

**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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TABLE OF CONTENTS

ABSTRACT	ii
CERTIFICATE OF AUTHORSHIP	iii
ACKNOWLEDGMENTS	iv
LIST OF FIGURES	x
CHAPTER 1 INTRODUCTION	1
1.1 Research into Educational Technology	5
1.2 Social Theory and Education	9
1.3 Habermas' Reconstructive Methodology	12
1.3.1 The Critical Reconstructive Method	14
1.4 Applying Critical Theory to the Reconstruction of Technology	16
1.5 Critical Theory of Educational Technology	18
1.6 Researching Technology in Higher Education	21
CHAPTER 2 UNDERSTANDING TECHNOLOGY	28
2.1 Heidegger and the Question of Technology	32
2.1.1 Placing the World under Human Control	35
2.2 Dewey's Pragmatic Technology	36
2.2.1 Appropriate Technology	40
2.3 Popper's Evolutionary Technology	41
2.3.1 Technology and Popper's Three Worlds	45
2.3.1.1 Meta-Cognitive Technologies	48
2.4 The Experience Of Technology	49
2.5 Experiential Technology	54
CHAPTER 3 INQUIRING INTO THE COMMUNICATIVE ASPECTS OF TECHNOLOGY	56
3.1 Social Evolution as a Theory of Rationality	59
3.1.1 Colonisation of Lifeworld by System	61

3.2	Critical Theory of Technology	62
3.2.1	The Social Construction of Technology	65
3.2.1.1	The Delegation of Norms to Technology	66
3.2.1.2	The Collective Agreement on Technology	68
3.2.2	Technology as Steering Media	71
3.3	Analysing the Technical Codes of Technology	73
3.3.1	The Parallels between Instrumentalization and Discourse Ethics	75
3.4	The Double Definition of Communication Technology	78
3.5	Integrating Technology Studies with Critical Theory	81
 CHAPTER 4 THE EXPERIENCE OF TECHNOLOGY IN HIGHER EDUCATION		 83
4.1	Lecture Theatres for Information Transmission	89
4.1.1	Student Learning in Lecture Theatres	91
4.2	Tutorial Rooms for Student Discussion	92
4.2.1	Student Learning in Tutorial Rooms	94
4.3	Learning Online	95
4.3.1	WebCT	96
4.3.1.1	Managing the Students' Learning	97
4.3.1.2	Learning Through Writing Online	98
4.3.2	Student Learning on the Internet	101
4.4	Can the Internet Be a Classroom?	102
4.4.1	Learning Online Learning, Online	104
4.5	The Online Classroom	108
 CHAPTER 5 THE CULTURAL HORIZON OF STUDENT LEARNING		 111
5.1	The Theoretical Assumptions of Research in Higher Education	112
5.1.1	The Australian University Context	114
5.1.1.1	Presage in Student Characteristics	115
5.1.1.2	Process of Teaching	116
5.1.1.3	System Restructuring	117
5.2	The Relational View of Student Learning in Higher Education Research	118
5.2.1	The Philosophical Principles of Phenomenography	120

5.2.2	Phenomenography as Linguistic Behaviourism	122
5.3	An Information-processing Model of Student Learning	125
5.4	The Pragmatics of Learning	127
5.5	Post-metaphysical Student Identities	129
5.6	Moral Reasoning in Academic Technical Decisions	132
CHAPTER 6 COMMUNICATIVE APPROACHES TO CLASSROOM LEARNING		136
6.1	The Situated Nature of Learning	139
6.1.1	Situated Cognition	140
6.1.2	Cognitive Apprenticeship	142
6.1.3	Communities of Practice	144
6.2	Teaching as Mediating Learning	145
6.2.1	Laurillard's Conversational Model of Educational Technology	146
6.3	Pask's Conversation Theory	149
6.3.1	Controlling the Learning Process	150
6.4	Plans and Situated Actions	151
6.5	The Limits of Conversation Theory	154
6.6	Communication as a Model of Teaching	157
6.7	The Learning Environment Created by Interacting with Educational Technology	161
CHAPTER 7 TECHNICIZATION OF HIGHER EDUCATION		165
7.1	The Australian Technology University	168
7.1.1	Flexible Learning at the Australian Technology University	171
7.1.2	Online Learning	172
7.2	The Use of Educational Technology at the Australian Technology University	174
7.3	Course Management Software and Its Role in Flexible Learning	176
7.4	Legitimising Online Learning for Higher Education Teaching and Learning	179
7.5	Lessons from the Online Classroom	185

CHAPTER 8	ONLINE TEACHING AND LEARNING IN THE	
	UNIVERSITY	189
8.1	Beyond the Colonisation Thesis	193
8.1.1	Characteristics of a Successful Online Learner	197
8.2	Appropriate Rationalisation in Educational Technology	200
8.2.1	A Scholarly Approach to Educational Technology	205
8.3	Understanding Higher Education Technology	207
8.4	What Is Educational about Technology in Higher Education?	214
CHAPTER 9	CONCLUDING REMARKS	217
9.1	Academics as Worker-Learners	219
9.2	Reconstructing Educational Technology	222
BIBLIOGRAPHY		227

LIST OF FIGURES

Figure 2.1. General schema for problem-solving (Source: Popper, 1979, p. 243)	43
Figure 2.2. Interaction between Popper's three worlds (adapted from Popper, 1994, p. 7).	45
Figure 2.3. The exchange of ideas through Popper's World 3.	50
Figure 5.1. Dunkin and Biddle model for the study of classroom teaching (adapted from Dunkin & Biddle, 1974, p. 38).	126
Figure 5.2. 3P model of learning (Biggs, 2003, p. 19).	127
Figure 6.1. Mediated interactions (modified from Vygotsky, 1978, p. 40).	141
Figure 6.2. The PBL cycle in which students analyse a problem to uncover its underlying issues which are revisited in the feedback session.	143
Figure 6.3. The conversational framework for individuals (Source: Laurillard, 1999).	147
Figure 6.4. The conversation skeleton (adapted from Pask, 1975a).	150