academically Productive Science Talk, *the International Society of the Learning Sciences (ISLS) Annual Meeting 2026, California, USA.*
1. Wu, J., **Hu, L.,** Wang, P., Zhang, J., Zhang, Y., & Chen, G. (2026, June). Orienting, Disciplining,

. and Supporting: How Discipline-Specific Probes Enable Academically Productive Science Talk, *the International Society of the Learning Sciences (ISLS) Annual Meeting 2026, California, USA.*

PRESENTATIONS: ORAL

15. Nov. 2024 (INVITED) — 10th Forum on Empirical Education Research, Improving Teaching Practice based on Design-based Research. Shanghai, China [Online].
Title: Improving group thinking in dialogic collaborative problem solving: A design-based experimental study.

14. June 2024 — The International Society of the Learning Sciences Annual Meeting (**ISLS 2024**), New York, USA.
Title: Analyzing participation equity criteria: A fresh perspective via turn-taking simulation

13. June 2023 — The International Society of the Learning Sciences Annual Meeting (**ISLS 2023**), Montréal, Canada.
Title: Exploring the trajectory of learning and using productive peer talk moves

12. June 2023 — The International Society of the Learning Sciences Annual Meeting (**ISLS 2023**), Montréal, Canada.
Title: iTalk–iSee: A participatory visual learning analytical tool for productive peer talk

11. June 2021 — The International Society of the Learning Sciences Annual Meeting (**ISLS 2021**), online
Title: Turn-usurping in dialogic collaborative problem solving

10. April 2021 — The **AERA 2021** Virtual Annual Meeting
Title: Explore the participation of students of few words in dialogic collaborative problem-solving

9. July 2020 — The Tenth International Conference on Complex Systems (**ICCS 2020**), virtual conference
Title: Towards a complex systems perspective on the temporal patterns of dialogic collaborative problem solving

8. Oct. 2019 — The Global Education Symposium at the College of Education, the University of Illinois at Urbana-Champaign. Illinois, the United States
Title: Multimedia effect in problem solving: A meta-analysis

7. Aug. 2019 — The 23rd Junior Researchers of EARLI Conference (**JURE 2019**) and the18th European Association for Research on Learning and Instruction Conference (**EARLI 2019**), Aachen, Germany
Title: Students' agentic engagement——A design-based study on how to involve students in curriculum design

6. June 2019 — The 13th International Conference on Computer Supported Collaborative Learning (**CSCL 2019**), Doctoral Consortium, Lyon, France
Title: Temporal patterns and visualizations of peer talk: Toward understanding the process and performance of dialogic collaborative problem-solving

5. Apr. 2019 (POSTER) — The **AERA 2019** Annual Meeting, Toronto, Canada
Title: The impact of time constraints on flow experience in an educational game

4. June 2018 (POSTER) — The 13th International Conference of the Learning Sciences (**ICLS 2018**), London, UK
Title1: The impact of video-based and data-supported professional development on classroom dynamics
Title2: Interactions among sources of cognitive load: an EEG perspective

3. May 2018 — The 22nd Global Chinese Conference on Computers in Education (**GCCCE 2018**), Guangzhou, China
Title: Implementation of students as co-creators of curricula: A design-based study on a bilingual graduate course

2. July 2016 — International Conference on Blending Learning 2016 (**ICBL 2016**), Beijing, China

Title: Blended learning: Beyond technology to pedagogical structure design

1. Apr. 2016 The 2nd Annual International Conference on Education (**ICEDU 2016**), Bangkok, Thailand
Title: The impact of time constraints on flow experience in an educational game

TEACHING EXPERIENCE

2023–NOW **Instructor,** College of Education, The University of Texas at El Paso (El Paso, TX)
6. Research Methods on Gen AI in Education (Master, Quote: 30)
5. Adaptive Learning and Assessment with Gen AI (Master, Quote: 30)
4. Quantitative Research Methods I (Doctoral, Quote: 15)
3. Educational Technology (Undergraduate, Quote: 30)
2. Assessing, Planning, and Implementing Technology Programs in EC–12 (Master, Quote: 20)
1. Curriculum Planning for Secondary Schools (Undergraduate, Quote: 30)

2022–2023 **Guest lecturer,** Faculty of Education, The University of Hong Kong
Quantitative Research Methods II (Doctoral, Quote: No limit)

2021 **Mathematics teacher**, Changjiang East Road Primary School, Jiangsu, China

2015–2016 **Teaching assistant**, School of Education, Shaanxi Normal University

2016 **English teacher**, Haiyang Education and Training Institution, Shaanxi, China

DISSERTATION/THESIS COMMITTEE OF GRADUATE STUDENTS

2. Dissertation Committee Member. Raul Alvarez Lopez,
Doctor's Program in Computer Science
Title (TBD): Developing an intelligent tutor for data science learning
Defense Date: TBD
Committee: Olac Fuentes, Liru Hu

1. Thesis Committee Member. Ivan Alejandro Montoya Sanchez
Master's Program in Computer Science
Title: "From Text to Utility: Distance-Aware Contrastive Learning for Detection-Ready and Shareable Malware Descriptions
Defense Date: May, 2025
Committee: Aritran Piplai, Liru Hu, Prajit Das, Anantaa Kotal.

AWARDS

Mar. 2026 Faculty Rising Star Emerging Award, College of Education, the University of Texas at El Paso

June 2021 Runner-up in Best Student Paper Award of the Annual Meeting of the International Society of the Learning Sciences

Apr. 2019 Second Runner-up of Interdisciplinary Competition, the University of Hong Kong

Dec. 2018 Best Presenter Award at the University of Hong Kong

Sept. 2017 Hong Kong Ph.D. Fellowship Scheme at the University of Hong Kong

May. 2017 Excellent Master's Thesis Award at Shaanxi Normal University

Nov. 2016 National Scholarship at Shaanxi Normal University

2012–2013 Outstanding Employee of Suning Commerce Group Co., Ltd.

2009–2012 National Scholarship for Encouragement at Nanjing University

Apr. 2011 Silver Medal for the amateur football contest in the 17th Games of Jiangsu Province

PROFESSIONAL MEMBERSHIPS & SERVICES

2024–	**Affiliated Faculty member**, Institute for Applied AI Innovation, The University of Texas at El Paso
2023–	Founding Member, Academic and Research Center in STEM Education (STEM ARC), The University of Texas at El Paso
2024–2026	**Faculty Senate member**, The University of Texas at El Paso
2025–2027	**Doctoral Committee member**, Teaching, Learning, Culture Doctoral Program, College of Education, The University of Texas at El Paso
2021–	**Program Committee member**, Global Chinese Conference on Computers in Education (GCCCE)
2019–	**Member**, American Educational Research Association (AERA)
2018–	**Member**, The International Society of the Learning Sciences (ISLS)