

**Reconstructing educational technology:
A critical analysis of online teaching and learning in the university**

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ABSTRACT

This thesis argues that it is only through understanding the multiple facets of technology that we are able to determine whether any particular manifestation of technology is educational. The reconstruction of educational technology in this thesis begins by building an understanding of the concept of experiential technology from the work of Heidegger, Dewey and Popper. This provides the conceptual architecture required to research the influence of educational technology in universities, which is interpreted in light of the wider theory of modernisation of society developed by Jürgen Habermas. The critical theory of technology formulated by Feenberg provides the methodological basis for reconstructing an understanding of technology and its impact on student learning.

A reconstructive analysis requires a number of situational critiques, which in this thesis review the advice given to academic staff about the use of educational technology. It is through a synthesis of these critiques that this thesis examines whether higher education is undergoing a process of colonisation that has reduced its potential to discuss the values of university teaching and learning. Online learning is taken as a case example that has been embraced by academics for dealing with increasing student numbers and the increasing importance of work-based learning. By shifting from the theory of technology to the practice of the Australian Technology University, this thesis demonstrates that one approach to coping with change in the higher education context is to incorporate business values, have increasingly flexible curricula and focus on workplace skills.

This thesis concludes that universities could go a lot further to incorporate the values of higher education into educational technology. In the case of the online learner this would support those distinctive characteristics that encourage a deep approach to learning. Following arguments put forward by Feenberg, it is argued that it is through student participation in technical design that we have the greatest chance of influencing technology's development to emphasize the values of higher education. As long as academics continue to control the technological decision-making, the delivery and management of information is likely to remain the most common use of online technology. The legitimacy of the academic's decision to use technology in their teaching increases where there is only a narrow gap between the values of the participants and the reality of their practice. Thus, to be morally just and provide students with the developmental opportunities that will serve them in their later professional and citizenship roles, the online classroom needs to ensure that it provides an autonomy-supporting environment.

CERTIFICATE OF AUTHORSHIP

I certify that this thesis is original and it has not been previously submitted for another degree. I also certify that the thesis has been written and researched by me. Any support and assistance that I received in the preparation and writing of this thesis has been acknowledged. In addition, I certify that the sources from the published literature have been acknowledged in the thesis.

Signature of the Candidate

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Undertaking part-time doctoral study consumes both your home and working life. At work the challenge of combining work and study was made all the more rewarding by the invaluable support of colleagues at the University of Sydney, University of Newcastle and the University of Technology, Sydney. At the Institute for Teaching and Learning at the University of Sydney Tai Peseta deserves a special mention for persevering with our many discussions on the merits of Habermas critical theory, and particularly for maintaining her sceptical position. It was Tai who taught me that it was "all about the love, brother". At the University of Technology, Sydney, Professor Shirley Alexander provided continuous support and arranged special doctoral leave from the Institute for Interactive Media and Learning at a decisive time in the development of the thesis.

A substantial component of this study is non-empirical work and it embodies several years of reflection on research studies on Habermas, higher education and technology. The work of Habermas is notoriously difficult and it was invaluable to have had critical colleagues on whom to try out my interpretations in order to clarify my thinking. Participants on the Spoons Habermas discussion list greatly assisted in

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