Negotiating community and knowledge in asynchronous online discussions in higher education

Jo Lander

A thesis submitted in fulfilment of the requirements for a **Doctor of Philosophy**

Faculty of Arts and Social Sciences University of Technology, Sydney February 2013

CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Candidate

ACKNOWLEDGEMENTS

First, I would like to thank my supervisor, Associate Professor Susan Hood, for her enthusiastic commitment to my project, for steering it past obstacles and whirlpools, for encouraging me when I was wavering, for her help with the practicalities of analysis, interpretation and writing and her faith that I would finish – without you, this wouldn't have made it to the finish line!

I would also like to thank my Head of School for his generous support for my research, and my colleagues, both academic and administrative, for their encouragement as well as their tolerance of my being somewhat preoccupied at times.

I would also like to thank the students and moderators who allowed me to analyse their discussion posts and answered survey questions.

My fellow UTS EdLing doctoral candidates and the vibrant SFL and LCT communities in Sydney have been a source of inspiration, challenge and sharing. My friends and family also deserve thanks for their understanding of my absence from their social lives over the past few years.

Most of all I would like to thank my husband, Mladen, for his unwavering belief in me, his love, patience and support, not to mention computer support and meals cooked – I dedicate this thesis to you.

Contents

Part 1

Chapter 1 Introduction	apter 1 Introduction	
1.1 Background and	1.1 Background and terminology	
1.2 Responses to or	nline learning in higher education	3
1.3 Asynchronous c	iscussions within online courses	5
1.4 The research pr	oblem	6
1.5 Characteristics	of asynchronous online discussions	8
1.6 Institutional and	disciplinary context	9
1.7 About this stud	/	10
1.8 Research quest	ons	12
1.9 Structure of this	s study	13
1.10 Contribution c	f this study	14
Chapter 2 Pedagogical and	research context	15
2.1 Pedagogical rationales for online discussions		15
2.2 Approaches to	esearching asynchronous online discussions	18
2.2.1 Meth	ods and approaches	19
2.3 Equivocal findin	gs on effectiveness	20
2.4 Findings related	to online communities	21
2.4.1 Resea	rching Communities of Inquiry	22
2.4.2 Nature of the evidence for the effectiveness of communities		of inquiry
		25
2.4.3 Resea	rching Communities of Practice	28
2.4.4 The re	ole of the moderator in learning communities	30
2.4.5 'Dem	ocracy' in online communities	31
2.4.6 The ir	dividual and the community	34
2.4.7 Resea	rching online communities and identities	36
2.5 Findings in relat	ion to collaborative knowledge construction, cognition	and
argumentation		36
2.5.1 Collab	poration	37
2.5.2 Cogni	tive presence	37
2.5.3 Accou	nting for collaborative knowledge construction	38

	2.5.4 Reflection, critical thinking and argumentation	39
	2.5.5 Failure to reach higher levels of enquiry	41
	2.6 The use of coding schemes to describe online interaction	43
	2.6.1 Development and examples of coding schemes	43
	2.6.2 Coding scheme issues	45
	2.7 Summary: researching online communities and collaborative knowledge	
	construction	46
	2.8 Researching online discussions as discourse	48
	2.8.1 Argument structures in two Open University discussions	49
	2.8.2 Online opinion texts in an ESL context	50
	2.8.3 The play of identity in an email list	51
	2.8.4 The making of cultural difference and sameness online	51
	2.8.5 Conversation analysis of an email list	51
	2.8.6 Discourse-based approaches to analysing online discussions	52
	2.9 Research approach	52
Chapte	r 3 Theoretical framing and research design	54
	3.1 Study design	54
	3.2 Choice of informing linguistic theory	55
	3.3 Analysing discourse	56
	3.3.1 Discourse Analysis	56
	3.3.2 Critical discourse analysis, academic discourse and online learning	57
	3.3.2 Analysis of conversational language	58
	3.4 Analysing classroom discourse	59
	3.5 Systemic Functional Linguistics	60
	3.6 Register	65
	3.7 Genre	67
	3.7.1 Pedagogical genres	68
	3.7.2 Genre shifts	69
	3.7.3 The concept of macrogenre	70
	3.7.4 Asynchronous online discussions and genre	70
	3.8 Interpersonal meaning: an overview	71
	3.9 APPRAISAL	71
	3.9.1 APPRAISAL 1: ATTITUDE	71

	3.9.2 APPRAISAL 2: GRADUATION	77
	3.9.3 APPRAISAL 3: ENGAGEMENT	82
	3.10 The NEGOTIATION system	87
	3.10.1 Negotiating information	88
	3.10.2 Negotiating goods and services	90
	3.10.3 Exchange structure analysis and classroom discourse	92
	3.11 INVOLVEMENT	92
	3.12 Application of SFL and genre to the current study	93
	3.13 Data collection and description	93
	3.13.1 Data collection	94
	3.13.2 Selection and display of discussion threads for analysis	95
	3.14 Data analysis and interpretation	97
	3.15 Of knowledge and knowers	99
Chapte	er 4 Negotiating structure	101
	4.1 Register variables for online discussions	103
	4.1.1 Field	103
	4.1.2 Tenor	103
	4.1.3 Mode	104
	4.2 Models of discussion structure	105
	4.3 Online discussions incorporating features of written and spoken discourse	106
	4.4 Interaction patterns in asynchronous online discourse: quantifiable data	108
	4.4.1 Chronological posting patterns	108
	4.4.2 Mapping interaction in threads	109
	4.4.3 The significance of replying	110
	4.4.4 Semogenesis in online discussions	112
	4.4.5 User experiences of discussion structure	113
	4.4.6 Interpreting interaction patterns	114
	4.4.7 Mode considerations for online discussions	117
	4.5 Structure as negotiation	118
	4.5.1 Greetings	119
	4.5.2 Moderator K1 moves: self-introduction	119
	4.5.3 Moderator K1 and dK1 moves: Establishing the scenario and askir	ng the
	first questions	120

4.5.4 Student K1 moves: Linking and acknowledging	121
4.5.5 Other features of response moves	121
4.5.6 Dynamic moves: tracking and challenging	122
4.5.7 Student K2 move complexes: Answering the question	123
4.5.8 Summary of move types	123
4.6 Role negotiation in online discussions: primary and secondary knowers	124
4.7 Asking for and providing a linguistic service	127
4.8 Mapping exchanges and exchange complexes	128
4.9 Potential models for online discussion genres: written texts	129
4.9.1 Models for genres represented in online discussion	130
4.9.2 Identified genres in posts	132
4.10 Towards a curriculum macrogenre	135
4.10.1 The concept of macrogenre	135
4.10.2 Curriculum macrogenres	136
4.10.3 Online discussions as a curriculum macrogenre	137
4.11 Online discussion structure overview and pedagogical implications	140
5 Negotiating online communities of learners	144
5.1 Theorising supportive learning communities linguistically	145
5.2 Building a community of learners through INVOLVEMENT	147
5.2.1 Greetings and sign-offs	147
5.2.2 Naming	147
5.2.3 Pronoun use	148
5.3 Building a community of learners through ATTITUDE	149
5.3.1 AFFECT	150
5.3.2 APPRECIATION	153
5.3.3 JUDGEMENT	159
5.3.4 Consolidating patterns in expression of ATTITUDE	162
5.4 Managing status in online communities of learners	166
5.4.1 Task description in the sample discussion	167
5.4.2 Task instructions in Cases 2 and 3	170
5.4.3 Negative JUDGEMENT in instructions	172
5.4.4 Students suggesting tasks to peers	173
5.4.5 Losing and regaining control of tasks	174

5.4.6 Negotiating specifications for ta	asks and participation	175
5.5 Conclusion: A community of learners?		178
Chapter 6 Negotiating affiliation and identit	у	183
6.1 Online communities of practice?		184
6.2 Theorising communal identity lin	guistically	185
6.3 Affiliating around research in the	field	188
6.4 Affiliating around the tasks and p	rocedures of public health	190
6.4.1 Showing the way		190
6.4.2 Couplings involving tas	ks and procedures	192
6.5 Affiliation in the field of content		195
6.5.1 Affiliation around JUDG	EMENT in public health: Big Tobacco	196
6.5.2 Affiliation around JUDG	SEMENT in public health: obesity	201
6.5.3 Fear and insecurity in t	he field of content	206
6.5.4 Affiliation in public hea	Ith communities of practice	207
6.6 Theorising individual identity ling	uistically	207
6.6.1 Professional and learne	er online identities	208
6.6.2 Individual vs communit	y identity: a case study	211
6.6.3 Communities and indiv	iduals	216
6.7 Conflict in online discussions		216
6.8 Comparing discussion posts with	academic writing	218
6.9 Conclusion		220
Chapter 7 Constructing knowledge in online	discussions	222
7.1 Theorising knowledge construction	on linguistically	222
7.2 Student views on peer learning		224
7.3 Shaping the discussion: ENGAGEI	MENT and knowledge construction	225
7.3.1 Moderators shaping th	e discussion	226
7.3.2 Students shaping the d	iscussion	235
7.3.3 Contributions to shapir	ng the debate	238
7.4 Bringing external sources into the	e discussion	240
7.4.1 Sources: types and dist	ribution	241
7.4.2 Citing external sources		242
7.4.3 Relations to external so	ources exemplified: Case 3	243

	7.4.4 Relations to external sources in Cases 1 and 2	245
	7.4.5 Patterns of relations to external sources	246
	7.5 Working with peers to construct knowledge	249
7.5.1 Acknowledging others as sources of information in the conversa		onversation
		248
	7.5.2 Foregrounding own activity	251
	7.5.3 Working with ideas and content supplied by others	254
	7.6 Argumentation and genres in online discussions	255
	7.6.1 K2 move complexes and genres	255
	7.6.2 Argumentation between posts	256
	7.6.3 Argumentation in online discussions	257
	7.7 Themes in online knowledge construction	259
	7.7.1 Low-impact relations to propositional meaning	259
	7.7.2 Low-impact interaction with others in the discussion	260
	7.7.3 'Personalising' participation	260
	7.7.4 Argumentation and genres	261
	7.7.5 Constructing knowledge	261
Chapter	8 Learning to mean online in academic and professional contexts	263
	8.1Contribution of this study	264
	8.1.1 Mode: shaping the discussion	265
	8.1.2 Tenor: belonging to communities	266
	8.1.3 Field: constructing knowledge	268
	8.2 Pedagogical implications	271
	8.2.1 Teaching participation	272
	8.2.2 The moderator's role	273
	8.2.3 Apprenticeship into academic writing	274
	8.2.4 Other aspects	275
	8.3 Directions for future research	275
	8.4 Conclusion	277
Referen	ices	278

Part 2 Appendices

Appendix 1 Case 1	
Appendix 1.1 Case 1 Unit, cohort and moderator description	2
Appendix 1.2 Case 1 Student responses to evaluation surveys	3
Appendix 1.3 Case 1 Thread chronologies	
Appendix 1.4 Case 1: Thread maps for selected discussions	18
Appendix 1.5 Case 1 Sample Exchange Structure Analysis	20
Appendix 1.6 Case 1 Transcripts	
Appendix 1.7 Case 1 Getting to know you	113
Appendix 1.8 Case 1 Sample APPRAISAL analysis	119
Appendix 2 Case 2	

Appendix 2.1 Unit description	131
Appendix 2.2 Case 2 Student evaluation responses	132
Appendix 2.3 Case 2 Thread chronologies	139
Appendix 2.4 Thread maps	141
Appendix 2.5 Case 2 Sample exchange structure analysis	143
Appendix 2.6 Edited transcripts	145
Appendix 2.7 Taxonomy of topics discussed: Obesity	167
Appendix 2.8 Case 2 Sample APPRAISAL analysis	168

Appendix 3 Case 3	
Appendix 3.1 Unit description	175
Appendix 3.2 Case 3 Student survey responses	176
Appendix 3.3 Case 3 Sample thread chronology	182
Appendix 3.4 Case 3 Thread maps	141
Appendix 3.5 Case 3 Sample exchange structure analysis	187
Appendix 3.6 Case 3 Edited transcripts	191
Appendix 3.7 Case 3 Sample APPRAISAL analysis	237
Appendix 4 Comparison table – thread chronologies	243

Appendix 5 Five-stage model of discussion structure	245
Appendix 5 me stage model of discussion structure	243

Appendix 6 Survey instrument - students	246
Appendix 7 External source types in discussions	250
A7.1 Source types in the sample discussion: Case 3	250
A7.2 Sources in Case 2	252
A7.3 Sources in Case 1	253
Appendix 8 Realisations of GRADUATION from Hood 2010	257
Appendix 9 Genres	
Appendix 10 INVOLVEMENT in community building in the case study discussions	262
A10.1 Greetings, naming and pronouns in the sample discussion	262
A10.2 Comparison with other discussions	264
A10.3 Summary and implications for building and maintaining community	264
Appendix 11 Individuation and identity in Case 1, Group 3	266
Appendix 12: Word occurrence in five posts in Case 1.	268

List of figures and tables

		Page
Figure 3.1	Ideational, interpersonal and textual metafunctions.	61
Figure 3.2	Language strata	62
Figure 3.3	Cline of instantiation	63
Figure 3.4	Metafunctions in relation to field, mode and tenor	65
Figure 3.5	Register recontextualised by genre	68
Figure 3.6	The APPRAISAL system	72
Figure 3.7	Sub-categories of ATTITUDE as affect, judgement and appreciation	73
Figure 3.8	System network for graduation: force and focus	79
Figure 3.9	GRADUATION system from Hood (2010)	79
Figure 3.10	GRADUATION network Hood (2010), adapted	80
Figure 3.11	Heteroglossia in the ENGAGEMENT system	83
Figure 4.1	Sample discussion: Thread 2	110
Figure 4.2	Sample discussion thread 2 annotated to show response patterns	112
Figure 4.3	Linear curriculum macro-genre (redrawn from Christie, 2002)	136
Figure 4.4	Orbital curriculum macrogenre (redrawn from Christie, 2002)	137
Table 4.1	Provisional curriculum macrogenre of moderator-led online discussions	138
Figure 6.1	Case 2 Thread 1 Posts involved in obesity disagreement	217
Figure 7.1	HETEROGLOSSIA in the ENGAGEMENT system	226
Table 7.1	Summary of main sources for students and moderators	242
Figure 7.2	Patterns of response compared across 3 cases	257

ABSTRACT

This thesis examines the enactment of teaching and learning in asynchronous online discussions in a postgraduate context. Specifically, it explores and seeks to explain the disjunct between the pedagogical promise of such discussions, founded on the collaborative construction of knowledge within supportive and democratised online communities, and the experience of teaching and learning through them, reported both in the research context and in published research. This experience often includes concern that students are failing to reach higher levels of knowledge construction, uncertainty on the part of moderators concerning their role and feelings of discomfort, disengagement and inadequate interaction on the part of students. The aim of the study is to provide a detailed account of this new and still evolving genre, rendering it transparent and able to be modelled and scaffolded pedagogically.

The data for the study are the online discussion posts as captured by the learning management system, supplemented by survey responses. The approach taken is discourse analytical, informed by a social theory of language, namely Systemic Functional Linguistics (SFL). The core of the analysis is a detailed study of the discourse semantics of interpersonal meaning drawing on the system of APPRAISAL (Martin & White 2005), with some reference to INVOLVEMENT and NEGOTIATION.

The negotiation of interpersonal meaning, studied within the context of community formation and maintenance, is profoundly influenced by mode features (written but dialogic, public, visible, persistent). Moderators' linguistic choices commonly include incongruent instructions, reduced commitment of meaning, implicit feedback and a tendency to expand rather than contract space for other voices and meanings. This serves to reduce status differentials and support a sense of community but potentially impacts on the negotiation of ideational meaning. Similarly low-key was students' relationship to the knowledge they brought into the discussion, particularly seen in the absence of standard forms of engagement in favour of narrative approaches and a tendency to open discursive space for others. Interaction with peers was likewise low-key for the most part, with little challenge and argumentation. Interestingly, students showed an individualistic concern with their own actions and postings, foregrounding their mental processes and personalising their approach to knowledge. Again attention to interpersonal relations appears to undermine to a certain extent ideational meaning-making. Addressing structural questions, a curriculum macrogenre was proposed and the presence of whole or fragmented written academic genres embedded in a quasiconversational matrix identified. The pedagogical implications of these findings are discussed.

xiii