

Editorial: Volume 30 Issue 5

In this editorial we consider some of the strengths of case study research in educational technology and some of the challenges it presents in reporting. Case study approaches are popular in educational technology research, as in education more broadly. This is in part because of the widespread acknowledgement that context plays such an important role in educational experiences. The versatility of the case approach allows researchers to explore the impact of a ‘naturally occurring’ phenomenon, such as the introduction of a new institution-wide technology tool or policy, or to investigate a technology-supported learning experience designed specifically for the purposes of the research. The multiple data sources associated with case study research can lead to a comprehensive dataset enabling greater analytic depth and richness than other approaches. Some of the best case studies in educational technology draw on observations, interviews, and student work products to explore relationships between perceptions, behaviours, and outcomes. Although case studies lack the kind of generalisability we associate with high quality experimental and survey research, they can be used for theory testing and theory building (Eisenhardt, 2002; Yin, 2009). The case study approach also takes many forms, including nested designs and mixed methods, and has much in common with formative research (Reigeluth, 1999) and design-based approaches (McKenney & Reeves, 2014).

Despite these strengths, case studies present a number of key challenges for researchers when reporting their work, particularly in academic journals. This can result in low quality manuscripts that do not find their way to publication. We highlight four key challenges that researchers must be mindful of:

1. Connecting to a wider conversation in the field

Many manuscripts fail to connect the case study to wider research questions or problems. A solid literature review can perform some of this function, but the theoretical or practical significance of the research must also be clearly explained. The absence of these connections is particularly noticeable in cases focused on particular initiatives in which authors have not positioned their research within the context of the ‘big picture’ problems of the field.

2. Relating to other cases

Case study authors often fail to relate their work to other case studies in a way that builds understanding of the impact of context. Many cases are one-off studies, with only limited use of collective or multiple case designs or replication by third-party researchers. This is perhaps due to the expense of case study research, but also a preference for innovation and difference. This limits the capacity of the field to build a connected knowledge base through case study research.

3. Presenting the case adequately

Presenting case data can be very difficult within word limits of many educational technology journals. Data must be richly represented, but also condensed. Quotes from participants should be carefully selected as indicative rather than comprehensive. Summary formats that give a sense of the depth and scope of the dataset are needed.

4. Explaining the context well

Despite its acknowledged importance in many studies, context is often poorly described or absent. This is despite being critical to the reading of the case. Many authors mention the context in the title, abstract or introduction, but provide no further account that would allow readers to understand important situational or cultural features. This challenge extends to other studies (e.g. surveys of particular populations) and needs careful thought from authors.

In sum, the case study approach is extremely valuable in educational technology for alerting us to important contextual factors, but the quality of reporting is often low. A clear conceptualisation of the research is needed from the outset, with researchers giving thought to how their study connects with the field and ultimately their future readers. Attention to addressing the above challenges will reduce the number of isolated studies and lead to the kinds of connections within the research base that can advance the field.

This issue of AJET starts with a paper by Winslett which asks the questions: “What counts as educational video? In a world where video is increasingly dominant, this paper provides a comprehensive review of

how video is – and has been – used in higher education. The second paper in this issue by Hwang, Huang, Shadiey, Wu and Chen investigates how mobile technologies can be used to support language learning and has some intriguing results. Huang, Liu, Chen Kinshuk and Wen provide a paper that presents an investigation of an innovative tool to support students' web-based problem-solving. Ladbroke's paper investigates the use and affordances of *Peerwise* as a tool for collaboration and building a community of practice. The next two papers in this issue consider technology adoption from different perspectives. Khalid and Nyvang explore the barriers to ICT adoption at various levels in rural Bangladesh, while Lee, Hsiao and Purnomo use the increasingly popular TAM model to empirically investigate the acceptance of technology in an Indonesian sample. Razak and Saeed's paper presents a qualitative study that investigated learning strategies and the development of a community of practice among foreign language learners. The issue concludes with an empirical paper that considers how the presentation style of e-textbooks impacts on students' learning processes and outcomes.

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