BJET 50th Anniversary Special Section:
British Journal of Educational Technology: Editorial

**Developing Critical and Theoretical Approaches to
Educational Technology Research and Practice**

Editor: Professor Jill Jameson
University of Greenwich
j.jameson@greenwich.ac.uk

ABSTRACT

Considerable prior literature reflecting on the evolution of the field of educational technology by numerous research experts has considered the extent of criticality within the field and found it somewhat wanting (Bulfin, Johnson & Bigum, 2015; Haßler, Major & Hennessy, 2016; Jameson, 2013; Latchem, 2014; Oliver, 2011, 2016; Selwyn, 2007, 2011, 2015). Challenges include considerations of whether research findings (OECD, 2015)indicating worrying findings about the negative influence of excessive computer usage are really being considered and taken up in research, policy and practice in the field. This 50th Anniversary Special Section called for submissions to consider the extent to which Selwyn and others are justified in asserting that much research in the field has engaged in 'previous decades of technological "boosterism," hyperbole, and outright evangelism' rather than genuine searching inquiry (Selwyn, 2015). The section considers the need for greater critical (Bulfin et al., 2015), challenging and questioning 'e-leadership' of the field by those who are practising within it (Jameson, 2015). Prior evaluation of theoretical perspectives such as Activity Theory and theories on e-learning, relate to this (Isssroff and Scanlon, 2002; Nichols, 2003). The paper considers the extent to which the evidence emerging from research findings in educational technology is really engaging in a critical way with important global issues (Selwyn, 2015) to effect a beneficial influence on education policy, theory and practice, including, particularly, outcomes for learners. To what extent are educational technology researchers really leading, critiquing and shaping the field?

EDITORIAL

This 50th Anniversary *BJET* special section on *Developing Critical and Theoretical Approaches to Educational Technology Research and Practice* aims to generate new responses to *BJET* Editorial Team reflections in 2017-19 on the need for greater critical evaluation and theoretical development within the journal and indeed the field of educational technology research. These reflections are linked not only with editorials, reviews and articles over those years, but also with two seminars on *Critical, Theoretical (2017) and Methodological (2018) Approaches to EdTech Research* co-organised by BJET with the British Educational Research Association (BERA) Educational Technology Special Interest Group and The Open University. In their 2017 seminar presentation, the Editors advised on the need for greater *Criticality in Reporting EdTech Research* in *BJET*, making "...a plea for (self-)critical examination of the contribution that research articles can make to the field", since "research reports need to move away from 'victory narratives' that assume technology has a positive 'impact' and provide no empirical evidence for the added value of specific technologies." (*BJET* Editorial, 49:1).

The special section responds to that call, building on extensive meta-reflections and reviews of the field and journal in this birthday anniversary year (Bodily, Leary & West, 2019; Bond, Zawacki-Richter & Nichols, 2019; Crook, 2019). It also responds to earlier *BJET* special issues, such as Markauskaite & Reimann's 2014 Editorial: "... e-research is still in a very early stage of its development... We hope that such discussions will continue in other issues of the journal." (*BJET* Editorial, 45:3). Mindful of calls for deeper disciplinary alignment, macro- and meso-level empirical and conceptual studies, theoretical, methodological and more meaningful research-practice engagement (Crook, 2019), *BJET* sent out an open-ended invitation for new submissions, in addition to inviting expert papers. Rather than concentrating on critical and theoretical perspectives that relate only to one approach or part of the field, the section adopted a broad granularity of focus on criticality and theoretical perspectives, including emerging perspectives on ethics and scholarship. This seemed necessary while meta-field reviews and related new sub-fields are in rapid formation. Hence this special section emphasises new *developments* in critical and theoretical approaches and *links between research and practice,* in aiming to contribute to the ever-renewing high quality, scholarship, content and rigour of the journal.

Research analyses on critical and theoretical approaches to educational technology have expanded in the past several years, building on earlier critical thought within the field of technology by theorists such as Weizenbaum (1976), Searle (1980), Turkle (1984) and Postman (1992). Selwyn (2007; 2011; 2016), Friesen (2009), Czerniewicz, (2010), Bayne (2015), Hassler, Major and Hennessy (2015), Hall (2017), Oliver (2017), Ferreira et al., (2017), Veletsianos and Moe (2017), Castañeda and Selwyn (2018), Bartolomé, Castañeda and Adell (2018) and Crook (2019) are amongst those making key contributions to the challenging, increasingly vital debate in this area, not only in seminars and conferences (BJET/OU/BERA EdTech SIG, 2017, 2018; AERA, 2018; Monash, 2019) but in special journal issues relating to e-Research (*BJET*, 2014, Guest Eds. Markauskaite and Reimann) and in higher education (*Int Jnl Ed Tech in HE*, 2018, Eds. Castañeda and Selwyn), in books (Bulfin, Johnson and Bigum, 2015; Selwyn, 2015) and on Twitter (#CriticalEdTech, #AERA2018, #NotAllEdTech).

Considerable prior literature reflecting on the above evolution by research experts has analysed the extent of criticality, scholarship and educational and other disciplinary theory within the field and found it somewhat wanting (Bulfin, Johnson & Bigum, 2015; Crook, 2019; Haßler, Major & Hennessy,

2016; Jameson, 2013; Latchem, 2014; Oliver, 2011, 2016; Selwyn, 2007, 2011, 2015). Challenges include, for example, whether macro level research findings (e.g. OECD, 2015) about negative aspects of computer usage are really being considered and taken up in research, policy and practice. The special section therefore called for submissions to consider in a measured way the extent to which Selwyn and others are justified in asserting that much research in the field has engaged in 'previous decades of technological "boosterism," hyperbole, and outright evangelism' rather than genuine searching inquiry (Selwyn, 2015). The section invited debate on whether there was a need for greater criticality (Bulfin et al., 2015), and more challenging, questioning macro and meso level digital leadership of the field by those who are practising within it (Jameson, 2015). Prior evaluation of theoretical perspectives such as activity theory and theories on e-learning, for example, relate to this (Isssroff and Scanlon, 2002; Nichols, 2003). The section therefore opens up consideration of the extent to which the evidence emerging from research findings in educational technology is really engaging in an informed, deeper way with important global issues (Selwyn, 2015) and educational studies (Crook, 2019) to effect a beneficial influence on education policy, theory and practice, including, particularly, outcomes for learners. To what extent are educational technology researchers really leading, critiquing and shaping the field? This section aims to build on that accelerating momentum of open-minded questioning and rigorous critique encouraged by the experts above, in seeking to advance the field.

Some aspects of the above growing debate relate to sociological, socio-cultural, ideological and ethical issues, while others focus on theoretical, methodological and epistemological factors. Emerging research engagement in this debate has stimulated new thinking amongst educational technology researchers in various forms, with reference to digital learning, technology enhanced learning, learning analytics, social media, pedagogy, artificial intelligence, machine learning, open educational resources, educational studies, post-humanist and complexity theories and sociotechnical networking/ materiality. However, awareness of new possibilities regarding a 'critical', more skeptical trend regarding atheoretical relatively data-blind techno-deterministic micro level evangelism is still arguably nascent in the wider Ed Tech community of researchers and practitioners. There is, therefore, arguably a need to investigate, expand and problematise this debate, more widely inviting contributions to it, without taking anything for granted or prematurely shutting down debate.

Around fifty expressions of interest in contributing to the special section were received from researchers in numerous countries by the Guest Editor, from which 29 articles were submitted, and nine papers finally selected for publication, following a highly demanding single blind reviewing process. The articles published in the special section comprise the following:

- Where is the 'theory' within the field of educational technology research?
- Technology enhanced learning: rethinking the term, the concept and its theoretical background
- Social scholarship revisited: Changing scholarly practices in the age of social media
- A Posthumanist Critique of Flexible Online Learning and its "Anytime Anyplace" Claims
- Ethics in educational technology research: informing participants on data sharing risks
- Technology-Mediated Learning Theory
- Integrating Games as a Means to Develop e-learning: Insights from a Psychological Perspective
- The creation of digital artefacts as a mechanism to engage students in studying literature
- Educational Technology Research Trends in Turkey from a Critical Perspective: An Analysis of Postgraduate Theses

Buoyant interest in this special section was demonstrated by numerous researchers: other articles of potentially high quality were regrettably unable to make the deadline. Further opportunities for articles with this focus are therefore highly recommended. It has been a great privilege and pleasure to have the opportunity of working on this special section in contributing to the 50th Anniversary BJET

Birthday Celebrations and to the advancement of scholarship, research and practitioner developments in the journal and the field.

REFERENCES

Bartolomé, A., Castañeda, L. and Adell, J. (2018). Personalisation in educational technology: the absence of underlying pedagogies. *International Journal of Educational Technology in Higher Education*, 15(1), 14.

Bayne, S. (2015). Teacherbot: interventions in automated teaching, *Teaching in Higher Education*, 20:4, 455-467.

Bodily, R., Leary, H., & West, R. (2019). Research trends in instructional design and technology journals. *British Journal of Educational Technology*, 50(1), 62–77. https://doi.org/10.1111/bjet.12712

Bond, M., Zawacki-Richter, O., & Nichols, M. (2019). Revisiting five decades of educational technology research: A content and authorship analysis of the British Journal of Educational Technology. *British Journal of Educational Technology,* 50(1), 12–63. https://doi.org/10.1111/bjet.12730

Bulfin, S., Johnson, N. F., & Bigum, C. (2015). Critical perspectives on technology and education. New York: Palgrave Macmillan.

Castañeda, L. and Selwyn, N. (2018). More than tools? Making sense of the ongoing digitizations of higher education, *International Journal of Educational Technology in Higher Education,* 15:22 https://www.springeropen.com/collections/criticaledtech

Crook, C. (2019). The "British" voice of educational technology research: 50th birthday reflection. *British Journal of Educational Technology*, 50: (2), 485-489. https://doi:10.1111/bjet.12757

Czerniewicz, L. (2010). Educational technology – mapping the terrain with Bernstein as cartographer. *Journal of Computer Assisted Learning*, 26: 523-534.

Friesen N. (2009). *Re-Thinking e-Learning Research: Foundations, Methods and Practices.* New York: Peter Lang.

Haßler, B., Major, L., & Hennessy, S. (2016). Tablet use in schools: A critical review of the evidence for learning outcomes. *Journal of Computer Assisted Learning*, 32(2), 139-156.

Hennessy, S., Girvan, C., Mavrikis, M., Price, S. and Winters, N. (2018). Editorial *British Journal of Educational Technology*, 49: 3-5. https://doi:10.1111/bjet.12598

Hennessy, S., Mavrikis, M., Girvan, C., Price, S. and Winters, N. (2019). BJET Editorial for the 50th Anniversary Volume in 2019: Looking back, reaching forward. *British Journal of Educational Technology*, 50: (1), 5-11. https://doi:10.1111/bjet.12731

Isssroff, K., & Scanlon, E. (2002). Using technology in higher education: An activity theory perspective. *Journal of Computer Assisted Learning*, 18(1), 77-83.

Jameson, J. (2013). e-Leadership in higher education: The fifth "age" of educational technology research. *British Journal of Educational Technology (BJET)*, 44, (6): 889-915.

Latchem, C. (2014). BJET Editorial. *British Journal of Educational Technology (BJET),* 45: 3-11. doi:10.1111/bjet.12122

Nichols, M. (2003). A theory for eLearning. *Educational Technology & Society*, 6(2), 1-10.

Markauskaite, L. and Reimann, P. (2014). Introduction to the special issue: e-Research for education. *British Journal of Educational Technology*, 45: (3), 385-391. https://doi:10.1111/bjet.12154

OECD (2015). *Students, Computers and Learning: Making the Connection,* PISA*,* OECD Publishing, Paris, https://doi.org/10.1787/9789264239555-en

Oliver, M. (2011). Technological determinism in educational technology research: some alternative ways of thinking about the relationship between learning and technology. *Journal of Computer Assisted Learning*, 27(5), 373-384.

Oliver, M. (2016). What is technology. In Rushby, N.J. and Surry, D. W. (Eds.) *Wiley handbook of learning technology*, Chichester, UK. Chapter 3, pages 35-57.

Perrotta, C. and Williamson, B. (2018). The social life of Learning Analytics: cluster analysis and the 'performance' of algorithmic education, *Learning, Media and Technology*, 43:1, 3-16.

Postman, N. (1992). *Technopoly : The Surrender of Culture to Technology.* New York: Alfred A. Knopf.

Rogers, T. (2015). Critical realism and learning analytics research: epistemological implications of an ontological foundation. In *Proceedings of the Fifth International Conference on Learning Analytics and Knowledge* (pp. 223-230). New York: ACM.

Searle, J. R. (1980). Minds, brains, and programs. *Behavioral and Brain Sciences*, 3(3), 417-424.

Selwyn, N. (2007). The use of computer technology in university teaching and learning: a critical perspective. *Journal of computer assisted learning*, 23(2), 83-94.

Selwyn, N. (2011). In praise of pessimism—the need for negativity in educational technology. *British Journal of Educational Technology*, 42(5), 713-718.

Selwyn, N. (2015). Never believe the hype: questioning digital 'disruption'and other big ideas. Teaching and digital technologies: Big issues and critical questions, in Michael Henderson, Michael J. Henderson (Eds.) *Teaching and Digital Technologies: Big Issues and Critical Questions,* Cambridge, UK: Cambridge University Press, Chapter 15, pp. 182.

Selwyn, N. (2016). *Education and technology: Key issues and debates.* London: Bloomsbury Publishing.

Selwyn, N. (2018). *What is Digital Sociology?* New York: Polity Press.

Turkle, S. (1984). The second self: The human spirit in a computer culture. New York: Simon & Schuster.

Veletsianos, G. and Moe, R. (2017). The Rise of Educational Technology as a Sociocultural and Ideological Phenomenon. Monday, April 10, 2017: *Educause Article*: https://er.educause.edu/articles/2017/4/the-rise-of-educational-technology-as-a-sociocultural-and-ideological-phenomenon

Weizenbaum, J. (1976). *Computer power and human reason: From judgment to calculation.* San Francisco, California: W. H. Freeman & Co.