

**How transparent are quantitative studies in contemporary technology education research?
Instrument development and analysis**

Abstract

Transparency in the reporting of empirical studies is foundational to a credible knowledge base. Higher levels of transparency, in addition to clarity in writing, also make research more accessible to a diverse readership. Previous research reviewed how transparently reported qualitative, interview-based, studies were in contemporary technology education research (Buckley et al. in Int J Technol Des Educ, 2021a. <https://doi.org/10.1007/s10798-021-09695-1>). The results illustrated that no article was fully transparent and that authors tended to be less transparent in some areas, such as the management of power imbalances and a saturation point, than in others, such as the methodology adopted and research setting. This article presents a similar study, however the focus of the investigation was on contemporary quantitative technology education research. An analysis of 46 articles revealed again that no article was fully transparent and that authors tended to be more transparent in some areas than others. Interestingly, the areas where authors or quantitative research tended to be more or less transparent were similar to the areas in which authors of qualitative research tended to be more or less transparent. These results have use in supporting researchers in the clear and transparent reporting of the empirical work and could be useful in the development of guides or support material for academic writing.

Keywords: