Dr. Yizhen (Eejain) **Huang**

Research Scientist and Instructor in Education, Psychology, and Technology

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Current Research Interests

1: Extended reality simulations for promoting instructional quality and educational success

2: Classroom dialog simulation powered by generative artificial intelligence for improving dialogic teaching practice

3: Experimental investigations of teachers' cognitive and affective processes in physical and extended reality

4: Adaptive feedback protocols for teachers using multimodal data streams

Scientific Career

Akademische Mitarbeiterin [Postdoctoral Research Scientist and Instructor]
Kiel, Germany

Department of Research on Teaching and Teacher Education, Kiel University
2019–Present

- Lead Professor: Thilo Kleickmann

Akademische Mitarbeiterin [Postdoctoral Research Scientist and Instructor]
Potsdam, Germany

Educational Research in Educational Sciences, Department of Education, University of Potsdam
2018–Present

- Lead Professor: Dirk Richter

Education

Ph.D. in Education and Psychology
Ann Abor, MI, United States

Combined Program in Education and Psychology, University of Michigan
2016–2018

- Awarded Date: August 17, 2018
- Subject Focus: Educational Psychology
- Dissertation Title: Learning from teacher's eye movement: Expertise, subject matter and video modeling
- Doctoral Committee: Kevin F. Miller (chair), Kai S. Cortina, Richard D. Gonzalez, Priti R. Shah

M.A. in Statistics
Ann Abor, MI, United States

Dual Master's Program in Statistics, University of Michigan
2016–2018

- Awarded Date: August 17, 2018
- Subject Focus: Applied Statistics

M.S. in Psychology
Ann Abor, MI, United States

Combined Program in Education and Psychology, University of Michigan
2013–2016

- Awarded Date: December 22, 2016
- Subject Focus: Developmental Psychology
- Thesis Title: Looking through you: First-person perspective video affects preschoolers' sex-typed toy choices

B.S. in Psychology
Beijing, P.R. China

School of Psychology, Beijing Normal University
2009–2013

- Awarded Date: July 01, 2013
- Subject Focus: Developmental Psychology
- Thesis Title: The influence of categorical information and attribute information on preschool children's toy choice (Awarded First Class Honours)

Funded Research Projects

Initiation of International Collaboration and Research Network on AI-based Immersive Virtual Reality Technology for Sustainable Development Education—Cross-cultural Comparison of the Effect of Emotions between Germany and South Korea (€18,864)

Potsdam, Germany

DFG [German Research Foundation]

2025–2026

- DFG Initiation of International Collaboration. Grant number: HU 2859/3-1
- Co-Principal Investigator. Co-PI: Pia Spangenberger

Teacher Use of Motivational Messages in the Classroom

Potsdam, Germany

DFG [German Research Foundation]

2024–2027

- DFG Research Grants. Grant number: 549301331
- Co-Investigator. PI: Rebecca Lazarides

VRAISE (Virtual Reality and AI-powered Simulation for Educators): Equitable Classroom Diagloue

Potsdam, Germany

Educational Research in the Educational Sciences, University of Potsdam

2023–Present

- Internal Funding
- Co-Principal Investigator. Co-PI: Dirk Richter

DigiProMIN [Digitization-Related and Digitally Supported Professional Development of STEM Teachers] (€96,435 for my position)

Multi-site

BMBF [Federal Ministry of Education and Research]

2023-2025

- BMBF Kompetenzzentren für digitales und digital gestütztes Unterrichten in Schule und Weiterbildung [Competence Centers for Digital and Digitally Supported Teaching in Schools and Further Education]. Grant number: 01JA23M05A
- Project Coordinator. PIs: Katharina Scheiter, Dirk Richter

Compare Interactive Simulation and 360 Video in Virtual Reality for Teacher Professional Learning (€3,850)

Kent, OH, United States and Potsdam, Germany

University of Potsdam

2022

- KoUP [Cooperation Funding at the University of Potsdam]
- Principal Investigator. Co-PI: Karl W. Kosko

Virtual Reality in Teacher Education

Potsdam, Germany

Educational Research in the Educational Sciences, University of Potsdam

2019–2023

- Internal Funding
- Co-Principal Investigator. Co-PIs: Dirk Richter, Thilo Kleickmann, Eric Richter

Understand Teacher's Professional Development Choices in Brandenburg

Potsdam, Germany

Educational Research in the Educational Sciences, University of Potsdam

2018–2019

- Internal Funding
- Co-Principal Investigator. Co-PIs: Eric Richter, Dirk Richter

Look through You: How First-person Perspective Video Promotes Perceptual Problem Solving? ($3,000)

Ann Arbor, MI, United States

Rackham Graduate School, University of Michigan

2017–2018

- Rackham Graduate Student Research Grant
- Principal Investigator. Co-PIs: Kevin F. Miller, Kai S. Cortina

Effects of Modeling that Convey Moral Standards on Delay of Gratification among Chinese and US Preschoolers ($5,000)

Ann Arbor, MI, United States

The International Institute, University of Michigan

2016

- International Institute Individual Fellowships
- Principal Investigator. Co-PIs: Kevin F. Miller, Kai S. Cortina

The Influence of First-person Perspective Video on Early Childhood Sex-typed Toy Choices ($4,000)

Ann Arbor, MI, United States

School of Education, University of Michigan

2014

- Professor & Mrs. Cho-Yee To Fund
- Principal Investigator. Co-PIs: Kevin F. Miller, Kai S. Cortina

Research Stay

Aggarwal-Blackburn Visiting Scholar

Kent, OH, United States

Extended Reality Initiative (XRi), School of Teaching, Learning and Curriculum Studies, Kent State University

Sep 2022

Awards, Scholarships, Further Competitive Grants

AERA TACTL Best Paper Award Nomination

Chicago, United States

American Educational Research Association (AERA) Technology as an Agent of Change in Teaching and Learning Special Interest Group (TACTL SIG)

2023 & 2024

- Nominated as the ten best research papers submitted to TACTL and accepted for presentation at the AERA 2023 and 2024 Conference.

Kongressreisenprogramm [Congress Travel Program] (€2,259)

Bonn, Germany

DAAD [German Academic Exchange Service]

2022

- Federal-level support for active participation of German scientists in international scientific congresses.

AERA SIG-IT Best Paper Award ($350)

Virtual

American Educational Research Association (AERA) Instructional Technology Special Interest Group (SIG-IT)

2021

- Selected as the best research paper submitted to SIG-IT and accepted for presentation at the AERA 2021 Conference.

Study Innovation Prize (€100)

Potsdam, Germany

Faculty of Human Sciences, University of Potsdam

2020

- Selected as the top three innovative teaching projects that promote good practice in E-Learning.

Potsdam Travel Grant (€1,480)

Potsdam, Germany

Potsdam Graduate School, University of Potsdam

2019

- Institute-level support for presentations in scientific events.

Rackham Conference Travel Grant ($800)

Ann Arbor, United States

Rackham Graduate School, University of Michigan

2015

- Institute-level support for graduate students in good academic standings for academic conferences.

Publications
Refereed Journal Articles (13)

Huang, Y., Hansen, M., Richter, E., Kleickmann, T., Scheiter, K., & Richter, D. (2025). Enhancing preservice teachers' noticing via adaptive feedback in a virtual reality classroom. *Learning and Instruction*, *95*, 102053. https://doi.org/10.1016/j.learninstruc.2024.102053

Metzner, O., Wang, Y., Symes, W., **Huang, Y.**, Keller, L., de Melo, G., & Lazarides, R. (2025). A process-oriented perspective on pre-service teachers' self-efficacy and their motivational messages: Using large language models to classify teachers' speech. *British Journal of Educational Psychology*, *n/a*(n/a). https://doi.org/10.1111/bjep.12779

Richter, D., **Huang, Y.**, & Richter, E. (2024). Ungleichheiten in der Lehrkräfteversorgung: Eine Analyse zur Verteilung qualifizierten Lehrpersonals auf Schulen mit unterschiedlicher Schülerschaft und verschiedenen sozio-ökonomischen

Kontexten [Inequalities in teacher provision: An analysis of the distribution of qualified teaching staff in schools with diverse student populations and varied socio-economic contexts]. *Zeitschrift für Erziehungswissenschaft [Journal of Educational Research]*, *27*, 1491–1517. `https://doi.org/10.1007/s11618-024-01271-2`

Westphal, A., Richter, E., Lazarides, R., & **Huang, Y.** (2024). More I-talk in student teachers' written reflections indicates higher stress during VR teaching. *Computers & Education*, *212*, 104987. `https://doi.org/10.1016/j.compedu.2024.104987`

Bardach, L., **Huang, Y.**, Richter, E., Klassen, R. M., Kleickmann, T., & Richter, D. (2023). Revisiting effects of teacher characteristics on physiological and psychological stress: A virtual reality study. *Scientific Reports*, *13*(1), 22224. `https://doi.org/10.1038/s41598-023-49508-0`

Huang, Y., Richter, E., Kleickmann, T., Scheiter, K., & Richter, D. (2023). Body in motion, attention in focus: A virtual reality study on teachers' movement patterns and noticing. *Computers & Education*, *206*, 104912. `https://doi.org/10.1016/j.compedu.2023.104912`

Huang, Y., Lazarides, R., & Richter, D. (2023). Teachers' adaptations to COVID-19: Perceived preparedness for distance education, frequency of teacher-student contact, and resources in ICT. *European Journal of Teacher Education*, 1–26. `https://doi.org/10.1080/02619768.2023.2288554`

Huang, Y., Richter, E., Kleickmann, T., & Richter, D. (2023). Comparing video and virtual reality as tools for fostering interest and self-efficacy in classroom management: Results of a pre-registered experiment. *British Journal of Educational Technology*, *54*(2), 467–488. `https://doi.org/10.1111/bjet.13254`

Huang, Y., Miller, K. F., Cortina, K. S., & Richter, D. (2023). Teachers' professional vision in action: Comparing expert and novice teacher's real-life eye movements in the classroom. *Zeitschrift Für Pädagogische Psychologie [German Journal of Educational Psychology]*, *37*(1–2), 122–139. `https://doi.org/10.1024/1010-0652/a000313`

Richter, E., Hußner, I., **Huang, Y.**, Richter, D., & Lazarides, R. (2022). Video-based reflection in teacher education: Comparing virtual reality and real classroom videos. *Computers & Education*, *190*, 104601. `https://doi.org/10.1016/j.compedu.2022.104601`

Huang, Y., Richter, E., Kleickmann, T., & Richter, D. (2022). Class size affects preservice teachers' physiological and psychological stress reactions: An experiment in a virtual reality classroom. *Computers & Education*, *184*, 104503. `https://doi.org/10.1016/j.compedu.2022.104503`

Huang, Y., Richter, E., Kleickmann, T., Wiepke, A., & Richter, D. (2021). Classroom complexity affects student teachers' behavior in a VR classroom. *Computers & Education*, *163*, 104100. `https://doi.org/10.1016/j.compedu.2020.104100`

Richter, E., Marx, A., **Huang, Y.**, & Richter, D. (2020). Zeiten zum beruflichen Lernen: Eine empirische Untersuchung zum Zeitpunkt und der Dauer von Fortbildungsangeboten für Lehrkräfte [Time for professional learning: An empirical study about timing and duration of teacher training]. *Zeitschrift für Erziehungswissenschaft [Journal of Educational Research]*, *23*(1), 145–173. `https://doi.org/10.1007/s11618-019-00924-x`

Book Chapters and Reports (3)

Cortina, K. S., **Huang, Y.**, & Richter, D. (2024). Teacher professional vision – a concept revisited. In A. Gegenfurtner & R. Stahnke (Eds.), *Teacher Professional Vision: Theoretical and Methodological Advances* (pp. 175–188). Routeledge.

Huang, Y., Richter, E., Kleickmann, T., & Richter, D. (2023). Virtual reality in teacher education from 2010 to 2020: A review of program implementation, intended outcomes, and effectiveness measures. In K. Scheiter & I. Gogolin (Eds.), *Bildung für eine digitale Zukunft [Education for a Digital Future]* (pp. 399–441). Springer Fachmedien. `https://doi.org/10.1007/978-3-658-37895-0_16`

Cortina, K. S., Miller, K. F., Hua, S., Peist, E., **Huang, Y.**, & Wei, Y. (2013). Behavioral regulation of preschoolers in China and the US: the role of attention. In N. McElvany & H. G. Holtappels (Eds.), *Empirische Bildungsforschung: Theorien, Methoden, Befunde und Perspektiven [Empirical educational research: theories, methods, findings, and perspectives]* (pp. 125–133). Waxmann Verlag. `https://books.google.com?id=rUAdAAAAQBAJ`

Submitted Manuscripts and Preprints

Erhardt, N., Richter, E., **Huang, Y.**, Richter, D., & Scheiter, K. (2024). *Artificial intelligence in teacher professional development - a systematic review (public registration)*. `https://doi.org/10.17605/OSF.IO/5BNGH`

Jacobsen, L. J., Weber, K. E., Prilop, C. N., **Huang, Y.**, Geske, A., & Richter, E. (2024). *Enabling meaningful feedback in teacher education: The use of virtual reality-based microteaching (manuscript submitted)*.

Metzner, O., Wang, Y., Symes, W., **Huang, Y.**, Keller, L., de Melo, G., & Lazarides, R. (2024). *A process-oriented perspective on pre-service teachers' self-efficacy and their motivational messages: Using Large Language Models to classify teachers' speech (under review)*.

Other Publications

Huang, Y. (2018). *Learning from teacher's eye movement: Expertise, subject matter and video modeling* [Doctoral dissertation, University of Michigan]. `https://doi.org/2027.42/145853`

Huang, Y. (2017). *A discussion on data visualization in 21st century education*. Blog of Center for Academic Innovation at University of Michigan. `https://bit.ly/3klgaHy`

Huang, Y., Foley, K., & Jankovic, F. (2017). *A picture is worth a thousand words: Understanding learners through visualization*. Blog of Center for Academic Innovation at University of Michigan. `https://bit.ly/41ghSdR`

Presentations

Refereed Conference Presentations (31)

Huang, Y., Klausner-Thimm, N., Richter, E., Scheiter, K., Kleickmann, T., & Richter, D. (2025, January 27–29). *Explore teacher talk moves in a generative AI-powered virtual reality classroom dialog simulation. In Y. Huang (Chair), Application of generative large language models in teacher-centered educational research* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2025 Annual Meeting, Mannheim, BW, Germany.

Klausner-Thimm, N., **Huang, Y.**, Richter, E., & Richter, D. (2025, January 27–29). *Eine Untersuchung zur Validität einer auf Beobachtungen basierenden Bewertung von Unterrichtsqualität in einer VR-basierten Unterrichtssimulation [An investigation into the validity of an observation-based assessment of teaching quality in a VR-based teaching simulation]. In B. Watzka (Chair), Potenziale und Herausforderungen für das Lernen mit Virtual Reality [Opportunities and challenges for learning with virtual reality]* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2025 Annual Meeting, Mannheim, BW, Germany.

Metzner, O., Wang, Y., Symes, W., **Huang, Y.**, Keller, L., de Melo, G., & Lazarides, R. (2025, January 27–29). *Assessing pre-service teachers' motivational messages with a large language model. In Y. Huang (Chair), Application of generative large language models in teacher-centered educational research* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2025 Annual Meeting, Mannheim, BW, Germany.

Klausner-Thimm, N., **Huang, Y.**, Richter, E., & Richter, D. (2024, December 13). *Eine Untersuchung zur Validität einer auf Beobachtungen basierenden Bewertung von Unterrichtsqualität in einer VR-basierten Unterrichtssimulation [An investigation into the validity of an observation-based assessment of teaching quality in a VR-based teaching simulation]* [Paper presentation]. ZfE-Forum 2024: Erfassung und Förderung von Lehrkraftkompetenzen mittels Unterrichtsvideos [Journal of Educational Science Forum 2024: Recording and promoting teacher skills using teaching videos], Frankfurt am Main, Germany.

Huang, Y., Wiepke, A., Hildebrandt, C., Tobin, S., Bernholt, S., Höft, L., Parchmann, I., Lucke, U., Steffensky, M., Kleickmann, T., Banerji, A., & Richter, D. (2024, September 30–October 2). *Teachers in the loop: Prototypical applications of branching narrative in VR-based science teaching simulations. In Y. Huang (Chair), Crafting the reality: Approaches for designing teaching simulations in virtual reality* [Symposium contribution]. Digitale Transformation für Schule und Lehrkräfte gestalten [Shaping digital transformation for schools and teachers], Potsdam, Germany.

Huang, Y. (2024, September 25–27). *Prospects of eye tracking method in teacher's professional vision research. In K. Horlenko & S. Gabel (Chair), Triangulating eye-tracking data: Toward a multimodal approach* [Symposium discusstion]. The European Association for Research on Learning and Instruction (EARLI) SIG 04 & SIG 17 Conference, Utrecht, Netherlands.

Huang, Y., Hansen, M., Richter, E., Kleickmann, T., Scheiter, K., & Richter, D. (2024, September 16–19). *Enhancing preservice teachers' noticing through adaptive feedback: An experiment in a virtual reality classroom. In U. Klusmann & T. Voss (Chairs), Wie veränderbar ist die professionelle Kompetenz von Lehrkräften? Empirische Evidenz aus systematischen Reviews, Längsschnitt- und Interventionsstudien [How malleable is teachers' professional knowledge? Empirical evidence from systematic reviews, longitudinal and intervention studies]* [Symposium contribution]. 53rd Deutsche Gesellschaft für Psychologie (DGPs) [German Psychological Society] Congress, Vienna, Austria.

Huang, Y., Reuth, F., Richter, E., Kleickmann, T., & Richter, D. (2024, April 11–14). *Preservice teachers' stress and speech quality: A virtual reality and natural language processing approach. In I. Adisa (Chair), Enhancing teacher capacities through technological innovation* [Roundtable presentation]. American Educational Research Association (AERA) 2024 Annual Meeting, Philadelphia, PA, United States.

Huang, Y., Richter, E., Kleickmann, T., Scheiter, K., & Richter, D. (2024, April 11–14). *Adaptive feedback to improve preservice teachers' noticing: A randomized controlled trial in virtual reality.* In J.P. Carpenter (Chair), *Simulations and adaptive feedback in teacher education* [Symposium contribution]. American Educational Research Association (AERA) 2024 Annual Meeting, Philadelphia, PA, United States.

Huang, Y., Richter, E., Hansen, M., Kleickmann, T., Scheiter, K., & Richter, D. (2024, March 18–20). *Effectiveness of adaptive versus static feedback on improving teacher noticing: A randomized controlled virtual reality study.* In P. Kuhl (Chair), *Virtual Reality in der Lehrkräftebildung: Einblicke, Ergebnisse und Entwicklungspotenziale [Virtual reality in teacher training: Insights, results and potential for development]* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2024 Annual Meeting, Potsdam, BB, Germany.

Richter, E., Weber, K. E., Jacobsen, L. J., Richter, D., & **Huang, Y.** (2024, March 18–20). *Virtual Reality Teaching Partner: Studie zur Wahrnehmung realer und VR-basierter Unterrichtssimulationen [Virtual Reality Teaching Partner: Study on the perception of real and VR-based teaching simulations].* In A. Wiepke (Chair), *Teach-R: Simulationsbasierte Lehramtsausbildung in VR [Teach-R: Simulation-based teacher training in VR]* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2024 Annual Meeting, Potsdam, BB, Germany.

Huang, Y., Reuth, F., Richter, E., Kleickmann, T., & Richter, D. (2023, September 13–15). *Preservice teachers' stress reactions and lexical richness during instruction in virtual reality.* In A. Henke (Chair), *a University of Potsdam symposium on emotion and motivation in technology-enhanced learning and instruction* [Symposium contribution]. Arbeitsgruppe für Empirische Pädagogische Forschung (AEPF) 2023 [Conference of the Working Group for Empirical Educational Research 2023], Potsdam, Germany.

Huang, Y., Richter, E., Geske, A., Weber, K. E., Jacobsen, L. J., & Richter, D. (2023, September 13–15). *Virtual reality teaching partner: Compare preservice teachers' perceptions of real versus virtual reality teaching simulation.* In Y. Huang (Chair), *Immersive education: Harnessing extended reality for transformative teaching and learning* [Symposium contribution]. Arbeitsgruppe für Empirische Pädagogische Forschung (AEPF) 2023 [Conference of the Working Group for Empirical Educational Research 2023], Potsdam, Germany.

Klausner-Thimm, N., **Huang, Y.**, Richter, E., & Richter, D. (2023, September 10–12). *Eine Untersuchung zur Validität einer VR-basierten Unterrichtssimulation unter Verwendung von CLASS [An investigation into the validity of a VR-based teaching simulation using CLASS].* In N. Klausner-Thimm (Chair), *Virtuelle Realität und Gamification [Virtual Reality and Gamification]* [Symposium contribution]. Arbeitsgruppe für Empirische Pädagogische Forschung (AEPF) 2024 [Conference of the Working Group for Empirical Educational Research 2024], Osnabrück, Germany.

Bardach, L., **Huang, Y.**, Richter, E., Klassen, R. M., Kleickmann, T., & Richter, D. (2023, August 22–26). *Revisiting effects of teacher characteristics on stress: A virtual reality study.* In R. Klassen (Chair), *Building a better understanding of teachers' well-being* [Symposium contribution]. The European Association for Research on Learning and Instruction (EARLI) 20th Biennial Conference, Thessaloniki, Greece.

Huang, Y., Richter, E., Kleickmann, T., Richter, D., & Scheiter, K. (2023, August 22–26). *Uncover teachers' movement patterns in immersive VR: Relevance for visual attention performance.* In V. Hoogerheide (Chair), *A multidisciplinary perspective on immersive virtual reality learning and instruction* [Symposium contribution]. The European Association for Research on Learning and Instruction (EARLI) 20th Biennial Conference, Thessaloniki, Greece.

Huang, Y., Richter, E., Kleickmann, T., & Richter, D. (2023, February 28–March 2). *Comparing video and virtual reality as tools for fostering interest and self-efficacy in classroom management: Results of a pre-registered experiment.* In R. Junker (Chair), *Evaluation digitaler Lernumgebungen zur Förderung der Klassenführungskompetenz bei Lehramtsstudierenden [Evaluation of digital learning environments to promote classroom management skills in student teachers]* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2023 Annual Meeting, Essen, NW, Germany.

Richter, E., Hußner, I., **Huang, Y.**, Richter, D., & Lazarides, R. (2023, February 28–March 2). *Videobasierte Unterrichtsreflexion in der Lehrkräfteausbildung: Virtual Reality und klassische Unterrichtsvideos im Vergleich [Video-based instructional reflection in teacher education: Comparing virtual reality and traditional instructional videos].* In T. Daltoè & R. Göllner (Chairs), *Unterrichtserleben in Virtual Reality als Chance für die Lehrkräftebildung [Classroom experience in virtual reality as an opportunity for teacher education]* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2023 Annual Meeting, Essen, NW, Germany.

Huang, Y., Richter, E., Richter, D., & Kleickmann, T. (2022, April 21–26). *Class size affects pre-service teachers' physiological and psychological stress reactions: An experiment in virtual reality* [Paper presentation]. American Educational Research Association (AERA) 2022 Annual Meeting, San Diego, CA, United States.

Huang, Y., Richter, E., Richter, D., & Kleickmann, T. (2022, March 9–11). *The class size effect on pre-service teachers' physiological and psychological stress reactions in virtual reality* [Paper presentation]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2022 Annual Meeting, Virtual.

Huang, Y., Lazarides, R., & Richter, D. (2021, April 22–23). *Teachers' contact frequency and perceived preparedness during COVID-19: Associations with ICT training, collaboration, and equipment* [Paper presentation]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2021 Annual Meeting, Virtual.

Huang, Y., Richter, E., Kleickmann, T., Wiepke, A., & Richter, D. (2021, April 8–12). *Classroom complexity affects student teachers' behavior in a VR classroom* [Paper presentation]. American Educational Research Association (AERA) 2021 Annual Meeting, Virtual.

Huang, Y., Richter, E., Kleickmann, T., & Richter, D. (2020, December 11). *Virtual reality and teacher education: A literature review for the last decade* [Symposium contribution]. ZfE-Forum 2020: Bildung für eine digitale Zukunft [Journal of Educational Science Forum 2020: Education for a Digital Future], Virtual.

Huang, Y., Richter, E., & Richter, D. (2020, April 17–21). *Presence and efficacy: Training preservice teachers' classroom management skills in virtual reality* [Paper presentation]. American Educational Research Association (AERA) 2020 Annual Meeting, San Francisco, CA, United States (Conference Canceled). `http://tinyurl.com/vqq6flp`

Huang, Y., Miller, K. F., Cortina, K. S., & Richter, D. (2019, February 25–27). *Learning from teacher's eyes: Expertise and eye movements* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2019 Annual Meeting, Köln, NW, Germany.

Richter, D., Wiepke, A., Richter, E., **Huang, Y.**, & Zender, R. (2019, February 25–27). *Nutzung von Virtual Reality-Technologie zur Erfassung von Klassenführungskompetenzen in der Lehrerausbildung [Using virtual reality technology to assess classroom management skills in teacher education]* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2019 Annual Meeting, Köln, NW, Germany.

Richter, E., Marx, A., **Huang, Y.**, & Richter, D. (2019, February 25–27). *Zeiten zum Lernen: Eine empirische Analyse zum Zeitpunkt und der Dauer von Fortbildungsveranstaltungen für Lehrkräfte [Times to learn: An empirical analysis of the timing and duration of professional development events for teachers]* [Symposium contribution]. Gesellschaft für Empirische Bildungsforschung [Society for Empirical Educational Research] (GEBF) 2019 Annual Meeting, Köln, NW, Germany.

Park, I., **Huang, Y.**, & Sun, X. (2018, April 13–17). *Effects of first impressions and instructional quality on student engagement: A continuous evaluation* [Symposium contribution]. American Educational Research Association (AERA) 2018 Annual Meeting, New York, NY, United States.

Huang, Y., Miller, K. F., Cortina, K. S., & Su, L. (2017, April 6–8). *Effects of modeling on delay of gratification among Chinese preschoolers: Testing a new method for assessing self-control* [Paper presentation]. Society for Research in Child Development (SRCD) 2017 Biennial Meeting, Austin, TX, United States.

Huang, Y., Su, L., & Miller, K. F. (2015, March 19–21). *Looking through you: First-person perspective video affects Chinese preschoolers' sex-typed toy choices* [Paper presentation]. Society for Research in Child Development (SRCD) 2015 Biennial Meeting, Philadelphia, PA, United States.

Wang, Z., & **Huang, Y.** (2013, April 18–20). *Attention, self-regulation, and looking at distractions in preschool Chinese children* [Paper presentation]. Society for Research in Child Development (SRCD) 2013 Biennial Meeting, Seattle, WA, United States.

Invited Talks and Public Engagement (17)

Huang, Y., John, F., Wiepke, A., & Hildebrandt, C. (2024, May 4). *Teach-R: Ein Virtuelles Klassenzimmer zum Lehren und Lernen [Teach-R: A virtual classroom for teaching and learning]* [Talk and Demonstration]. Potsdamer Tag der Wissenschaften [Potsdam Science Day] 2024, Potsdam, BB, Germany. `https://bit.ly/4iYhSbt`

Huang, Y. (2024, March 20–22). *VR for teacher education. In Y. Huang, J. Krüger, & P. Spangenberger (Chairs), Educational science meets XR* [Talk and Demonstration]. Arbeitskreis VR/AR-Learning der Gesellschaft für Informatik [Working Group VR/AR-Learning of the German Informatics Society] 2024 VR/AR Learning Days, Berlin, Germany. `https://bit.ly/3Dopvre`

Huang, Y., & Richter, E. (2024, January 31). *Teacher education reimagined: How virtual reality can help shape future teachers* [Talk]. IQB-Forschungskolloquium [Institute for Educational Quality Improvement Research Colloquium], Berlin, Germany.

Huang, Y., & John, F. (2023, September 29). *Blink, and you are a teacher* [Talk and Demonstration]. Kinder-Uni Potsdam [Children's University at University of Potsdam] 2023, Potsdam, BB, Germany. `https://bit.ly/3ZE6YP4`

Huang, Y., & John, F. (2023, May 6). *VR experience of being a teacher* [Talk and Demonstration]. Potsdamer Tag der

Wissenschaften [Potsdam Science Day] 2023, Potsdam, Germany.

Richter, E., **Huang, Y.**, John, F., & Schmidt, E. (2023, April 13). *Virtual Reality in der Lehrkräftebildung und Lehrkräfteforschung [Virtual reality in teacher education and teacher research]* [Talk and Demonstration]. Fachtagung 3D erleben – lernraum.zukunft.gestalten [Symposium on 3D experience - learning space.future.design], Dillingen, Germany.

Huang, Y. (2023, February 24). *Potsdam VR classroom: Applications for teacher training and research* [Talk]. Module of Immersive Learning Environments from the Swiss Competence Centre for Innovations in Learning, St.Gallen, Switzerland.

Huang, Y. (2022, November 17). *Virtual reality based learning: The why and how* [Talk]. Deutscher Akademischer Austauschdienst [German Academic Exchange Service] (DAAD) International Alumni Seminar 2022: The Future of Education – Overcoming Educational Inequality Through Innovation, Potsdam, Germany.

Huang, Y. (2022, September 14). *Teach in virtual reality (VR): Understand preservice teachers' behaviors through VR experiments* [Talk]. Combined Program in Education and Psychology Colloquium Series, University of Michigan, Ann Arbor, MI, United States.

Huang, Y. (2022, September 7). *Uncoil preservice teachers' experiences through virtual reality experiments* [Talk]. The Gerald H. Read Center for International and Intercultural Education Guest Talk, Kent State University, Kent, OH, United States.

Huang, Y. (2022, June 20). *Professional vision in virtual reality: Experimental investigations of preservice teachers' noticing* [Talk]. Research Colloquium of Eye Tracking Working Group in Methods of Empirical Classroom Research, University of Augsburg, Germany.

Huang, Y. (2022, May 12). *Teach in virtual reality (VR): Experimental investigations of preservice teachers' behaviors in a VR classroom* [Talk]. Research Colloquium of Department of Educational Research and Educational Psychology, IPN – Leibniz Institute for Science and Mathematics Education, Kiel, Germany.

Huang, Y. (2022, March 4). *Features and applications of the Potsdam virtual reality classroom* [Talk]. Module of Immersive Learning Environments from the Swiss Competence Centre for Innovations in Learning, St.Gallen, Switzerland.

Huang, Y. (2021, December 8). *Classroom features and preservice teachers' behaviors: Experimental investigations in a virtual reality (VR) classroom* [Talk]. Research Colloquium of the Professorships at the Department of Educational Science, University of Potsdam, Potsdam, Germany.

Huang, Y. (2018, October 24). *Learning from teacher's eye movement: Expertise, subject matter and video modeling* [Talk]. Research Colloquium of the Professorships at the Department of Educational Science, University of Potsdam, Potsdam, Germany.

Huang, Y. (2017, February 8). *Effects of modeling on delay of gratification among Chinese preschoolers: Testing a new method for assessing self-control* [Talk]. Combined Program in Education and Psychology Colloquium Series, University of Michigan, Ann Arbor, MI, United States.

Huang, Y. (2015, October 21). *Looking through you: First-person perspective video affects Chinese preschoolers' sex-typed toy choices* [Talk]. Combined Program in Education and Psychology Colloquium Series, University of Michigan, Ann Arbor, MI, United States.

Teaching Experience (7)

Education on the Horizon: Teaching and Learning with Technology
University of Potsdam

[seminar for Bachelor and Master] Instructor
2019–Present

Enhance Teaching and Learning through the Perspective of Cognitive Psychology
University of Potsdam

[seminar for Bachelor and Master] Instructor
2018–Present

Understand Schooling through the Lens of Cross-cultural Comparisons
University of Potsdam/Kiel University

[seminar for Bachelor and Master] Instructor
2018–Present

Educational Psychology and Human Development
University of Michigan

[Undergraduate seminar] Graduate Student Instructor
2016

Research Methods in Educational and Cross-cultural Contexts *University of Michigan*
[Undergraduate seminar] Graduate Student Instructor *2015*

Introduction to Psychology *University of Michigan*
[Undergraduate seminar] Graduate Student Instructor *2014–2017*

Psychology Subject *Gucheng High School, China*
High School Teacher *2012*

Thesis Supervision (11)

Comparing Eye Movement of German and English Teachers
Megan Lake (Master), University of Potsdam *Ongoing*

Using the digital game engine Minecraft Education for language learning to enhance learning motivation
Vanessa Pomorin (Bachelor), University of Potsdam *May-2025*

Empirical investigation of the influence of gamification elements on the flow state
Paul Behrens (Bachelor), University of Potsdam *May-2025*

Dimensions and Effects of Teachers' Presentations
Julian Effler (Bachelor), University of Potsdam *Apr-2024*

Exploring the Pedagogical Potential: Digital Tools and Their Roles in Foreign Language Learning in the Classroom
Larissa Genz (Bachelor), University of Potsdam *Mar-2024*

Vergleich zwischen Lehrer_innen und Lehramtsstudent_innen hinsichtlich Unterrichtsstörungen im VR Klassenraum [Comparison of Teachers' and Student Teachers' Responses to Classroom Disruptions in the VR Classroom]
Hilke Onat (Master), Kiel University *Sep-2023*

Distribution of Preservice Teachers' Visual Attention Regarding Seating Positions and Student Behaviors in a Virtual Reality Classroom
Julia Schwirczek (Master), University of Potsdam *Sep-2023*

How Stress Impacts Preservice Teachers' Vocabulary During Teaching in Virtual Reality
Felix Reuth (Master), University of Potsdam *May-2023*

Are Comic Books Suitable for Teaching Second Language?—Example of English in German Secondary Education
Lennert Schulze (Bachelor), University of Potsdam *Oct-2020*

Berufliches Lernen von Lehrkräften am Arbeitplatz [Professional Learning of Teachers in the Workplace]
Anna-Kathaina Czwalinna (Ph.D.), University of Potsdam *May-2020*

Die Aufmerksamkeitsverteilung von Praxissemesterstudierenden und erfahrenen Lehrkräften und ihr Zusammenhang zur Klassenführung [Attention Allocation of Teacher Trainees and Experienced Teachers and its Relationship to Classroom Management]

Ann-Katrin Schäfer (Master), University of Potsdam   *Jan-2020*

Professional Certification

Graduate Teacher Certificate (GTC)   *University of Michigan*
Professional certificate for college-level instructors   *2018*

PEERRS (Program for Education and Evaluation in Responsible Research and Scholarship) Certificate   *University of Michigan*
Certificate for responsible conduct of research   *2018*

Other Professional Activities

Data Science Specialist   *Ann Arbor, MI, United States*
Digital Education & Innovation Lab, The Office of Academic Innovation, University of Michigan   *2016–2017*

- Responsible for managing, mining, analyzing and visualizing big data set for the Massive Open Online Courses provided by University of Michigan.

Program Leader   *Ann Arbor, MI, United States*
Global Course Connection in China, Center for Global and Intercultural Study, University of Michigan   *2013–2017*

- Responsible for leading international comparison studies both in US and China, as well as facilitating the cultural and academic exchange between American and Chinese college students.

Graphic Designer   *Virtual*
Freelance   *2011–2018*

- Graphic designer specialized in scientific illustration and data visualization

Professional Service

Ad-hoc Peer Review

Applied Science

Asia Pacific Education Review

British Educational Research Journal

British Journal of Educational Psychology

British Journal of Educational Technology

Computers and Education

Computers and Education Artificial Intelligence

Education Sciences

Educational Psychology

European Journal of Investigation in Health, Psychology and Education

European Journal of Teacher Education

Frontiers in Education

Frontiers in Psychology

Interdisziplinäre Beiträge zur Bildungsforschung [Interdisciplinary Contributions to Educational Research] 2026

Instructional Science

Journal of Mathematics Teacher Education

Journal of Research on Technology in Education

Learning Research and Practice

Psychology Research and Behavior Management

Quality and Quantity

Sustainability

Teaching and Teacher Education

Unterrichtswissenschaft [Teaching Science]

Institutional Service

University of Potsdam: Colloquium Planning Committee

University of Michigan: Admissions Committee, Colloquium Planning Committee, Communications Committee, Executive Committee Cohort Representative, Graduate Student Mentor

Current Memberships

American Educational Research Association: Division C (Learning and Instruction), SIG 119 (Technology, Instruction, Cognition, and Learning), SIG 052 (Instructional Technology)

American Psychological Association: Division 7 (Developmental Psychology), Division 15 (Educational Psychology)

European Association for Research on Learning and Instruction: SIG 07 (Technology-Enhanced Learning And Instruction), SIG 11 (Teaching and Teacher Education)

Skills

Data Science	R, Mplus, SPSS, Tableau, Python
Reproducible Report	R-Markdown, org-babel, LaTeX, Pandoc
Programming Languages	C/C++/C#
Apparatus	Tobii/SMI/Pupil Labs Eye-tracking system, HTC VIVE, Quest
Quantitative Methods	Hierarchical Linear Modeling, Structural Equation Modeling, Deep Learning
Languages	English (Native/Bilingual), Mandarin Chinese (Native/Bilingual), German (B1)