NCRM Bitesize Lessons for Teaching Social Science Research Methods



1: Active Learning

What is active learning?

Active learning is an approach that values learning by doing. It involves a mix of doing and reflecting and may be referred to as 'hands on learning'. It requires activities in which learners do things in practical and thoughtful ways so that they actively construct knowledge and build skills.

The underpinning ideas include:

- To learn something we need to experience it concretely and actively, not just abstractly and reflectively
- Applying knowledge in active ways facilitates understanding as well as competence
- The more we do, the more we learn and retain and the more we feel ownership of the learning and appreciate it.

Using active learning in research methods education

In research methods education/training active learning approaches are used alongside experiential learning¹, collaborative learning², problem-based learning³, student-centred learning³, and reflective learning approaches⁴.

Methods trainers and teachers, like teachers in many fields recognise that being 'hands on' enables learners to appreciate and engage with the learning challenge and that it can enhance the pleasure and accessibility of learning methods when the concepts are hard.

The hands-on work of active learning is good for teaching core concepts, using e.g. case studies, practical activities, exercises, group discussions, and simulations. It supports methods learners to gain experience and confidence. Being hands-on consolidates and expands knowledge and its application

in practice. Students become active agents in identifying methodological problems and revising and justifying methods where analytical thinking and informed decision-making are applied.

Active learning is common in research methods teaching and learning in person, in hybrid contexts and in toolkits where learners can work on activities at their own pace. Teachers carefully intersperse being 'hands on' with 'hands off' reading, thinking and reflection².

Active learning in research methods education is particularly valued for preparing students for their roles in conducting research and using data analysis software.

What the pedagogic research literature tells us

Active learning supports methods learners to:

- take measured risks, applying and reflecting on their learning⁵
- know 'what concepts and tools are available, when and where to apply them, and what the limitations may be'6
- build practical knowledge using a conceptual framework based on their own experiences⁷
- apply core concepts in exercises and simulations⁸
- consolidate and expand their knowledge and apply it in practice - when learning interviewing¹ or mixed methods⁵
- identify problems, revise and justify methods¹
- gain experience and confidence².

In terms of learning theory, active learning is a good fit with critical pedagogy¹, constructivism^{2,3}, cognitivism³, and sociocultural theories of learning⁹.

Applying active learning

Research methods teachers and trainers apply active learning in many ways, including in the form of:

- learning logs with reflexive exercises⁵
- research journal clubs⁶
- games and simulations^{8,12}
- playful tasks¹⁰
- carefully staged practical tasks¹¹, exercises¹¹, discussions, role plays and group work^{6,12}

Useful links

Case Studies in Research Methods Pedagogy - Teaching computational statistics through active learning

The NCRM quick start guide to Three approaches used in research methods teaching

References

- Hsiung, P.-C. 2016. Lives & legacies: A digital courseware for the teaching and learning of qualitative interviewing, *Qualitative Inquiry*, 22(2), 132–139.
- Bourque, C.J., & Bourdon, S. 2017.
 Multidisciplinary graduate training in social research methodology and computer-assisted qualitative data analysis: A hands-on/ hands-off course. *Journal of Further and Higher Education*, 41(4), 475–491.
- 3. Dyrhauge, H. 2014. Teaching qualitative methods in social science: A problem-based learning. *Journal of Contemporary European Research*, 10(4), 442-455.
- 4. Orange, A. 2016. Encouraging reflective practices in doctoral students through research journals. *The Qualitative Report*, 21(12), 2176–2190.

- 5. Hesse-Biber, S. 2015. The problems and prospects in the teaching of mixed methods research. *International Journal of Social Research Methodology*, 18(5), 463–477.
- 6. Bowers, A.J. 2017. Quantitative research methods training in education leadership and administration preparation programs as disciplined inquiry for building school improvement capacity. *Journal of Research on Leadership Education*, 12(1), 72–96.
- 7. Ivankova, N.V., & Plano Clark, V.L. 2018.
 Teaching mixed methods research: Using a socio-ecological framework as a pedagogical approach for addressing the complexity of the field. International Journal of Social Research Methodology, 21(4), 409–424.
- 8. Mallette, L., & Saldaña, J. 2017. Teaching qualitative data analysis through gaming. *Qualitative Inquiry*, 25(9–10), 1085–1090.
- 9. Saeed, M.A., & Al Qunayeer, H.A. 2021. Can we engage postgraduates in active research methodology learning? Challenges, strategies and evaluation of learning, *International Journal of Research & Method in Education*, 44(1), 3–19.
- 10. King, P. 2018. An evaluation of using playful and non-playful tasks when teaching research methods in adult higher education. *Reflective Practice*, 19(5), 666–677.
- 11. Corti, L. & Van den Eynden, V. 2015. Learning to manage and share data: Jump-starting the research methods curriculum. *International Journal of Social Research Methodology*, 18(5), 545–559.
- 12. Boström, P.K. 2019. In search of themes keys to teaching qualitative analysis in Higher Education. *The Qualitative Report*, 24(5), 1001–1011.

This resource is underpinned by a systematic review: Nind, M. & Katramadou, A. (2023) Lessons for teaching social science research methods in higher education: Synthesis of the literature 2014-2020. *British Journal of Educational Studies*, 71(3), 241-266.

National Centre for Research Methods Social Sciences University of Southampton Southampton, SO17 1BJ United Kingdom Web: www.ncrm.ac.uk
Email: info@ncrm.ac.uk
Tel: +44 23 8059 4539
Twitter: @NCRMUK