

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.sjlk.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

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| 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

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