



“You’re breaking up ...”: Responding with integrity to the student voice in asynchronous online discussions

Jo Lander and Sharon Reid

School of Public Health, Faculty of Medicine
University of Sydney

Recent years have seen the increasing integration of asynchronous online discussions, often embodying a collaborationist, constructivist pedagogical paradigm, into on- and off-campus postgraduate courses. This paper uses data from published research, a series of course evaluations and one study by the authors into the development of a community of practice to highlight the tensions between pedagogy and student expectations in this context, and explore possible biases in existing research methodologies. These, taken together, may mean that educators and researchers are not clearly hearing student voices when they interact online or report their experiences of asynchronous online discussions.

Keywords: Online discussions, asynchronous discussions

Introduction

The use of asynchronous online discussions continues to increase in both on- and off-campus postgraduate study, despite strongly polarized academic opinions (eg Laurilliard 2002, Brabazon 2002) and the rise of newer, mobile technologies. Institutional rationales often include the pragmatic (flexibility, reach) while educators themselves are often motivated by the assumed pedagogical opportunities and advantages afforded by the technology, for example for more reflective and collaborative learning. This paper will limit itself to pedagogical, rather than pragmatic, rationales for asynchronous online discussions.

The pedagogical arguments for asynchronous online discussions are well-rehearsed within the broader pedagogical discourse and are often a reaction against unidirectional, transmission-style teaching. Tapping into Vygotskian concepts of the social/ group dimensions of learning, which enhance individual achievement within the Zone of Proximal Development, such discussions are described as potentially enabling the collaborative construction of knowledge (eg De Laat and Lally 2004, Littleton and Whitlock 2005), the building of a learning community in educational contexts (eg Irwin and Berge 2007), and, in professional contexts, a community of practice. At the same time such discussions allow for reflective learning and potentially equalise participation structures and minimise power differentials to ‘democratise’ education (Ortega 2008). Such views mesh well with principles of andragogy and constructivist learning paradigms, for example self-directed learning. The current paper draws on data from published research, a series of postgraduate coursework evaluations over three years (2005 – 2007) and one study by the authors into the development of a community of practice in an online course. It seeks to some extent to problematise this ‘euphoric’ view (Ortega 2008) under three broad headings: research paradigms, pedagogical paradigms and interactional paradigms.

Researching asynchronous discussions

One reason for practitioners’ early eagerness to adopt collaborationist rationales, apart from an almost intuitive match with the technological affordances, may have been the specific orientation of the literature and published research available to them at the time. Much published literature is of the descriptive or ‘best practice’ type, offering ‘advice uninformed by research’, which nonetheless is ‘powerfully shaping online educational practices’ (Doherty 2006: 60). Early researchers into computer-mediated communication in education focused on the more easily quantifiable variables such as rates of participation and interaction and participants’ evaluation of conference success (Schrire 2005: 2-3). It may be that researching early adopters, which were often in the fields of ICT and education, led to a more positive initial picture. There is a marked absence of empirical investigation into the *interaction itself* (Doherty 2006: 64), investigation which might give rise to an evidence-based understanding of successful task design and moderation in specific contexts.

Many studies which did take the step of examining the interaction nonetheless do not tell the full story: they focus on cognitive processing (eg Schellens and Valcke 2004) to the detriment of the social interactive features critical to the collaborative learning rationale or use pre-existing coding schemes and fixed categories embodying specific a priori pedagogical and ideological orientations. There is little agreement regarding these coding schemes, and such schemes as exist have a limited research base or none at all. Surveys of coding schemes generally find them wanting (eg Campos 2004: 4-6 and Veldhuis-Diermanse 2000: 27-40), leading to the development of yet more (sometimes under-theorised) coding schemes.

Although some of the suggested benefits of online discussion have been upheld in some studies, researchers are increasingly admitting that online discussions do not always live up to their potential, either cognitively or socially. For example, Moore and Marra (2005) have reported that participants failed to reach higher levels of collaborative knowledge construction, while others (eg Ellis et al 2006) report strong emotional reactions to online discussion. In the light of this, the lack of consistent, proven research instruments (Mazur 2004: 1082) is of increasing concern, since this makes it very difficult to compare studies or conduct meta-analyses. However, given the variety of approaches (cognitive, interactionist, quantitative, qualitative, and subsets of these), consistency and agreement may not be achieved for some time, if at all. In the interim, it may be worthwhile considering a multi-dimensional approach, combining quantitative data from discussion participation, quantitative and qualitative data from survey responses, e-ethnography where appropriate and a detailed analysis of the online discourse itself, preferably using linguistic approaches unencumbered with pedagogical preconceptions. This may be the most ethically responsible solution available to us (although resource-intensive), enabling the student (and moderator) voice to be clearly heard.

Pedagogical paradigms and student expectations

Although the majority of undergraduate students may be 'digital natives', this is not necessarily true of postgraduate courses, with considerable mature age and international student enrolments. Even students with high levels of personal entertainment and social ICT and mobile device use may (and often do) have no prior experience with the use of such technologies for learning. While it might appear so, technology is not culturally neutral (Ortega 2008: 338), nor is pedagogy. Online discussions presuppose a level of academic literacy and validate 'speaking' (ie posting) over remaining silent ('lurking'), again with cultural overtones. Moderators' minimal involvement (favoured by constructivist paradigms) brings with it a learning style unfamiliar to at least some overseas-educated students. All of these issues may have ethical implications, but so might *not* providing flexibility and *not* facilitating online engagement in this increasingly digital age.

This section will focus on the pedagogical paradigm implied in many online discussions. Evaluation survey responses over three years (2005-7) in a number of Health Sciences courses at the University of Sydney, featuring online discussion activities ranging from reading-based through case discussion to personal experience, showed an ethical conflict playing itself out at the intersection of constructivist models of online learning and student expectations.

Clearly, many students were happy with the discussions in a general sense, as shown in overall ratings and comments such as "*I enjoyed participation in the online discussion ... I found I was able to say my point of view and give my contributions without feeling intimidated or getting spoken over.*" More specific questions, however, drew out reservations. Where educators might have assumed social presence would naturally flow from participation in discussions, especially for 'digital natives', such participation instead was perceived as impersonal and unrealistic: "*[they would have been] better as face to face discussions, just like the real world ...*" (emphasis added in this and all following quotes). Likewise, when asked about interaction, the technological promise was not being fulfilled: "*no-one was **actually** interacting in the **normal** sense*" "*People just tended to agree to previous statements and add a few comments, but there was little 'discussion'*". While many valued the chance to learn from others ("*so many highly trained and experienced people with different perspectives and expertise to draw on*") others valued collaborative learning less: "*We often had to wade through a lot of **rubbish** to find the point of the response, **if any**...*".

Some students came to appreciate the role of the moderator: "*There were a 'few good men' who really contributed greatly to the course -more so than the tutors (I suppose this was the purpose of the discussion process)*" but many expected more guidance: "*It would be helpful if they [tutors] can provide clearer information ...*" "*I got no real sense of what the industry party line was*". Some wished for more personal validation "*[I expected] ... more frequent and personal input from tutors*". Some of the

comments stemmed from genre unfamiliarity – the level of formality needed, where the texts sit on the continuum from spoken to written language, whether a posting is supposed to resemble an assignment or not. One student critiques his peers thus (in a survey): “*Unless you speak like an academic paper in normal conversation, don't write that way on a discussion board*”. Some students perceptively noted that the assessment of online participation (unfortunately necessary to ensure participation in this context), being competitive, mitigated against collaboration and cooperation, or that a formal, polite style may have avoided conflict but did not promote robust discussion: “... *people were too polite to each other*”.

Although some variation in expressed student attitudes is to be expected, these survey responses across a wide range of course, activity types and moderator experience do suggest a student voice to be heeded. Responses to date have included re-introducing face to face sessions for those who wish to/ can attend, offering as many courses as possible in dual mode (providing user choice) and redesigning activities. Further useful responses can certainly be envisaged but it does appear that there are many contradictions inherent in the mode of online discussion.

Interactional paradigms

In the study described below, our aim was to examine whether the concept of a ‘community of practice’ might be helpful in conceptualising an online discussion group where the course content (and participants) were oriented to professional practice. Communities of practice are variously defined, but such definitions usually include the social construction of knowledge through negotiation of meaning and learning by participation in the (physical, social) context and processes of community life.

The cohort consisted of twenty students, mostly clinicians, the majority male and under 44 years of age. They were led by an expert moderator through a number of short discussion tasks on professional communication and ethics in health care, based both on personal experience and on supplied readings.

We analysed three types of data: evaluation surveys, a semi-structured interview with the moderator of module discussions and an analysis of online discourse using three tools. These tools were chosen from amongst those described above to reflect a cognitive approach to the co-construction of meaning (the Interaction Analysis Model (IAM) (Gunawardena 1997)), a learning interaction approach (Littleton and Whitlock (2005)) and a social presence approach (the Social Presence Coding Template (Hughes, Ventura and Dando 2007)). Postings were double-coded. The post itself was taken as the unit of analysis, except where there was a change of mode within it. The scales proved somewhat difficult to use, particularly as not all gave examples of language which might be used in each category, to assist decision-making. It should be noted that this was a small-scale study, intended as proof of concept.

The results of the analysis showed limited knowledge construction and low social presence. Applying the IAM showed that 52% of postings were in Phase 1, ‘sharing’ (the lowest level), 26% demonstrated ‘dissonance’ (postulated to lead to learning) and 19% synthesis (new knowledge). The analysis using the Social Presence Coding Template showed that 74% of postings displayed no social presence at all, whereas only 7 demonstrated ‘interactive’ (mostly complimenting) and 3 ‘cohesive’ (mostly naming) social presence. Using Littleton and Whitlock’s model, we discovered that 71% of postings were cumulative (building uncritically but positively on others’ postings), 27.5% exploratory (conducive to problem solving, critical thinking and academic achievement) and only one (1.5%) disputational. According to these analyses, there is limited evidence for higher levels of collaborative learning and exploratory (academic) discourse; interaction mostly took the form of sharing and accretion; there was some disagreement but no disputation, and social presence was quite low.

Comparing this to the results of assessment tasks, surveys and the moderator interview demonstrates some discrepancies. The average grade for the assessment task based on this discussion was 21.5/30 and the total marks for the course in the credit to HD range. By conventional measures, learning was occurring. Immediate (self-reported) effects were also positive: 92.86% noted attitudinal change and 85.71% felt the course influenced work practice. Survey responses indicated students were generally happy with the interaction with peers and the tutor, while the moderator ‘*was impressed with the trust learners had ... bringing workplace problems and ethical dilemmas to the discussion – did not feel there was a competition going on ...*’. On the other hand, she did note the ‘parallel monologues’ implied by ‘cumulative’ and ‘sharing’ modes: ‘... *it was certainly more like a group of individuals I was interacting with – that’s not to say people didn’t respond to other learners – they did – but I did feel like individuals brought their own agendas ...*’

The predominance of ‘sharing’ interactions (rather than those exploring dissonance and synthesising new knowledge) and ‘additive’ (rather than critiquing or exploring) posts in this study are borne out by other studies (for example Moore and Marra 2005). However, as we found, this did not prevent (self-reported and assessed) learning occurring. Likewise, despite social presence being low, the establishment of a high level of trust and the sharing of sensitive information did occur.

Conclusion

After more than a decade of online learning, it is perhaps timely to question the way we research online discussions. Is it ethical, not to mention methodologically sound, to use ideologically-driven (cognitive, collaborative) normative coding schemes while there is still a need to demonstrate that the pedagogy which drives them guarantees learning? Should coding schemes prescribe communication styles which might be totally at odds with the communication styles of the professional workplace (or another culture), and deem interaction unsuccessful or non-existent if these styles are not present, with flow-on effects to assessment of online discourse? We need to use a more neutral and multidimensional research paradigm to hear without distortion and compare what the student voice is telling us in surveys, interviews and online discussion texts.

References

- Brabazon, T. (2002). *Digital hemlock: Internet education and the poisoning of teaching*. Sydney: University of NSW Press.
- Campos, M. (2004). A constructivist method for the analysis of networked cognitive communication and the assessment of collaborative learning and knowledge-building. *JALN* 8(2), 1-29.
- De Laat, M & Lally, V (2004). Complexity, theory and praxis: Researching collaborative learning and tutoring processes in a networked learning community. In Goodyear, P. et al (Eds.), *Advances in research on networked learning*. Boston: Kluwer Academic.
- Doherty, C. A. (2006). *The production of cultural difference and cultural sameness in online internationalized education*. PhD thesis. Queensland University of Technology.
- Ellis R.A., Goodyear P., Prosser M., O’Hara A. (2006). How and what university students learn through online and face to face discussion: conceptions, intentions and approaches. *Journal of Computer Assisted Learning* 22, 244-256.
- Gunawardena, C., Lowe, A. and Anderson, T. (1997). Analysis of a global online debate and the development of an interaction analysis model for examining social construction of knowledge in computer conferencing. *J. Educational Computing Research* 17 (4), 397-431
- Hughes, M Ventura, S and Dando M (2007). Assessing social presence in online discussion groups: a replication study. *Innovations in Education and teaching International* 44(1), 17-29.
- Irwin, C. & Berge, Z. (2006). Socialisation in the online classroom. *e-Journal of Instructional Science and Technology*, 9(1), 1-7. http://www.ascilite.org.au/ajet/e-jist/docs/vol9_no1/papers/full_papers/irwin_berge.htm
- Laurilliard, D. (2002). *Rethinking university teaching: A conversational framework for the effective use of learning technologies*. 2nd.ed. London & New York: Routledge/ Falmer.
- Littleton, K. & Whitelock, D. (2005) The negotiation and co-construction of meaning and understanding within a postgraduate online learning community. *Learning, Media and Technology*, 30(2) 147-164.
- Mazur, J.M. (2004) Conversational analysis for educational technologists: theoretical and methodological issues for researching the structures, processes and meaning of online talk. In Jonassen, D.H. (Ed) *Handbook of research on educational communications and technology* 2nd ed Mahwah, NJ: Erlbaum. pp.1073-1098.
- Moore, J.L. & Marra, R.M. (2005). A comparative analysis of online discussion protocols. *Journal of Research on Technology in Education*, 38(2) 191-222.
- Ortega, L. and Zyzik, E. (2008). Online interactions and L2 learning: some ethical challenges for L2 researchers. In Magnan, S S (Ed) *Mediating discourse online*. Amsterdam, Benjamins.
- Schellens, T. & Valcke, M. (2005). Collaborative learning in asynchronous discussion groups: What about the impact on cognitive processing? *Computers in human behaviour* 21(6) 957-975.
- Schrire, S. (2005). Knowledge building in asynchronous discussion groups: Going beyond quantitative analysis. *Computers & Education* 46(1) 49-70
- Veldhuis-Diermanse, A. E. (2002). *CSCLearning? Participation, learning activities and knowledge construction in computer-supported collaborative learning in higher education*. Ph.D thesis. Wageningen: Wageningen University.

Author contact: Jo Lander jlander@health.usyd.edu.au

Please cite as: Lander, J. & Reid, S. (2008). "You're breaking up...": Responding with integrity to the student voice in asynchronous online discussions. In *Hello! Where are you in the landscape of educational technology? Proceedings ascilite Melbourne 2008*
<http://www.ascilite.org.au/conferences/melbourne08/procs/lander.pdf>

Copyright 2008 Jo Lander and Sharon Reid

The authors assign to ascilite and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ascilite to publish this document on the ascilite web site and in other formats for *Proceedings ascilite Melbourne 2008*. Any other use is prohibited without the express permission of the authors.