INNOVATION TO IMPROVE UNDERGRADUATE STUDENTS' ENGAGEMENT AND EXPERTISE IN RESEARCH

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01 Introduction

- Research method courses are often perceived as the least exhilarating by social science undergraduates, particularly social work, primarily owing to the traditional research pedagogy.[1,2]
- Given that, the study revamped the introductory research method (SOWK2015 and SOWK2143) by bridging theoretical knowledge with real-world applications through innovative curriculums:
  - Experiential learning
  - Partnership with local NGOs & the expert from the University of Wollongong
  - Service learning
  - International education

02 Objectives

- To assess the effectiveness of redesigned teaching innovations in enhancing students' engagement and expertise in research
- To explore the mechanisms of change in the undergraduate research course

03 Methodology

Method
- A sequential mixed-methods research paradigm (QUAN > qual)

Participants
- Social work and social sciences students who enrolled in the SOWK2015/SOWK2143 Research on Social Work Practice I (total n = 53)

Quantitative
- Pre-test on 5th February, 2025 (n = 38)
- Post-test on 2ed & 9th April, 2025 (n = 31)
- Match cases for paired analysis (n = 29)

Qualitative
- Semi-structured interviews for stakeholders (n = 3), but failed recruitment for students under incentives
- Student reflections (n =22)

04 Measures

- Research self-efficacy (9 items)[3]
- Global Competency (35 items)[4]

Career development:
1. The perceived amount of use of research in their future career (1 item)[5]
2. Career development self-efficacy (5 items)[6] [post]

05 Results

Table 1.

Comparison of students' reserach self-efficacy in pre- and post-programme (n=29)							
Pre_Mean (SD)	Post_Mean (SD)	Difference	95% CI of the Difference	t	df	Cohen's d	Sig. (2-tailed)
54.95 (13.65)	63.66 (16.93)	-8.7	-13.96, -3.45	-3.39	28	-0.63	**0.002**

Table 2.

Comparison of global competency in pre- and post-programme (n=29)							
Pre_Mean (SD)	Post_Mean (SD)	Difference	95% CI of the Difference	t	df	Cohen's d	Sig. (2-tailed)
3.57 (0.48)	3.72 (0.60)	-0.16	-0.29, -0.03	-2.45	28	-0.46	**0.021**

Table 3.

Compared outcomes: use of statistics for future employment (n=29)							
Pre_Mean (SD)	Post_Mean (SD)	Difference	95% CI of the Difference	t	df	Cohen's d	Sig. (2-tailed)
4.52 (1.30)	4.14 (1.64)	0.38	-0.12, 0.88	1.55	28	0.287	0.133

Table 4.

Career development self-efficacy in the post-programme (n=31) [Post]	Assess and modify my career goals according to changes in external situation	Explore different careers within areas of my interest	Understand my abilities so as to help myself choose a career	Choose university courses wisely to prepare myself for my future career	Constantly improve my study and career plan to work toward my career goals
Mean (SD)	3.26 (0.73)	3.48 (0.81)	**3.61 (0.76)**	**3.61 (0.67)**	3.39 (0.67)
Mode	3	4	4	4	4
Skewness	-0.45	-1.15	-0.17	-0.8	-0.64
SE of Skewness	0.42	0.42	0.42	0.42	0.42

Qualitative

Semi-structured interviews

Development of International Perspectives
- Constraints on developing the international perspectives (e.g., time)
- Fostered global viewpoints and boarder understanding (e.g., global knowledge, interconnectedness, cultural otherness)

Building Self-efficacy in Research
- Positive environment in experiential learning
- Confidence in research skills

Future Career Development
- Significance of research in effective social service delivery
- Research skills as a cornerstone for professional advancement
- Career visions in social work

Recommendations
- Increased guest lectures and expanded mentorship to share "*story*" that ignite "*curiosity*"
- More proactive pedagogical engagement (e.g., polling before older adults sharing)

Student reflections

Preliminary findings revealed students:
1. Transformative impacts in their social work career
2. Cultivated the interest and competency in research
3. Positive experiential learning from courseworks

This project also deepened my understanding of how social work interventions must be evidence-based and culturally appropriate. ~ F010

This has been an enjoyable and memorable experience with lessons and teachings that I will carry with me throughout my career. ~ F023

Although I am sure that I will not pursue for a research postgraduate degree, what I have learnt through this project will definitely help me in future job career as it improves my logical reasoning and helps me to better identify issues in the society and finding methods to resolve different social issues ahead. ~ F001

06 Conclusion

This study provides the foundation and knowledge for designing the course curriculum that proactively engage with social science undergraduates in the research method, which is paramount of supporting and facilitaing our students' academic and professional development.

References
1. Raja, F. U., & Khan, N. (2018). Comparing Traditional Teaching Method and Experiential Teaching Method using Experimental Research. *Journal of Education and Educational Development, 5*(2), 276. https://doi.org/10.22555/joeed.v5i2.1816
2. Gredig, D., Heinsch, M., & Bartelsen-Raemy, A. (2022). Exploring social work students' attitudes toward research courses: comparing students in Australia and Switzerland. *Social Work Education, 41*(4), 451–471. https://doi-org.eproxy.lib.hku.hk/10.1080/02615479.2020.1849086
3. Unrau, Y. A., & Grinnell, R. M. (2005). The Impact of Social Work Research Courses on Research Self-Efficacy for Social Work Students. Social Work Education, 24(6), 639-651. https://doi.org/10.1080/02615470500185069
4. Liu, Y., Yin, Y., & Wu, R. (2020). Measuring graduate students' global competence: Instrument development and an empirical study with a Chinese sample. *Studies in Educational Evaluation, 67*, 1-13. https://doi.org/10.1016/j.stueduc.2020.100915
5. Yoon, E., & Lee, J. (2022). Attitudes toward Learning Statistics among Social Work Students: Predictors for Future Professional Use of Statistics. *Journal of Teaching in Social Work, 42*(1), 65–81. https://doi.org/10.1080/08841233.2021.2014018
6. Wong, L. P. W., Yuen, M., Zhang, J., & Ho, E. Y. F. (2023). Assessing life skills development self-efficacy: a validation study in Hong Kong, China. International Journal for Educational and Vocational Guidance. https://doi.org/10.1007/s10775-023-09605-y.

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