

Upstream from Impact: Frameworks for Improving Research Quality
2017 NSF EEC Grantees Conference

Resource Guide

Interpretive

Walther, J., Sochacka, N. W., & Kellam, N. N. (2013). Quality in interpretive engineering education research: Reflections on an example study. *Journal of Engineering Education, 102*(4), 626-659. doi: 10.1002/jee.20029

Walther, J., Sochacka, N. W., Benson, L. C., Bumbaco, A. E., Kellam, N., Pawley, A. L., & Phillips, C. M. L. (2017). Qualitative research quality: A collaborative inquiry across multiple methodological perspectives. *Journal of Engineering Education, 106*(3), 398-430. doi: 10.1002/jee.20170

Walther, J., Pawley, A. L., & Sochacka, N. W. (2015). Exploring ethical validation as a key consideration in interpretive research quality. Paper presented at the ASEE Annual Conference and Exposition, Seattle, WA.

Quantitative

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. American Educational Research Association.

Cohen, L., Manion, L., & Morrison, K. (2013). Validity and Reliability. In *Research Methods in Education*. Routledge.

Douglas, K. A., & Purzer, Ş. (2015). Validity: Meaning and relevancy in assessment for engineering education research. *Journal of Engineering Education, 104*(2), 108-118.

DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Sage publications.

Mixed Methods

Creswell, J. W., Klassen, A. C., Plano Clark, V. A., & Clegg Smith, K. (2011). *Best Practices for Mixed Methods Research in the Health Sciences*. National Institutes of Health (NIH) Office of Behavioral and Social Sciences Research (OBSSR).

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research* (Second Edition). Sage Publishing.

O’Cathain, A., Murphy, E., & Nicholl, J. (2008). The quality of mixed methods studies in health services research. *Journal of Health Services Research Policy, 13*(2), 92-98.

Schiffedercker, K. D., & Reed, V. A. (2009). Using mixed methods research in medical education: Basic guidelines for researchers. *Medical Education, 43*, 637-644.