

Yuanhua Wang

School of Education, College of Applied Human Science, West Virginia University
Morgantown, WV, 26506

Email: yuanhua.wang@mail.wvu.edu

Mobile: (806) 392-6316

EDUCATION

Ph.D., Educational Psychology December, 2019
Texas Tech University Lubbock, TX

M.S., Biological Science May, 2013
Texas Tech University Lubbock, TX

M.S., Curriculum and Instruction August, 2012
Texas Tech University Lubbock, TX

EMPLOYMENT

Assistant Professor 2020-Present
West Virginia University Morgantown, WV

SELECTED HONRS AND AWARDS

Open Educational Resources Grant Award, West Virginia University, 2022

Summer Research Scholarship, West Virginia University, 2021

Summer Research Scholarship, Texas Tech University, 2018

Helen DeVitt Jones Fellowship, Texas Tech University, 2013 - 2016

FUNDED GRANT

Kale, U. & **Wang, Y.** (2022-2025). National Science Foundation: Division Of Undergraduate Education. *Teaching Science with Computational Thinking: Preparing Preservice Elementary Educators of the Future STEM Workforce*. \$294,958. Award Number: 2142274. Project Role: Co-Principal Investigator.

JOURNAL PUBLICATIONS

Wang, J., **Wang, Y.**, Thacker, B., Wipfli, K., & Hart, S. (2024). Unveiling the influence of pedagogical content knowledge of questioning on college students' conceptual learning of introductory physics. *Physical Review Physics Education Research*.

- Wang, Y.** (2024). How and When Does Early Home Learning Environment Improve Children's Kindergarten Academic Skills? The Roles of Language Ability and Self-Control. *Journal of Research in Childhood Education*, 1-19.
- Wang, J., **Wang, Y.**, Moore, Y., Sneed, S., Thacker, B., & Hart, S. (2024). Analyzing the Patterns of Questioning Chains and Their Intervention on Student Learning in Science Teacher Preparation. *International Journal of Science and Mathematics Education*, 22(4), 809-836.
- Wang, J., **Wang, Y.**, Kashef, S. S., & Moore, Y. (2024). Quantitative Measurement of Pre-Service Teachers' Competency of Questioning in Scaffolding Students' Science Learning. *Research in Science Education*, 1-23.
- Wang, J. & **Wang, Y.** (2023). Investigating the authenticity of "students" in microteaching for science pre-service teacher education. *Research in Science & Technological Education*.
- Wang, Y.** (2023). Examining the role of sense of belonging and formative assessment in reducing the negative impact of learning anxiety in mathematics. *European Journal of Psychology of Education*, 1-23.
- Wang, J., **Wang, Y.**, Wipfli, K., Thacker, B., & Hart, S. (2023). Investigating learning assistants' use of questioning in online courses about introductory physics. *Physical Review Physics Education Research*, 19(1), 010113.
- Wang, Y.** (2023). Self-concept, learning anxiety, and performance in mathematics learning: The moderating effect of teacher cognitive activation. *Eurasia Journal of Mathematics, Science and Technology Education*, 19(9), em2323.
- Wang, Y.**, Wang, J., Raymond, F., & Wang, J. (2023). Elementary pre-service teachers' horizon knowledge for teaching addition and subtraction: An analysis of video presentations. *Eurasia Journal of Mathematics, Science and Technology Education*, 19(6), em2276.
- Wang, J., & **Wang, Y.** (2021). Compare synchronous and asynchronous online instruction for science teacher preparation. *Journal of Science Teacher Education*, 32(3), 265-285.
- Wang, J., Sneed, S., & **Wang, Y.** (2019). Validating a 3E rubric assessing pre-service science teachers' practical knowledge of inquiry teaching. *EURASIA Journal of Mathematics, Science and Technology Education*, 16(2).
- Back, S. M., Tseng, W. C., Li, J., **Wang, Y.**, Phan, V. T., & Yeter, I. H. (2015). Training neighborhood residents to conduct a survey. *Journal of Higher Education Outreach and Engagement*, 19(2), 175-194.

TEACHING

West Virginia University:

C&I 440: Elementary Science Method I
C&I 442: Elementary Science Method II
C&I 231: Mathematics for Elementary Teachers II
UTCH 322: Classroom Interactions in Mathematics and Science
C&I 602: Curriculum/Teaching Principles
EDUC 400: Instructional Design and Evaluation

Texas Tech University:

BIO 1404: Biology II lab
BIO 1111: Environmental System lab
EDEL 4375: Teaching Science in Elementary (Online)
EDEL 4370: Teaching Mathematics in Elementary (Online)

EDITORIAL AND REVIEW WORK

Grant Proposal Reviewer, *National Science Foundation*, 2024
Grant Proposal Reviewer, *National Science Foundation*, 2022
Editorial Board Member, *Educational Research & Development Journal*, 2022-Present
Editorial Board Member, *Journal of Digital Learning in Teacher Education*, 2022-Present
Proposal Reviewer, *AERA, Division C - Section 1d: Science*, 2022

CONFERENCE PAPERS AND PRESENTATIONS

- Wang, Y.** & Kale, U. (2024, March). *The Effect of Unplugged Activities on Preservice Teachers' Perception of Competence, Interest, and Utility Value*. Paper presented at the Society for Information Technology & Teacher Education (SITE) conference, Las Vegas, Nevada.
- Kale, U. & **Wang, Y.** Aldebyan, A., Mann, T., & O'Brien, N. (2024, April). *Future Teachers' Interest, Competence, and Perception of Utility Value Regarding Computational Thinking in Teaching Science*. Paper presented at the American Educational Research Association (AERA) conference, Philadelphia, Pennsylvania.
- Kale, U. & **Wang, Y.** Aldebyan, A., Mann, T., & O'Brien, N. (2024, March). *Competent but Not Interested? Computational Thinking-Ready Preservice Science Teachers*. Paper presented at the Society for Information Technology & Teacher Education (SITE) conference, Las Vegas, Nevada.
- Wang, J. & **Wang, Y.** (2024, March). *Evaluating questioning competency in elementary pre-service teachers using Likert-scale questions*. Paper presented at the National Association for Research in Science Teaching (NARST), Denver, Colorado.

- Wang, Y.** (2023, April). *Reducing Learning Anxiety's Negative Impact: The Role of Sense of Belonging and Formative Assessment*. Paper presented at the American Educational Research Association (AERA) Annual Meeting, Chicago, Illinois.
- Wang, Y.** (2023, April). *The Effects of Self-Concept on Motivational Behaviors: The Contingent Roles of Cognitive Activation and Gender*. Paper presented at the American Educational Research Association (AERA) Annual Meeting, Chicago, Illinois.
- Wang, J., **Wang, Y.**, Thacker B., Wipfli, K., & Hart, S. (2022, March). *Investigating learning assistants' use of questioning in the online setting of an inquiry-oriented physics course*. Paper presented at the National Association for Research in Science Teaching (NARST), Vancouver, Canada.
- Wang, J., **Wang, Y.**, Guo, Y., & Kashef, S. (2022, March). *Examining elementary pre-service teachers' competence of questioning in leveraging students' conceptual understanding*. Paper presented at the National Association for Research in Science Teaching (NARST), Vancouver, Canada.
- Wang, Y.** & Caldera, Y. (2021, April). *Early Home Learning Environment, Language Ability, Self-regulation, and Academic Skills*. Paper presented at the American Educational Research Association (AERA), Virtual Annual Meeting due to COVID-19 pandemic.
- Wang, J. & **Wang, Y.** (2021, April). *Examine the Impact of Microteaching with Peers or Students in Preservice Science Teacher Education*. Paper presented at the American Educational Research Association (AERA), Virtual Annual Meeting due to COVID-19 pandemic.
- Wang, J. & **Wang, Y.** (2021, April). *Examine interactional formats in an online methods course for science teacher preparation*. Paper presented at the American Educational Research Association (AERA), Virtual Annual Meeting due to COVID-19 pandemic.
- Wang, J., **Wang, Y.**, Guo, L., Guo, Y., Sneed, S., & Wipfli, K. (2021, April). *Introduce a coding instrument for the quantitative analysis of teachers' questioning chains*. Paper presented at the National Association for Research in Science Teaching (NARST), virtual conference due to COVID-19 pandemic.
- Wang, Y.**, Wang, J., Flores, R., & Wang, G. (2018, April). *Examining the Types of Mathematical Connections Made by Elementary Preservice Teachers: A Video Analysis*. Paper presented at the American Educational Research Association (AERA) Annual Meeting, New York City, NY.
- Flores, R., Wang, J., Ortiz, R., Yi, M., **Wang, Y.**, Zeng, X., Wang, G., Zhang, S. & Neff, J. (2018, April). *Examining Elementary Preservice Teachers' Mathematics Knowledge for Teaching Using Video Surveys*. Paper presented at the American Educational Research Association (AERA) Annual Meeting, New York City, NY.
- Wang, G., Wang, J., Flores, R., Neff, J., & **Wang, Y.** (2018, April). *Impact of Jigsaw Collaboration on Preservice Teachers' Development of Specialized Content Knowledge for Teaching Mathematics*. Paper presented at the American Educational Research Association (AERA) Annual Meeting, New York City, NY.

- Wang, Y.**, Yi, M., Wang, G., & Flores, R. (2018, April). *Enhancing Preservice Teachers' Specialized Knowledge: An Intervention Study*. Presentation at the National Council of Teachers of Mathematics (NCTM) Annual Meeting, Washington, DC.
- Wang, Y.**, Wang, J., Flores, R., Yi, M., Neff, J., Zhang, S., & Zeng, X. (2017, April). *Elementary Preservice Teachers' Specialized Content Knowledge and Common Content Knowledge for Teaching Addition and Subtraction*. Paper presented at the American Educational Research Association (AERA) Annual Meeting, San Antonio, TX.
- Yi, M., Flores, R., Wang, J., **Wang, Y.**, Zeng, X., Zhang, S., & Neff, J. (2017, April). *The Influence of Van Hiele Theory-based Interventions on Elementary Pre-service Teachers' Geometry Knowledge for Teaching*. Paper presented at the American Educational Research Association (AERA) Annual Meeting, San Antonio, TX.
- Zeng, X., Wang, J., Flores, R., Zhang, S., **Wang, Y.**, Neff, J., & Yi, M. (2017, April). *Questioning to Understand Students: A Video-Analysis of Preservice Elementary Teachers' Use of Questions*. Paper presented at the American Educational Research Association (AERA) Annual Meeting, San Antonio, TX.
- Zhang, S., Flores, R., Wang, J., Zeng, X., Neff, J., Yi, M., & **Wang, Y.** (2017, April). *Elementary Preservice Teachers' Specialized Content Knowledge and Common Content Knowledge for Teaching Addition and Subtraction*. Poster presented at the American Educational Research Association (AERA) Annual Meeting, San Antonio, TX.
- Wang, Y.**, Wang, J., Flores, R. (2017, March). *Elementary Preservice Teachers' Horizon Knowledge for Teaching Addition and Subtraction: A Video Analysis Study*. Paper presented at the American Association of Colleges for Teacher Education (AACTE) Annual Meeting, Tampa, FL.
- Wang, Y.**, Wang, J., & Zeng, X. (2016, April). *Preservice Teachers' Horizon Knowledge for Teaching Addition and Subtraction*. A paper accepted by the annual meeting of the National Council of Teachers of Mathematics, San Francisco, California.
- Chesnut, S. R., **Wang, Y.**, & Barnard-Brak, L. (2015, April). *The influence of diverse personal factors and test anxiety on academic cheating behaviors*. A paper presented to the annual meeting of the American Educational Research Association (AERA), Chicago, Illinois.