

2010

# Knowledge and knowers in online learning : investigating the effects of online flexible learning on student sojourners

Rainbow Tsai-Hung Chen  
*University of Wollongong, uow\_chenr@uow.edu.au*

---

## Recommended Citation

Chen, Rainbow Tsai-Hung, Knowledge and knowers in online learning : investigating the effects of online flexible learning on student sojourners, Doctor of Philosophy thesis, Faculty of Education, University of Wollongong, 2010. <http://ro.uow.edu.au/theses/3099>

## **NOTE**

This online version of the thesis may have different page formatting and pagination from the paper copy held in the University of Wollongong Library.

## **UNIVERSITY OF WOLLONGONG**

### **COPYRIGHT WARNING**

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site. You are reminded of the following:

Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

**Knowledge and knowers in online learning:  
Investigating the effects of online flexible learning  
on student sojourners**

A thesis submitted in fulfilment of the  
requirements for the award of the degree

**Doctor of Philosophy**

from

University of Wollongong

by

**Rainbow Tsai-Hung Chen**

B.Ed., M.A.

Faculty of Education

2010

## **Certification**

I, Rainbow T.-H. Chen, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the Faculty of Education, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

---

Rainbow T.-H. Chen

5 May, 2010

## **Acknowledgements**

I would like to express my sincere gratitude to my two supervisors, Associate Professor Sue Bennett and Dr. Karl Maton. I thank them both for providing me with inspiration and unwavering support during my Ph.D. candidature and throughout the writing of this thesis. I thank them both particularly for their enthusiasm for this research, and for encouraging me at various stages that I was capable of accomplishing this project. Their constant challenging of my intellectual thinking helped me immeasurably.

I also owe special thanks to all the people involved in the research. I wholeheartedly thank the teacher and student participants for contributing their time to this study. Particular thanks also go to the University of Wollongong and its staff for the financial, academic and technical support they provided me, especially in awarding me a University Postgraduate Scholarship, which made full-time study possible. I am additionally grateful to my fellow Ph.D. students with whom I shared this journey, particularly Catherine Wormald, for her friendship and intellectual companionship.

Finally, I dedicate this thesis to my husband and best friend, Michael Yeldham, for his unflinching intellectual and emotional support through the entire project.

## **Abstract**

This study investigates the effects of online flexible learning on international students in Australian higher education. It brings together two issues widely viewed as key to the future of higher education worldwide: online learning and international students. The focus of this research is on Chinese students because they are presently among the largest international student cohorts in English-speaking countries that have embraced online education, including Australia. The study was motivated by the paucity of empirical research on international students' experiences of online flexible learning, and particularly the lack of research in this area underpinned by theory. The aim of this investigation was to explore Chinese international students' perspectives and experiences of online flexible learning by systemically analysing these learners' educational dispositions, the pedagogic practices involved in this form of learning, and the relations between these two factors. The study seeks to generate findings that contribute to the theorisation of online educational experiences.

The research employed a qualitative case study approach, drawing on postgraduate Chinese students' online experiences in the Faculty of Education at an Australian university. Three key questions guided the research:

- (1) What are the characteristics of the teaching practices that have helped shape the educational beliefs and values that Chinese student sojourners bring to the online learning context in Australia?
- (2) What are the characteristics of the online teaching practices at the Australian university, including the pedagogical beliefs underpinning them?
- (3) How do Chinese students interpret and respond to these online teaching practices?

The research design comprised three main parts that addressed these three questions respectively. These involved conducting: focus groups with Chinese students from various faculties; interviews with Australian teachers of online units in the Faculty of Education, and a review of their unit outlines; and multi-session interviews with individual Chinese students who had previously been or were currently enrolled in an online unit in the Faculty of Education.

The theoretical framework used for the research drew primarily on three principal sources. First, Berry's acculturation approach (1980, 1997a, 2005) provided an organising framework for analytically distinguishing what the 'heritage culture' or dispositions students brought with them from China, the 'host culture' or pedagogic practices they encountered in Australian online courses, and the outcomes of the meeting of these two educational cultures. Secondly, the conceptual framework of Basil Bernstein (1977, 1990, 2000) enabled each of these to be analysed in terms of curriculum, pedagogy and assessment. Thirdly, Maton's 'Legitimation Code Theory' (LCT) (Maton, 2000, 2007, 2009; Moore & Maton, 2001) provided a further means of conceptualising their underlying structuring principles in a manner that enabled a systematic analysis.

The instructional approaches used in the online units examined in this research were identified as constructivist-inspired. A major finding of the study was that there was, in the terms of legitimation codes, a 'code clash' between the students' prior 'knowledge code' educational experiences (where explicit procedures, skills and specialised knowledge are emphasised) and the teachers' 'knower code' notions of education (where learners' dispositions are emphasised as the basis of achievement). This code clash in the students' online learning experiences led to 'relativist code' consequences (where neither specialist knowledge nor particular dispositions is emphasised – a kind of vacuum of legitimacy), which were associated with feelings of isolation, guilt and depression. The study argues that online constructivist teaching assumes a particular kind of knower, with particular socially-based dispositions and experiences, and systematically disadvantages other kinds of knowers. The thesis concludes with a detailed theoretical explanation for this form of learning experience, and a discussion of the findings in relation to constructivist teaching practice and online learning.

One contribution of the study is that it expands the knowledge base concerning Chinese learners' experiences with online flexible education. More prominent and enduring contributions of this research, however, reside in the wider application of the findings to other learner populations, and in the demonstrated utility of exploring online educational practice and experience through a sociology of knowledge approach.

## Table of Contents

Certification .....	i
Acknowledgements.....	ii
Abstract.....	iii
List of Figures .....	x
List of Tables .....	xi
<b>Chapter 1 – Introduction.....</b>	<b>1</b>
1. 1 Background to the study.....	1
1.1.1 Online flexible learning in Australian higher education.....	1
1.1.2 Chinese international students in Australian higher education.....	4
1. 2 The research problem .....	5
1. 3 Aim of the study and research strategy .....	5
1. 4 Significance of the study .....	8
1. 5 Overview of the thesis.....	9
<b>Chapter 2 – Literature Review .....</b>	<b>10</b>
2. 1 Introduction .....	10
2. 2 Online flexible learning in Western universities.....	11
2. 3 Learners’ experiences of online learning .....	17
2.3.1 Learners’ general experiences of online learning.....	18
2.3.2 Learners’ experiences in particular online contexts .....	22
2. 4 Chinese learners’ experiences of online learning.....	29
2.4.1 Chinese learners.....	29
2.4.2 Chinese learners’ online experiences.....	32
2. 5 Conclusion.....	38
<b>Chapter 3 – Methodology .....</b>	<b>40</b>
3. 1 Introduction .....	40
3. 2 Theoretical perspectives.....	40



3.2.1 Conceptualising the research problem: Berry’s acculturation framework .....	41
3.2.2 Characterising educational practices: Bernstein’s concepts of educational knowledge codes .....	45
3.2.3 Integrating the knower: Maton’s Legitimation Code Theory.....	50
3. 3 Research approach .....	53
3.3.1 Qualitative research .....	53
3.3.2 Case study approach .....	55
3. 4 Research setting .....	56
3. 5 Data collection .....	56
3.5.1 Phase One: The focus groups .....	57
3.5.2 Phase Two: Teacher interviews .....	61
3.5.3 Phase Three: Case study student interviews.....	63
3.5.4 Translation .....	69
3.5.5 Role of researcher .....	70
3.5.6 Ethics .....	72
3. 6 Data analysis .....	72
3.6.1 Empirical thematic analysis.....	73
3.6.2 Organisational coding.....	74
3.6.3 Analytical coding.....	76
3. 7 Quality of research .....	85
3. 8 Summary of the chapter .....	88

**Chapter 4 – Heritage Educational Culture: Students’ conceptions of and beliefs about learning..... 90**

4. 1 Introduction .....	90
4. 2 Curriculum .....	90
4.2.1 Relation to everyday knowledge .....	90
4.2.2 Relation to other forms of educational knowledge.....	92
4.2.3 Types of knowledge to pursue.....	93
4.2.4 Discussion.....	98
4. 3 Pedagogy .....	100
4.3.1 The sequencing of learning.....	100

4.3.2	The pacing of learning .....	102
4.3.3	Favourable learning strategies .....	103
4.3.4	Relationships between teacher and students .....	104
4.3.5	Relationship with fellow students .....	109
4.3.6	Discussion .....	110
4.4	Assessment .....	113
4.4.1	Rules of achievement for exam-based assessment .....	113
4.4.2	Rules of achievement for non exam-based assessment .....	115
4.4.3	Discussion .....	117
4.5	Summary of the chapter .....	118

**Chapter 5 – Host Educational Culture: Teachers’ conceptions and designs of the online units.....119**

5.1	Introduction .....	119
5.2	Curriculum .....	119
5.2.1	Relation to everyday knowledge .....	119
5.2.2	Relation to other forms of educational knowledge .....	121
5.2.3	Learner development .....	122
5.2.4	Construction of personal knowledge .....	124
5.2.5	Discussion .....	126
5.3	Pedagogy .....	128
5.3.1	The sequencing of learning .....	128
5.3.2	The pacing of learning .....	131
5.3.3	Relationships between teacher and students .....	134
5.3.4	Relationships with fellow students .....	140
5.3.5	Teachers’ overall view of online learning .....	144
5.3.6	Discussion .....	146
5.4	Assessment .....	149
5.4.1	Assessment methods .....	149
5.4.2	Assessment criteria .....	152
5.4.3	Measures of achievement .....	153
5.4.4	Discussion .....	156
5.5	Summary of the chapter .....	158

<b>Chapter 6 – Sojourners’ experiences in the host culture: Student experiences of online learning</b> .....	<b>159</b>
6. 1 Introduction .....	159
6. 2 Curriculum .....	159
6.2.1 Relation to everyday knowledge .....	159
6.2.2 Relation to other forms of educational knowledge.....	163
6.2.3 Types of knowledge gained.....	164
6.2.4 Discussion.....	172
6. 3 Pedagogy .....	176
6.3.1 The sequencing of learning.....	176
6.3.2 The pacing of learning .....	179
6.3.3 Relationships with the teacher .....	181
6.3.4 Relationships with fellow students .....	186
6.3.5 Discussion.....	189
6. 4 Assessment .....	194
6.4.1 Assessment criteria .....	194
6.4.2 Perceived measures of achievement .....	197
6.4.3 Discussion.....	202
6. 5 Views of the online delivery mode .....	206
6.5.1 Discussion.....	208
6. 6 Summary of the chapter .....	209
<b>Chapter 7 – Conclusion</b> .....	<b>210</b>
7. 1 Introduction .....	210
7. 2 Summary and discussion of findings .....	210
7.2.1 Characterisation of the teaching practices in the students’ formative educational context.....	211
7.2.2 Characterisation of the constructivist teaching practices in the online units .....	218
7.2.3 Student sojourners’ experiences of constructivist-inspired pedagogies in the online context .....	226

7. 3	Conclusions and implications .....	234
7.3.1	Code clash.....	235
7.3.2	The intrinsically invisible knower code.....	241
7.3.3	Findings in relation to constructivist teaching approaches.....	243
7.3.4	Findings in relation to flexible online learning .....	246
7. 4	Strengths, limitations and issues for future research.....	247
7. 5	Conclusion.....	249
<b>References.....</b>		<b>252</b>
 <b>Appendices</b>		
Appendix 1:	Interview guide for focus groups .....	273
Appendix 2:	Stimulus material used in focus groups .....	274
Appendix 3:	Interview guide for teacher interviews.....	276
Appendix 4:	Interview guide for the first student interviews .....	277
Appendix 5:	Interview guide for intervening student interviews .....	278
Appendix 6:	Interview guide for the final student interviews .....	279
Appendix 7:	Information sheet (example) .....	280
Appendix 8:	Consent form (example).....	281
Appendix 9:	Coding scheme for themes emerging from the data .....	282

## List of Figures

Figure 1: A general framework for understanding acculturation (Berry, 2005, p.703). .....	42
Figure 2. Adapted framework for understanding acculturation in this study (adapted from Berry, 2005). .....	43
Figure 3. Legitimation codes of specialisation (Maton, 2007, p.97) .....	51
Figure 4. Data collection phases .....	57
Figure 5. Analytical stages in this study .....	76

## List of Tables

Table 1. Demographic information for focus group informants.....	60
Table 2. Demographic information for teacher participants .....	63
Table 3. Demographic information for case study participants .....	66
Table 4. Student interview schedule .....	67
Table 5. General topics for student interviews .....	68
Table 6. Examples from the coding scheme for emerging themes .....	74
Table 7. Results of data organisation based on Berry’s framework .....	75
Table 8. Language of description for classification and framing .....	80
Table 9. Manifestations of the epistemic and social relations in this study.....	81
Table 10. An external language of description for epistemic and social relations .....	83
Table 11. Detailed summary of analysis approach and procedures employed in this study.....	84
Table 12. Summary of strategies used to enhance the quality of the research .....	87
Table 13. Summary of the assessment tasks included in the online units .....	150
Table 14. Assessment criteria for different types of tasks .....	152
Table 15. Teachers’ descriptions of a successful learner in their online units .....	154
Table 16. Students’ descriptions of a successful learner in their online units .....	198
Table 17. Code clash and its effects.....	240