

Dr Hsin-Hui Wang

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Work history

Position	Organisation	Years
Research Fellow	Institute for Learning Science & Teacher Education, Australian Catholic University	Jun 2019-present
Adjunct Assistant Professor	Center for Teacher Education, National Sun Yat-sen University, Taiwan	Mar 2017-May 2019
Postdoctoral Research Fellow	Center for General Education, National Sun Yat-sen University, Taiwan	Dec 2016-May 2019
Research Assistant	Institute of Education, National Sun Yat-sen University, Taiwan	2009-2012

Education

Qualifications	Organisation	Completed
Doctor of Philosophy	Institute of Education, National Sun Yat-sen University, Taiwan	2016
Master of Education	Institute of Education, National Sun Yat-sen University, Taiwan	2009
Bachelor of Education	Department of Social Studies Education, National Pingtung University of Education, Taiwan	2006

Thesis

Wang, H. H. (2016). *The impact of Socioscientific Issue intervention on college students' environmental literacy*. Unpublished doctoral dissertation, National Sun Yat-sen University, Kaohsiung.

Fields of educational expertise

- Science Education
- Educational Psychology

Expertise in qualitative, quantitative and mixed research design methodologies

- Questionnaire Design and Development
- Exploratory Factor Analysis & Confirmatory Factor Analysis
- Quantitative Data Analyses (e.g., descriptive & inferential analyses, structural equation modelling, partial least squares, item response theory)

Research supervision fields

- STEM Education
- Affective Factors in Learning Science
- Argumentative Inquiry Teaching
- Socio-scientific Instruction
- Educational Psychology

Funded research

Competitive grants

Year	Grants	Funding
2012-2013	National Sun Yat-sen University Scholarship for Outstanding Doctoral Students	NTD 240,000 (AUD 11,500)

Publications

Book chapters

- 洪瑞兒、魯盈謙、王薪惠 (2020). 臺灣民眾對科學與科技相關議題興趣及幸福感之探討. 載於林煥祥 (主編), 2018 年臺灣公民科技素養概況 (19-33頁).
- Hong, Z. R., Lu Y. Y., & Wang, H. H. (2020). An investigation of Taiwanese citizens' well-being and interest in science and technology-related issues. In H. S. Lin (Ed.), *2018 Taiwan Citizen Science and Technology Literacy* (pp. 19-33).
- 王薪惠 (2020). 民眾的科學能力. 載於林煥祥 (主編), 2018 年臺灣公民科技素養概況 (115-134頁).
- Wang, H. H. (2020). Citizen's scientific competency. In H. S. Lin (Ed.), *2018 Taiwan Citizen Science and Technology Literacy* (pp. 115-134).
- 洪瑞兒、王薪惠、魯盈謙 (2017). 學生問卷分析結果. 載於余曉清、林煥祥 (主編), PISA 2015 台灣學生的表現 (201-285 頁). 新北市: 心理出版社. ISBN:978-986-191-776-4
- Hong, Z. R., Wang, H. H., Lu Y. Y. (2017). The results of student questionnaires. In H. C. She & H. S. Lin (Eds.), *Taiwan students' performance on PISA 2015* (pp. 201-285). Taipei: Psychological Publishing Co.

Articles

- 韓傳亭、洪瑞兒、林煥祥、魯盈謙、王薪惠、黃愛雅 (2020年6月已接受). 大學運動績優排球選手自我統合與幸福感之差異與相關研究. 教育科學研究期刊.
- Han, P. T., Hong, Z. R., Lin, H. S., Lu, Y. Y., Wang, H. H., & Huang, A. Y. (Accepted June 2020). Investigation of college outstanding volleyball players' ego identity and well-being. *Journal of Research in Education Sciences*.
- Wang, H. H., Hong, Z. R., Lin, H. S., & Tsai, C. Y. (2020). The relationships among adult sustainability attitudes, psychological well-being, nature relatedness, and interest in scientific issues. *Current Psychology*. doi:10.1007/s12144-020-00708-1
- Lu, Y. Y., Chen, H. T., Wang, H. H., Lawrenz, F., & Hong, Z. R. (2019). Investigating grade and gender differences in students' attitudes toward life and well-being. *Applied Research in Quality of Life*. doi:10.1007/s11482-019-09746-9
- 余典錡、魯盈謙、王薪惠 (2019). 閱讀動機與網路素養調查對大學通識課程之啟示. 通識學刊: 理念與實務, 7(2), 37-86.
- Yu, T. C., Lu, Y. Y., & Wang, H. H. (2019). An investigation of college students' internet literacy and reading motivation. *Journal of General Education: Concept & Practice*, 7(2), 37-86.
- Chen, H. T., Wang, H. H., Lu Y. Y., & Hong, Z. R. (2019). Bridging the gender gap of children's engagement in learning science and argumentation through a modified argument-driven inquiry. *International Journal of Science and Mathematics Education*, 17(4), 635-655. doi:10.1007/s10763-018-9896-9
- 王薪惠、林煥祥、洪瑞兒 (2018). 臺灣公民科技素養、科學興趣及科學參與之探討. 教育科學研究期刊, 63(4), 229-259. (TSSCI).
- Wang, H. H., Lin, H. S., & Hong, Z. R. (2018). Exploring Taiwan citizens' scientific literacy, interest in, and engagement in learning science. *Journal of Research in Education Sciences*, 63(4), 229-259.

- Wang, H. H., Hong, Z. R., Liu, S. C., & Lin, H. S. (2018). The impact of socio-scientific issue discussions on student environmentalism. *EURASIA Journal of Mathematics, Science and Technology Education*, 14(12), em1624. [doi:10.29333/ejmste/95134](https://doi.org/10.29333/ejmste/95134)
- Wang, H. H., Chen, H. T., Lin, H. S., Huang, Y. N., & Hong, Z. R. (2017). Longitudinal study of a cooperation-driven, socio-scientific issue intervention on promoting students' critical thinking and self-regulation in learning science. *International Journal of Science Education*, 39(15), 2002-2026. [doi:10.1080/09500693.2017.1357087](https://doi.org/10.1080/09500693.2017.1357087)
- Wang, H. H., Chen, H. T., Lin, H. S., & Hong, Z. R. (2017). The effects of college students' positive thinking, learning motivation and self-regulation through a self-reflection intervention in Taiwan. *Higher Education Research & Development*, 36(1), 201-216. [doi:10.1080/07294360.2016.1176999](https://doi.org/10.1080/07294360.2016.1176999)
- Chen, H. T., Wang, H. H., Lu, Y. Y., Lin, H. S., & Hong, Z. R. (2016). Using a modified argument-driven inquiry to promote elementary school students' engagement in learning science and argumentation. *International Journal of Science Education*, 38(2), 170-191. [doi:10.1080/09500693.2015.1134849](https://doi.org/10.1080/09500693.2015.1134849)
- Wang, H. H., Chen, H. T., Yore, L., & Hong, Z. R. (2015). An investigation of Taiwanese college students' personality traits and self-worth. *Journal of Happiness Studies*, 16(6), 1593-1613. [doi:10.1007/s10902-014-9579-3](https://doi.org/10.1007/s10902-014-9579-3)
- Chen, H. T., Wang, H. H., Lin, H. S., Lawrenz, F., & Hong, Z. R. (2014). Longitudinal study of an after-school, inquiry-based science intervention on low-achieving children's affective perceptions of learning science. *International Journal of Science Education*, 36(13), 2133-2156. [doi:10.1080/09500693.2014.910630](https://doi.org/10.1080/09500693.2014.910630)
- Hong, Z. R., Lin, H. S., Chen, H. T., Wang, H. H., & Lin, C. J. (2014). The effects of aesthetic science activities on improving at-risk families children's anxiety about learning science and positive thinking. *International Journal of Science Education*, 36(2), 216-243. [doi:10.1080/09500693.2012.758394](https://doi.org/10.1080/09500693.2012.758394)
- Hong, Z. R., Lin, H. S., Wang, H. H., Chen, H. T., & Yang, K. K. (2013). Promoting and scaffolding elementary school students' attitudes toward science and argumentation through a science and society intervention. *International Journal of Science Education*, 35(10), 1625-1648. [doi:10.1080/09500693.2012.734935](https://doi.org/10.1080/09500693.2012.734935)
- Hong, Z. R., Lin, H. S., Wang, H. H., Chen, H. T., & Yu, T. C. (2012). The effects of functional group counseling on inspiring low achieving students' self-worth and self-efficacy in Taiwan. *International Journal of Psychology*, 47(3), 179-191. [doi:10.1080/00207594.2011.590494](https://doi.org/10.1080/00207594.2011.590494)
- Lin, H. S., Hong, Z. R., Wang, H. H., & Lee, S. T. (2011). Using reflective peer assessment to promote students' conceptual understanding through asynchronous discussions. *Educational Technology & Society*, 14(3), 178-189.

Scholarly contributions

Invited reviewer

- International Journal of Science and Mathematics Education (SSCI Journal).
- Taiwan Journal of General Education.
- 2019 Annual International Conference in USA.
- 2018 TERA-GACC Conference in Taiwan.
- 2017 TERA Conference in Taiwan.

Memberships

- Honorary member of the Phi Tau Phi Scholastic Honor Society of the Republic of China (2016).

Awards

- Outstanding Teaching Assistants (2014) for subject Implication and Implementation of Psychology, National Sun Yat-sen University.
- Doctoral Scholarship (2012) for Full-time High-achieving Student in College of Social Science, National Sun Yat-sen University, Taiwan.
- 5x Student's Journal Publication Award (2012-2016) in College of Social Science, National Sun Yat-sen University, Taiwan.
- Outstanding Teaching Assistants (2009) for subject The Application of Scientific Inquiry, National Sun Yat-sen University.

Service internal

Research

- Cooperative Researcher / 2017 school year NSYSU international partnership project on pre-service student-teacher educational apprenticeship in NIU and Sycamore High School / Ministry of Education, R.O.C. / Dec 2017-Jun 2018.

Academic events

- 2018 Survey of Scientific Literacy in Taiwan.
- 2018 Teacher Professional Development Workshop, Matsu Senior High School.
- 2017 Teacher Professional Development Workshop, Kinmen Jin-cheng Junior High School.
- 2017 Teacher Professional Development Workshop, Kaohsiung Municipal Baolai Junior High School.
- International Journal of Science and Mathematics Education Editorial Board Meeting & Workshop, September 10-12, 2012, October 21-22, 2013, October 21-23, 2014, October 3-5, 2015, October 27-29, 2016, November 16-18, 2017, and October 11-12, 2018.
- Press Conference on Contextualized Science Assessment Network, January 23, 2017.

Speaker

- *Citizens' Scientific Competency*, 2019 Symposium on Taiwan Citizens' Scientific Literacy in 2018, Nov 15, 2019.
- *Inquiry and Practice*, Inquiry and Practice Workshop, Guoguang Laboratory School, NSYSU, December 28, 2017.
- *The Essentials of Writing Academic Paper*, Teacher Professional Development Workshop, Guoguang Laboratory School, NSYSU, November 30, 2017.
- *Multiple Assessment*, Teacher Certification Examination Workshop, NSYSU, October 20, 2017.
- *Guiding an Independent Study and Recognizing Research Methods*, Teacher Professional Development Workshop, Guoguang Laboratory School, NSYSU, September 22, 2017.
- *Be a Happy and Excellent TA*, Training Workshop for Teaching Assistants, Shu-Te University, March 27, 2010.
- *My TA Experience*, Workshop for Teaching Assistants, National Sun Yat-sen University, September 26, 2009.

Service external

Research

- Cooperative Researcher / 2017 popular science in Kaohsiung / Ministry of Science and Technology, R.O.C. / Sep 2017-Jul 2018.
- Coder of the Programme for International Student Assessment (PISA) on reading literacy in Taiwan (2015 field trial PISA and 2015 PISA).

Academic events

- *Conference on Research Outcomes of the Ministry of Science and Technology Research Project in Science Education*, November 18-19, 2016.

Invited Speaker

- *Assessment of Social Literacy*, Hengchun Junior High School, Jun 3, 2019.
- *Inquiry-based activity: Quick Freezing Juice*, Scientific Literacy Curriculum, Instruction and Assessment Workshop, National Matsu Senior High School, June 2, 2018.
- *Science curriculum and implementation*, Creating the Ideal Classroom with Gender Workshop, May 20, 2018.
- *Kitchen Science*, Science Teacher Professional Development on Inquiry Workshop, Confucian Private Secondary School, Malaysia, November 4, 2017.
- *Argumentation on Socioscientific Issues*, Teacher Professional Development in Rural Areas Workshop, Tainan, Kaohsiung, and Pingtung, June 15, 2017.
- *Socioscientific Inquiry Activity*, Argument-Driven Inquiry Teaching Workshop, for Tainan High School teachers, May 15, 2017.
- *Inquiry course: Quick Freezing Juice*, Science and Reading Inquiry and Teacher Professional Development Workshop, Kinmen Jin-cheng Junior High School, Taiwan, June 8, 2017.
- *Magical Ink Pen*, Literacy Instruction and Assessment Workshop, for principals of Kaohsiung Primary and Secondary Schools, March 24, 2017.
- *Explore the Dangers of Salt to the Environment Through Quick Freezing Juice*, Environmental Education for Sustainable Development, for science gifted students in Kaohsiung, February 8, 2017.
- *Quick Freezing Juice*, Argument-Driven Inquiry and Teacher Professional Development Workshop, Kaohsiung Municipal Baolai Junior High School, June 30, 2016.
- *Inquiry Activity*, Education Seminar for Foreign and Mainland Spouse, for students and parents in Kaohsiung, May 21, 2016.