CURRICULUM VITAE
YAO SHIH-YING

Teaching & Learning Centre
Singapore University of Social Sciences
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Singapore 599494

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EDUCATION

Ph.D., Education (Quantitative Methods and Evaluation Program), University of California, Berkeley, California, 2013, Dissertation: "Investigating the Validity of a Scientific Argumentation Assessment Using Psychometric Methods"

M.Ed., International Education Policy, Harvard University, Massachusetts, 2006

B.Ed., Education, National Chengchi University, Taiwan, 2004

PROFESSIONAL EXPERIENCE

2023-present: Lecturer, Teaching & Learning Centre, Singapore University of Social Sciences, Singapore

2020-2023: Instructor, School of Humanities & Behavioural Sciences, Singapore University of Social Sciences, Singapore

2020-2020: Course Developer, School of Humanities & Behavioural Sciences, Singapore University of Social Sciences, Singapore

2014-2017: Research Fellow, Office of Education Research, National Institute of Education, Singapore

2013-2014: Postdoctoral Scholar, Graduate School of Education, University of California, Berkeley, California

2011-2011: Graduate Student Instructor, Graduate School of Education, University of California, Berkeley, California

2011-2011: Research Intern, Riverside Publishing, Illinois

2007-2013: Graduate Student Researcher, Graduate School of Education, University of California, Berkeley, California

2006-2007: Research Associate, Museum of Science, Boston, Massachusetts

SELECTED PUBLICATIONS

Yao, S.-Y. (2021). HBC201 Research methods for the social and behavioural sciences (study guide). Singapore: Singapore University of Social Sciences.

Yao, S.-Y., Bull, R., Khng, K. H., & Rahim, A. (2018). Psychometric properties of the NEPSY-II Affect Recognition Subtest in a preschool sample: A Rasch modeling approach. *The Clinical Neuropsychologist, 32*(1), 63-80.

Yao, S.-Y., Muñez, D., Bull, R., Lee, K., Khng, K. H., & Poon, K. (2017). Rasch modeling of the Test of Early Mathematics Ability–Third Edition with a sample of K1 children in Singapore. *Journal of Psychoeducational Assessment, 35*(6), 615-627.

Bull, R., **Yao, S.-Y.**, & Ng, E.L. (2017). Assessing quality of kindergarten classrooms in Singapore: Psychometric properties of the Early Childhood Environment Rating Scale-Revised. *International Journal of Early Childhood, 49*(1), 1-20.

Yao, S.-Y., Wilson, M., Henderson, J.B., & Osborne J. (2015). Investigating the function of content and argumentation items in a science test: A multidimensional approach. *Journal of Applied Measurement*, *16*(2), 171-192.

Black, P., Wilson, M., & **Yao, S.-Y.** (2011). Road maps for learning: A guide to the navigation of learning progressions. *Measurement: Interdisciplinary Research & Perspective*, *9*(2-3), 71-123.

HONORS AND AWARDS

Innovation Seed Grant, Singapore University of Social Sciences, 2022

Dean's Normative Time Fellowship, University of California, Berkeley, 2011-2012

Morphett Fellowship, University of California, Berkeley, 2009-2010

University Fellowship, University of California, Berkeley, 2007-2009

SELECTED PRESENTATIONS

Yao, S.-Y. (2023, April). Application of microlearning in adult education. Invited talk at the T & L Conversation. Singapore University of Social Sciences, Singapore.

Bull, R., **Yao, S.-Y.**, & Ng, E.L. (2017, April). Measuring quality of early childhood environments in Singapore. Poster presented at the biennial meeting of Society for Research in Child Development, Austin.

Yao, S.-Y. (2015, April). Investigating the properties of a science assessment: A multidimensional Rasch modeling approach. Invited talk at the ECDL Research Seminar Series. National Institute of Education, Singapore.

Yao, S.-Y., & Wilson, M. (2013, April). Validation of a learning progression in science: A latent class analysis approach. Paper presented at the annual meeting of American Educational Research Association, San Francisco.

Yao, S.-Y., & Wilson, M. (2013, April). Developing and validating a learning-progression-based assessment of the structure of matter. Paper presented at the annual meeting of American Educational Research Association, San Francisco.

Yao, S.-Y. (2011, April). Examining relationship between gender differences in attitudes and in middle-grade science achievement in the United States: Results from TIMSS 2007. Paper presented at the annual meeting of American Educational Research Association, New Orleans.

Yao, S.-Y., & Wilson, M. (2010, May). Random item profile modeling of DIF. Paper presented at the annual meeting of National Council on Measurement in Education, Denver.

Yao, S.-Y., & Choi, I.-H. (2010, May). Investigating measurement invariance of the Chinese and English versions of TIMSS 2007 science assessment. Paper presented at the annual meeting of American Educational Research Association, Denver.

RESEARCH REPORTS

Wilson, M., Osborne, J., Morell, L., **Yao, S.-Y.**, & Chiu, T. (2013). *Learning progressions in middle school science instruction and assessment research performance progress report, Year 3* (Technical Report to the Institute of Education Sciences). Berkeley, CA: Berkeley Evaluation and Assessment Research Center.

Wilson, M., Osborne, J., Morell, L., **Yao, S.-Y.**, Galpern, A., & Chiu, T. (2012). *Learning progressions in middle school science instruction and assessment research performance progress report, Year 2* (Technical Report to the Institute of Education Sciences). Berkeley, CA: Berkeley Evaluation and Assessment Research Center.

RESEARCH INTERESTS

Assessment Development and Validation, Educational Technology, Instructional Design, Adult Learning