ZHIGAO LIANG

PhD
Department of Teacher Education and Leadership
Mississippi State University
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Google Scholar

Education

2020-2024 Doctor of Philosophy: Special Education
The Pennsylvania State University, State College, United States
Advisor: Dr. David Lee

2011-2014 Master of Education: Special Education
East China Normal University, Shanghai, China

2007-2011 Bachelor of Arts: English Translation
Suihua University, Suihua, China

Professional Experience

2024-Present Assistant Professor
Department of Teacher Education and Leadership
Mississippi State University, Starkville, United States
Courses:

- Undergraduate-Level:
  - *Assistive Technology in Special Education*
  - *Foundations of Special Education*
  - *Positive Behavioral Interventions and Support (Tier One &Two)*
  - *Intensive and Individualized Behavior Intervention and Support (Tier Three)*
- Graduate-Level:
  - *Universal Design for Learning*
  - *Advanced Planning (PBIS)*
  - *Evidence-Based Practices for Struggling Learners*

2020-2024 Graduate Research and Teaching Assistant
Department of Educational Psychology, Counseling, and Special Education
The Pennsylvania State University, State College, United States

- *Course:*
  - *Introduction to Autism Spectrum Disorder (Work as an independent instructor)*
- *Sections:*
  - *Assistive Technology in the Classroom*
  - *Evidence-Based Instruction for Individuals with Special Needs*
  - *Behavior Management*

2014- 2021 Director of Autism Teaching and Research Program & Special Education Teacher
Pudong New District Special Education School, Shanghai, China.

- *Teach students with autism, intellectual disability, and behavioral disorders.*
- *Supervise new in-service teachers and pre-service teachers.*

- *Provide training (online and in-person) for in-service teachers, parents, and pre-service special and general education teachers.*

2012-2014 Program Coordinator
Special Education and Community Services for Children and Adolescents with Autism and Intellectual Disability, Shanghai, China.

2012-2013 Teaching Assistant
Department of Special Education, East China Normal University, Shanghai, China

Professional Certification

- Chinese Elementary School Teacher Certification (Mathematics)
- Graduate Certificate in Applied Behavior Analysis

Memberships in Professional Organizations

2020- Present Council for Exceptional Children (CEC)
2020- Present Division on Autism and Developmental Disabilities (CEC-DADD)
2022- Present Teacher Education Division (CEC-TED)

Peer-Reviewed Publications

Manuscripts Published

Liang, Z., & Hampshire, P. K. (2026). ENGAGE students through providing higher rates of opportunities to respond. *TEACHING Exceptional Children*. https://doi.org/10.1177/00400599261484929

Liang, Z., & Lee, D. (2026). Evaluation of self-paced online training on pre-service general education teachers' case application of visual schedules for individuals with intellectual and developmental disabilities. *American Journal of Distance Education*, 1–19. https://doi.org/10.1080/08923647.2026.2719280

Liang, Z., Fondren, K. B., & Patenaude, D. (2026). CHECK videos to support individuals on the autism spectrum. *TEACHING Exceptional Children*, https://doi.org/10.1177/00400599261464951

Liang, Z., Fondren, K.B., Chesser, B., & Mosley, S. (2025). Evaluation of self-paced online training on pre-service teachers' case application of video-based intervention for individuals on the autism spectrum: A feasibility study. *Journal of Special Education Technology*. https://doi.org/10.1177/01626434251403028

Liang, Z., Patenaude, D., Mosley, S., & Yang, J. (2025). A systematic review of independent work systems for individuals with autism spectrum disorder. *Review Journal of Autism and Developmental Disorders*. https://doi.org/10.1007/s40489-025-00528-8

Liang, Z. (2025). CHECK video-enhanced activity schedules for individuals on the autism spectrum. *Intervention in School and Clinic, 61*(2), 83-90. https://doi.org/10.1177/10534512251367388

Liang, Z., Chen, Q. & Liang, S. (2025). A literature review of single-case studies utilizing aided augmentative and alternative communication intervention for students on the autism spectrum who have limited speech in elementary school. *International Journal of Developmental Disabilities*, 1–15. https://doi.org/10.1080/20473869.2025.2486431

Liang, Z., Liang, S., & Zuo, J. (2025). Self-paced online intervention training for parents of individuals on the autism spectrum: A literature review. *International Journal of Developmental Disabilities*, 1-14. https://doi.org/10.1080/20473869.2025.2496718

Lin, T.-H., Riccomini, P. J., & **Liang, Z.** (2025). Mathematical error patterns of students with mathematics difficulty: A systematic review. *Learning Disability Quarterly, 48*(4), 242-256. https://doi.org/10.1177/07319487241310873

Liang, Z., Liang, S., & Zuo, J. (2025). A literature review of video-enhanced activity schedules for individuals with autism spectrum disorder. *Review Journal of Autism and Developmental Disorders*. https://doi.org/10.1007/s40489-025-00492-3

Liang, Z. (2025). CHECK visual schedules to support individuals on the autism spectrum. *Intervention in School and Clinic, 60*(4), 228-235. https://doi.org/10.1177/10534512241300157

Liang, Z., Lee, D., Zuo, J., & Liang, S. (2024). The use of visual schedules to increase academic-related on-task behaviors of individuals with autism: A literature review. *International Journal of Developmental Disabilities*, 72(6), 1326-1339. https://doi.org/10.1080/20473869.2024.2402124

Patenaude, D., McNaughton, D., & **Liang, Z.** (2024). Using visual scene displays with young children: An evidence-based practice synthesis. *Journal of Special Education Technology, 40*(1), 91-103. https://doi.org/10.1177/01626434241263061

Liang, Z., Zuo, J., & Lee, D. (2024). An evaluation of online training on pre-service special education teachers' case application of visual schedules for individuals with intellectual and developmental disability in China. *Journal of Special Education Technology, 39*(4), 459-467. https://doi.org/10.1177/01626434231214792

Manuscripts Under Review (Preprints)

Liang, Z., & Chen, X. (2026). *Effects of evidence-based practices on social communication of individuals with autism spectrum disorder in the educational settings of the Chinese mainland: A systematic review and meta-analysis* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7572338

Chen, X., & **Liang, Z**. (2026). *Design-based effect sizes and their synthesis in randomized multiple-baseline experiments*. ArXiv. https://arxiv.org/abs/2610.13001

Liang, Z., Hampshire, P., & Elizarraras, J. (2026). *EMBED instruction to support children with autism spectrum disorder* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7526760

Liang, Z., Zuo, J., Xin, W., Zhang, T., & Wang, Z. (2026). *Scoping review and quality assessment of evidence-based practices for individuals on the autism spectrum in educational settings* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7507840

Liang, Z., & Zuo, J. (2026). *A pilot study of online training on special education teachers' case applications and creation of visual schedules for individuals with intellectual and developmental disabilities* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7474518

Liang, Z., Zuo, J., & Wang, X. (2026). *CHECK classroom routines and procedures to engage and support students on the autism spectrum* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7474439

Liang, Z. (2026). *CHECK independent work systems to support individuals on the autism spectrum* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7474458

Liang, Z. (2026). *TEACH classroom expectations and rules to support contextually appropriate behaviors for students on the autism spectrum* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7474360

Liang, Z., Zuo, J., & Xie, Y. (2026). *Generalization, maintenance, and social validity of evidence-based practices for individuals with autism spectrum disorder in educational settings in the Chinese mainland: A systematic review* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7479420

Liang, Z., Elizarraras, J., Hampshire, P., & Zuo, J. (2026). *Using embedded instruction for individuals with autism spectrum disorder: An evidence-based practice synthesis* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7478799

Liang, Z., Lin, T.-H., He, H., & Zuo, J. (2026). *A systematic review on asynchronous online training for preservice educators of students with disabilities* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7478825

Zuo, J., **Liang, Z.**, & He, H. (2026). *Evaluation of self-paced online training on pre-service preschool teachers' case application and creation of video-based intervention for young children with autism spectrum disorder in China* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7479059

Zuo, J., **Liang, Z.**, & He, H. (2026). *Evaluation of online training on pre-service teachers' application of visual schedules for individuals with IDDs* [Preprint]. SSRN. https://doi.org/10.2139/ssrn.7478963

Xin, W., Li, J., **Liang, Z.,** Zhang, Z., & Ma, W. *A scoping review of educator-identified strengths in autistic students.*

Xin, W., Hang, Y., Mu, D., **Liang, Z.,** & Zhang, Z. *Rethinking curriculum focus in IEP goals for students with complex support needs in China: Expected progress and goal-writing quality.*

Pending Grants

Funding Organization: United States Department of Education (DOEd)
Proposal Title: Grow Your Own: A Rural Residency for Collaborative Excellence
Role: CO-PI
Total Anticipated Proposal Amount: $2,491,536

Funding Organization: National Institutes of Health (NIH)
Proposal Title: An AI-Supported Mobile Application to Strengthen Classroom Delivery of Tier 1 Positive Behavioral Interventions and Supports: Development, Usability, and AI-Performance Evaluation
Role: PI
Total Anticipated Proposal Amount: $293,000

Grants: Not Funded

Funding Organization: Mississippi Department of Mental Health
Proposal Title: Empowering Families for Educational Collaboration and Transitions (EFFECT)
Role: CO-PI
Total Anticipated Proposal Amount: $88,770
Date Submitted: February 28, 2025

Funding Organization: Ottilie Schillig Special Teaching Projects Grants
Proposal Title: Self-Paced Online Training Modules to Enhance the Learning of Evidence-Based Practices for Students with Disabilities
Role: PI
Total Anticipated Proposal Amount: $3,000
Date Submitted: March 13, 2025

Funding Organization: National Science Foundation (NSF)
Proposal Title: Innovating Undergraduate Computing Education through Adaptive Back-and-Forth Pedagogy on a Multi-background, Networked, and Customizable Platform
Role: CO-PI
Total Anticipated Proposal Amount: $1,300,000
Date Submitted: July 18, 2025

Funding Organization: Ottilie Schillig Special Teaching Projects Grants
Proposal Title: Development of Self-Paced Online Training Modules on Evidence-Based Practices for Students on the Autism Spectrum
Role: PI
Total Anticipated Proposal Amount: $2,600

Date Submitted: February 4, 2026

Funding Organization: Organization for Autism Research
Title of Letter of Intent: Effects of Online Parents' Training of Visual Supports on Daily Living Skills of Children with Autism
Role: PI
Total Anticipated Proposal Amount: $47,500
Date Submitted: March 10, 2026

Books Translation (English-Chinese)

Liang, Z. & Liang, S. (2016). *Just Give Him The Whale: 20 Ways to Use Fascinations, Areas of Expertise, and Strengths to Support Students with Autism*. Huaxia Publishing House, Beijing, China.

He, H. & **Liang, Z.** (2013). *The Science and Fiction of Autism*. Shanghai Renmin Publishing House, Shanghai, China.

Chen, L. & **Liang, Z.** (in progress). *Adolescents and Adults with Autism Spectrum Disorders*. Social Science Publishing House, Shanghai, China.

Conference Presentations

In English

Liang, Z. &**.** Fondren, KB. (2026, January). CHECK videos to support individuals on the autism spectrum. Poster Session at the Division on Autism and Developmental Disabilities (DADD) Conference, Long Beach, California.

Liang, Z. &. Fondren, KB. (2026, January). *Evaluation of self-paced online training on pre-service teachers' case application of video-based intervention for individuals on the autism spectrum: A pilot study*. Poster Session at the Division on Autism and Developmental Disabilities (DADD) Conference, Long Beach, California.

Liang, Z. &. Fondren, KB. (2025, November). CHECK videos to support individuals on the autism spectrum. Poster Session at the Teacher Education Division (TED) Conference, Kansas City, Missouri.

Liang, Z. &. Fondren, KB. (2025, November). *Evaluation of self-paced online training on pre-service teachers' case application of video-based intervention for individuals on the autism spectrum: A pilot study*. Poster Session at the Teacher Education Division (TED) Conference, Kansas City, Missouri.

Liang, Z. (2025, January). *Video-enhanced activity schedules for individuals on the autism spectrum*. Poster Session at the 19th Annual Autism Conference, New Orleans, Louisiana.

Patenaude, D., McNaughton, D., &. **Liang, Z.** (2024, December). *Are visual scene displays (VSDs) an EBP in Early Childhood?* Poster Session at the American Speech and Hearing Association (ASHA) Conference, Seattle, Washington.

McNaughton, D., Armendariz, K., Galley, K., **Liang, Z.,** Patenaude, D., Redmon, S., Romano, N., &. Steffen, K. (2024, August). The AAC Learning Center: Sharing knowledge, building capacity, & assessing impact. Poster presentation at Office of Special Education Programs (OSEP) Conference, Arlington, VA.

Patenaude, D., McNaughton, D., **&. Liang, Z.** (2024, March). *Using visual scene displays with young children: An evidence-based practice synthesis.* Poster Session at Council for Exceptional Children (CEC) Convention, San Antonio, Texas.

Liang, Z. (2023, April). S*trategy instruction for visual schedules*. Behavioral Analysis Research Colloquium at Penn State.

McNaughton, D., Jakobs, E., Dobrzynski, C., Stroschein, R., **Liang, Z**., Laubscher, E., &.Holyfield, C. (2023, Febuary). *Supporting participation and communication using video visual scene displays.* Poster Session at Assistive Technology Industry Association (ATIA) Conference, Orlando, FL.

Liang, Z. (2022, May). *Enhancing communication and independence for university students with autism and complex communication needs using AAC video visual scene displays*. AAC Think Tank at Penn State.

McNaughton, D., Light, J., Jakobs, E., Dobrzynski, C., Stroschein, R., **Liang, Z**., &. Laubscher, E. (2022, November). *The effect of video VSDs on communication and participation for individuals with complex communication needs.* Poster Session at the American Speech and Hearing Association (ASHA) Conference, New Orleans, LA.

In Chinese

Liang, Z. (2022, November). The development and preliminary evaluation of an online learning module to support pre-service teachers using visual schedules for individuals with intellectual and developmental disabilities. Graduate Student Research Forum, East China Normal University, Shanghai, China.

Creative Works and Instructional Materials

Liang, Z. & McNaughton, D. (2024). Module of Visual Supports for Participation and Communication (https://aac-learning-center-moodle.psu.edu/course/view.php?id=59) at The AAC Learning Center Moodle: An Instructional Resource in Augmentative and Alternative Communication. This module was developed and assessed with 150 Penn State students in June 2023. Students demonstrated strong increases in knowledge of the targeted skills, and over 96% would *recommend* or *strongly recommend* using the module to other students.

Services

Peer Review of Manuscripts

Peer reviewer for the manuscript on *Perceptual and Motor Skills*: 2026, October
Peer reviewer for the manuscript on *Humanities and Social Sciences Communications*: 2026, October
Peer reviewer for the manuscript on *Education and Training in Autism and Developmental Disabilities*: 2026, October
Peer reviewer for the manuscript on *Education and Training in Autism and Developmental Disabilities*: 2026, July
Peer reviewer for the manuscript on *Sage Open*: 2026, June
Peer reviewer for the manuscript on *Sage Open*: 2026, June
Peer reviewer for the manuscript on *Discover Psychology*: 2026, Febuary
Peer reviewer for the manuscript on *Journal of Developmental and Physical Disabilities*: 2026, January
Peer reviewer for the manuscript on *Discover Education*: 2025, December
Peer reviewer for the manuscript on *Research in Neurodiversity:* 2025, December
Peer reviewer for the manuscript on *Focus on Autism and Other Developmental Disabilities*: 2025, October
Peer reviewer for the manuscript on *Universal Access in the Information Society*: 2025, Febuary
Guest reviewer for the manuscript on *Journal of Special Education Preparation*: 2022

Guest Lecture

Liang, Z. (2025, March).CHECK Visual Schedules to Support Individuals on the Autism Spectrum. National Taichung University of Education, China.

Liang, Z. (2023, November). Using video modeling to improve the participation and independence of students with intellectual and developmental disabilities. Tangshan Normal University, China.

Liang, Z. (2022, December). Using visual schedule for students on the autism spectrum in special education school. Tangshan Normal University, China.

Liang, Z. (2022, November). Using visual supports to create an effective classroom environment. Tangshan Normal University, China.

Parents' Online Training

Liang, Z. (2022, September). Using visual supports to establish daily life routines for children with intellectual and developmental disabilities in family settings. Shanghai, China.

Liang, Z. (2021, April). Intervention strategies for improving communicative skills for children on the autism spectrum in family settings. Hangzhou, China.

Paraeducators' Training (In-person)

Liang, Z. (2023, August). "CHECK" Visual Schedules to improve the participation and independence of students with intellectual and developmental disabilities. 16th Annual ParaConference. Bellefonte, PA.

In-Service Teachers' Online Training

Liang, Z. (2024, August). Using video modeling to improve the participation and independence of students with intellectual and developmental disabilities. Shanghai, China.

Liang, Z. (2024, August). Creating a consistent, organized, and respectful learning environment for preventing challenging behaviors of students with autism. Shanghai, China.

Liang, Z. (2023, December). Using an individualized working system to support students with intellectual and developmental disabilities in the special education classroom. Shanghai, China.

Liang, Z. (2023, November). Using video modeling to improve the participation and independence of students with intellectual and developmental disabilities. Shanghai, China.

Liang, Z. (2023, October). "CHECK" visual schedules to improve the participation and independence of students with intellectual and developmental disabilities. Shanghai, China.

Liang, Z. (2023, September). Creating a consistent, organized, and respectful learning environment for students with intellectual and developmental disabilities. Shanghai, China.

Liang, Z. (2022, December). Strategies for creating an effective classroom environment based on TEACCH. Anhua Special Education School, Beijing, China.