

Xiaoxue LENG

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EDUCATION

- 2025-2030 (Expected) **University of North Carolina at Chapel Hill (UNC), Chapel Hill, NC**
Ph.D. Student in Education (Learning Sciences and Psychological Studies)
Advisor: Dr. Matthew Bernacki
- 2021-2024 **Central China Normal University (CCNU), Wuhan, China**
M.Ed. in Psychology
Thesis: *The effects of viewing perspective in learning from instructional videos which demonstrate a step-by-step procedure*
Advisor: Dr. Fuxing Wang
- 2017-2021 **Central China Normal University, Wuhan, China**
B.S. in Psychology with Honors

PUBLICATIONS

Note. * indicates co-first author, # indicates corresponding author.

Journal Articles in English (N = 7)

- Zhu, W., **Leng, X.**, Mayer, R. E., & Wang, F. (2025). No need for webcams with synchronous online learning. *Learning and Instruction*, 98, 102131.
<https://doi.org/10.1016/j.learninstruc.2025.102131>
- Wang, F., **Leng, X.**, Kuang, Z., & Zhao, T. (2024). Eye movement modelling examples as cues to guide attention and improve learning in short or long animations. *Journal of Computer Assisted Learning*, 41, e13094. <https://doi.org/10.1111/jcal.13094>
- Leng, X.**, Zhu, W., Mayer, R. E., & Wang, F. (2024). The viewing perspective effect in learning from instructional videos: A replication and neuroimaging extension. *Learning and Instruction*, 94, 102004. <https://doi.org/10.1016/j.learninstruc.2024.102004>
- Li, W., Kuang, Z., **Leng, X.**, Mayer, R. E., & Wang, F. (2024). Role of gesturing onscreen instructors in video lectures: A set of three-level meta-analyses on the embodiment effect. *Educational Psychology Review*, 36(67). <https://doi.org/10.1007/s10648-024-09910-0>
- Leng, X.**, Wang, F., Mayer, R. E., & Zhao, T. (2024). How to train students to engage in text-picture integration for multimedia lessons. *British Journal of Educational Technology*, 55(3), 1167–1188. <https://doi.org/10.1111/bjet.13419>
- Kuang, Z., Jiang, X., Shubeck, K., **Leng, X.**, Li, Y., Zhang, R., Wang, Z., Peng, S., & Hu, X. (2024). The effect of different question types on vicarious learning. *Educational Psychology*, 44(2), 208-226. <https://doi.org/10.1080/01443410.2024.2325589>
- Leng, X.**, Wang, F., & Mayer, R. E. (2024). Is student learning from a video lecture affected by

whether the instructor wears a mask? *Applied Cognitive Psychology*, 38(1), e4169.
<https://doi.org/10.1002/acp.4169>

Journal Articles in Chinese (N = 5)

Kuang, Z., **Leng, X.**, Wang, F., & Hu, X. (2026). Graspable: The promoting effect of tracing gesture on learning. *Psychological Development and Education*.

Wang, F., Huang, Y., Zhang, Y., Zhu, W., & **Leng, X.** (2024). Prompts affect learning-by-teaching process and learning outcome in multimedia learning. *Acta Psychologica Sinica*, 56(4), 469-481. <https://doi.org/10.3724/SP.J.1041.2024.00469>

Wang, F., Huang, Y., **Leng, X.**, & Kuang, Z. (2023). Learning-by-teaching promotes the effect of multimedia learning: The impact of self-generated drawing. *Journal of Soochow University (Educational Science Edition)*, (3), 97–106. <https://doi.org/10.19563/j.cnki.sdj.2023.03.008>

Cheng, M., Kuang, Z., **Leng, X.**, Zhang, Y., & Wang, F. (2023). Can learning by non-interactive teaching promote learning? *Advances in Psychological Science*, 31(5), 769–782.
<https://doi.org/10.3724/SP.J.1042.2023.00769>

Leng, X., Cheng, M., & Wang, F. (2022). The effects of testing and feedback on segmentation principle in video learning. *Studies of Psychology and Behavior*, 20(01), 52–58.
<https://doi.org/10.12139/j.1672-0628.2022.01.008>

Conference & Presentations (N = 13)

Yin, X., Cheng, M., **Leng, X.**, & Wang, F. (Accepted). *Explaining to the bored audience promotes learning-by-teaching*. The 2026 American Educational Research Association Annual Meeting, Los Angeles, CA, USA.

Cheng, M., Wang, F., & **Leng, X.** (Accepted). *Adding pedagogical agents who point or trace to children's instructional videos*. The 2026 American Educational Research Association Annual Meeting, Los Angeles, CA, USA.

Zhu, W., **Leng, X.**, Mayer, R. E., & Wang, F. (2025, April). *No need for webcams with synchronous online learning*. The 2025 American Educational Research Association Annual Meeting, Denver, CO, USA.

Xiong, F., Ma, A., & **Leng, X.** (2023, November). *Understanding individual differences in reading Chinese traditional poetry using hidden Markov Models*. The International Conference on Intelligent Education and Intelligent Research 2023, Wuhan, Hubei, China.

Leng, X., Kuang, Z., Wang, F., & Qiao, P. (2023, October). *The effects of tracing gesture on learning outcomes and cognitive load: Evidence from two three-level meta-analyses*. The 25th National Academic Conference of Psychology, Chengdu, Sichuan, China.

Zhu, W., **Leng, X.**, & Wang, F. (2023, October). *Can the presence of teacher and student promote online learning?*. The 25th National Academic Conference of Psychology, Chengdu, Sichuan, China.

Huang, Y., Zhang, Y., Zhu, W., **Leng, X.**, & Wang, F. (2023, October). *Prompts affect learning-by-teaching process and learning outcome in multimedia learning*. The 25th National Academic Conference of Psychology, Chengdu, Sichuan, China.

- Leng, X.**, Wang, F., Kuang, Z., & Zhao, T. (2023, September). *Eye movement modelling examples as cues to guide attention and improve learning in short or long animations*. The 9th China International Conference on Eye Movements, CICEM 2023, Tianjin, China.
- Leng, X.**, Zhao, T., & Wang, F. (2022, November). *The effects of eye movement modeling examples and verbal instruction in video learning*. The 24th National Academic Conference of Psychology, Xinxiang, Henan, China. [In virtual]
- Leng, X.**, Wang, F., & Zhu, W. (2022, November). *Do instructors' wearing masks affect students' learning?*. The 24th National Academic Conference of Psychology, Xinxiang, Henan, China. [In virtual]
- Cheng, M., Wang, F., & **Leng, X.** (2022, November). *Audience size on learning-by-teaching: Clarifying the social presence hypothesis*. The 24th National Academic Conference of Psychology, Xinxiang, Henan, China. [In virtual]
- Huang, Y., **Leng, X.**, Kuang, Z., & Wang, F. (2022, November). *Learning-by-teaching promotes the effect of multimedia learning: The impact of self-generated drawing*. The 24th National Academic Conference of Psychology, Xinxiang, Henan, China. [In virtual]
- Leng, X.**, Wang, F., & Cheng, M. (2021, October). *Incorporated self-test and feedback enhances learners' learning outcomes during the learning with segmentation*. The 23th National Academic Conference of Psychology, Hohhot, Inner Mongolia, China. [In virtual]

MANUSCRIPTS UNDER REVIEW

- Leng, X.**, Wu, Y., Zhang, Q., & Wang, F. (2026). How producing gestures improve children's memory on spatial information.
- Wang, Y.*, **Leng, X.***, He, G., & Lin, H. (2026). When labels matter more: Behavioral and eye-tracking evidence on aesthetic judgment of AI-generated and human-created paintings.
- Wang, Y.*, **Leng, X.***, & Lin, H. (2026). Electronic Mona Lisa loses its charm: Diminished aesthetic judgment of AI art compared to human paintings.
- Kuang, Z., Lai, X., **Leng, X.**, Zhang, L., Lin, J. & Hu, X. Cultural similarity or content similarity? The impact of pedagogical agent's image on English learning.
- Cheng, M., Zhu, W., **Leng, X.**, Mayer, R. E., & Wang, F. Optimizing the effectiveness of learning-by-teaching as a generative learning strategy by converting a live audience face into a static avatar.
- He, G., Lin, H., **Leng, X.**, & Su, A. How to evaluate students' mathematical modeling competencies: Construction and verification of a new evaluation framework for mathematical modeling competencies.
- Lin, H., Ding, J., **Leng, X.**, He, G., Lin, Y., & Zhong, H. Joint profiles of perceived teachers' moral grandstanding, self-esteem, and rumination in primary school students and their associations with academic achievement: The longitudinal mediation of learning burnout.

MANUSCRIPTS IN PREPARATION

Leng, X., & Kuang, Z. Using models to learn in STEM: A network meta-analysis.

He, G., **Leng, X.**, & Lin, H. The effect of parent-student congruency in growth mindset on students' math performance: A responsive surface approach.

He, G., **Leng, X.**, & Lin, H. The relationship of student-parent mindset and involvement profiles and math achievement: A latent profile analysis and structural equation model.

RESEARCH EXPERIENCE

2025-Present	Graduate Research Assistant School of Education, UNC, Chapel Hill, NC PI: Dr. Matthew Bernacki
2021-2024	Graduate Research Assistant Learning and Child Development Lab, CCNU, Wuhan, China PI: Dr. Fuxing Wang
2020-2021	Undergraduate Research Assistant Learning and Child Development Lab, CCNU, Wuhan, China PI: Dr. Fuxing Wang

TEACHING EXPERIENCE

School of Psychology, CCNU

2022 Fall, 2023 Fall	Instructor Safety & Technique Use Laboratory Center
2023 Spring	Graduate Teaching Assistant Introduction to Psychology II Instructor: Dr. Fuxing Wang & Dr. Ming Peng
2022 Fall	Graduate Teaching Assistant Introduction to Psychology I Instructor: Dr. Fuxing Wang & Dr. Hanshu Zhang

HONORS & AWARDS

Received at University of North Carolina at Chapel Hill

2025	Doctoral Merit Award
2025	Charles Templeton Scholarship

Received at Central China Normal University

2023	Second Class Scholarship
2022	Outstanding Graduate Scholarship (Third Prize)
2021, 2022	First Class Scholarship

2021	Merit-based Admission Scholarship
2021	Outstanding Graduates Award
2020-2021	National Undergraduate Training Program for Innovation and Entrepreneurship & Student Research Training Program (10,000 RMB)
2018, 2019, 2020	Merit Student Award
2019-2020	Undergraduate Student Research Training Program (2,000 RMB)
2018, 2020	Boya Scholarship

SERVICES

2025-2026	Mentor NextGen Psych Scholars Program
2019-2020	Editor Journal of Undergraduates of Central China Normal University (Humanities and Social Sciences Section)