

Online debating to encourage student participation in online learning communities: A case study in the Education Department of Rhodes University

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Abstract

The Education Department of Rhodes University (RU) presents a BEd (Hons) elective, Information Communication Technology (ICT) in Education. In 2000 this module was presented online for the first time as some students were geographically dispersed and the subject matter specifically requires students to be familiar with the use of information and communication technology for education. As students were located as far a field as Swakopmund and Port Elizabeth, strategies for encouraging lecturer-student and student-student interaction were utilised to promote participation, one of which was the use of online debating. The online debate involved the lecturer in the role of chairperson, an outside evaluator and two “virtual” debating teams that included Education students and invited practitioners in the field of ICT in education. Asynchronous online debates have subsequently been facilitated for the BEd (Hons) classes in 2001 and 2003; with the roles of the chairperson and evaluator being alternated.

This paper will discuss the underlying epistemological perspective on online debating, the informing learning theory, the pedagogical processes put in place to facilitate maximum interaction and some of the strategies used to overcome the problems encountered during the process.

1. Introduction

Internationally there is a growing trend for universities to use computer-mediated communication to facilitate discussion between geographically dispersed students. Computer-mediated communication (CMC) is a “generic term now commonly used for a variety of systems that enable people to communicate with other people by means of computers and networks” (Romiszowski & Mason, 1996:438). It includes the use of e-mail, computer conferencing, discussion lists, bulletin boards, videoconferencing, chat rooms as well as more specific educational applications such as computer-mediated seminars and case study discussions (Romiszowski, Jost & Chang, 1990; Romiszowski & De Haas, 1989); virtual classrooms (Hiltz, 1994); virtual learning teams (Johnson, Suriya, Won Yoon, Berrett & La Fleur, 2002) and learning circles (Riel, 2002). Alternative strategies for developing

online communication to replicate or augment face-to-face group communication and developing learning communities are constantly being explored. Although all these strategies have the intention of encouraging participation, each have different “rules” and differ to what extent the online discussion is managed and to what extent participation is specifically required. For example, while students may be requested to participate in an online discussion, they often don’t or they need incentives to do so (See Masters and Oberprieler 2004 for an extended discussion). One strategy to encourage structured student participation in distance learning courses is to use online debating, which enables people to formally debate a matter with other people by means of computers and networks.

2. Theoretical framework

2.1 Epistemological underpinnings

The epistemological perspective that underlies the use of online debating to encourage student participation is based on constructivist assumptions which emphasise that knowledge is constructed by learners in sociocultural context (Vygotsky, 1978). The upshot of this perspective is that knowledge is constructed, negotiated and perpetuated “via a process of argumentation within a community” (Cobb, Perlwitz & Underwood-Gregg, 1998:72). Online debating can be seen as one way of allowing geographically dispersed students to participate in the process of constructing and negotiating knowledge via a process of argumentation within a virtual community.

2.2 Informing learning theory

Social constructivist learning theory informs the interactive and collaborative nature of online debating. This view holds that learning does not happen in a void, but occurs within a social environment which not only brings with it the history, traditions and “wisdom” of the social environment or particular society, but also provides the learner with a resource of other learners, each with their own knowledge, experience and expertise, with whom to share ideas, negotiate meaning and work towards shared understandings. One of the key assumptions of social constructivism is that the most valuable activity in a classroom is one that provides opportunities for learners to work and interact together become part of a community of scholars and practitioners (Jonassen, Davidson, Collins, Campbell & Haag, 1995). Whether the students meet face-to-face or online, the assumption is that by making their covert ideas overt, either through talking or typing, students support each other in the construction of their understanding of the topic and concepts at hand.

2.3 Pedagogical strategies and processes

2.3.1 Advantages of using a debate as teaching strategy

Face-to-face class debates have traditionally encouraged students to “engage interactively” with each other to refine their understanding of particular issues. Conducting a debate presents educators and learners with a unique form of cooperative learning which requires learners, each with an assigned role, to work in smaller groups towards a shared goal. Similar to assigning very specific roles to learners in cooperative learning teaching strategies, members of a debating team are assigned to “first speaker” and “second speaker” who introduce their respective teams’ stance on the motion; “third speaker” who responds to the second team’s introduction and re-iterates the first team’s point of view; “fourth speaker” who responds to the first team’s point of view; “fifth speaker” and “sixth speaker” who summarises their respective teams’ standpoints incorporating the arguments from the opposing team as well as those from the floor. This is more easily conceptualised in a diagram (Table 1):

Team 1	Team 2
Speaker 1	Speaker 2
Speaker 3	Speaker 4
Open to the floor	
Speaker 5	Speaker 6

Table 1: Online debating teams

While this formal structure only makes provision for 6 such roles, other learners are afforded the opportunity to contribute to the debate by:

- Participating in the strategising discussions “behind the scenes” (i.e. using the distribution lists);
- Participating at the stage when the debate is opened to the floor;
- Teaming up with more than one participant in the role of “Speaker 1”, “Speaker 2”, etc.

This study appropriates the formal organisation and structure of the face-to-face debate to the virtual classroom so as to accrue similar outcomes. In line with a social constructivist view of learning and a cooperative learning teaching strategy, the role of the teacher, in this online debate, shifted from being a content provider in a transmission model of teaching to a facilitator of learning, thereby

acknowledging the prior learning and experience of the learners who became active participants in the construction of their own knowledge through the negotiation of meaning. Rather than a teacher-centred approach to teaching which requires the lecturer to work while the students listen, an online debate embodies a learner-centred approach to teaching requiring the students to work while the lecturer listens and prompts and thereby ideally promoting active learning.

2.3.2 Advantages of using online discussion

Researchers in the field of CMC maintain that asynchronous online discussion offers participants the opportunity to think through, research and construct their responses that is not possible in a traditional face-to-face discussion (Harasim, Hiltz, Teles, & Turoff, 1995). Furthermore, Boughey (1997) claims that the act of writing (or typing) responses *per se*, as opposed to responding verbally, also enhances learning since the writer has to consider, clarify and revise thoughts more carefully than if they had not been written down. While these researchers did not direct their comments to online debating in particular, we have drawn on their ideas in order to consider some of the potential benefits of online debating.

2.3.3 Potential advantages of online debating

Boughey (1997) suggests that having to take into account the audience of the text prompts writers into anticipating and considering viewpoints other than their own. She claims that since writing is both produced and received in a context void of support for the communication of meaning (e.g. facial expressions or tone of voice), meaning in writing must be made explicit: "Understanding of the need to be explicit forces writers to engage with the prepositions contained in their text more than in speaking" (Boughey, 1997:126-127). Once again, these potential benefits of writing *per se*, could be attributed to an online debate.

In addition, asynchronous communication media such as electronic mail and mailing lists provide students with more time to reflect and construct responses that are well thought through before posting. As opposed to synchronous face-to-face interaction where learners need to respond immediately, asynchronous communication may be of potential benefit to English additional-language speakers who may not normally have the courage to express their views in a face-to-face setting where English is the medium of the debate.

Active learning requires students' active participation. Motivating students to engage actively with the content and each other seems to be an ongoing challenge for educators in both contact and distance education settings. A debate can provide a structure (i.e. the debating procedures), an educational rationale (i.e. cooperative learning) and the motivation (both through competition and team spirit) to involve students, also at an affective (emotional) level. Introducing the motion of a debate through a

contentious reading or provocative statement can engage students emotionally, which in turn may foster deep learning.

In distance education settings it becomes particularly demanding to build a community of learners and distance students often report feelings of isolation which are detrimental to their learning (Friesen, 2002). One of the strategies to overcome these negative feelings is to have the students introduce themselves to one another through a personal profile, as was the case in this study.

2.3.4 Potential disadvantages of online debating

While we have yet to find reported studies on using online debating, we can extrapolate from some of the concerns raised about online conferencing. As Friesen (2002) notes in his chapter entitled: “Technological experiences: Is there a Body in this Class?” – online discussions can be intimidating and alienating. Friesen (2002) raises the concern that in online conferencing the participants may lack an “identity” – equivalent to the “embodied being” in a physical classroom, which may hamper their participation. Furthermore, the formal structure of the online debate may inhibit spontaneous repartee, as in face-to-face debating, making it somewhat stilted and artificial. The asynchronous nature of the online debate as used in this study, could result in discontinuities of thought and may hamper the development of a sustained argument. This is particularly evident when participants feel the need to respond to a number of issues raised by a previous speaker, which requires them to quote extensive “snippets” from the previous discussion in order to provide the context of their response.

2.4 Advantages of using low-tech technologies

The three modes of communication used during these debates were electronic mail, distribution lists created within students’ email clients and a mailing list (listserv), none of which requires high bandwidth provision, as Web-based technologies would have required. This was especially useful since some of the participants were connected to their Internet Service Providers (ISPs) through dial-up connections. As we did not have access to a learning management system at the time, we had to be creative with what software was available.

Although students only needed to use ordinary email to communicate through the mailing list, all postings were archived and could be accessed afterwards on the Web. This is a particularly functional feature for working students (in-service teachers) since it provides them with a means of catching up on discussions in case they fall behind due to demanding work commitments.

3. Context of the study

The Education Department of Rhodes University offers a two-year part-time BEd (Hons) degree for in-service teachers. During their first year students enrol for Foundations of Education, a course integrating Educational Psychology, Philosophy and Sociology. In their second year students can select three from a total of five-seven elective courses¹, one of which is "Educational Computing" (as it was in 2000, but renamed in 2001 as Information Communication Technology for Education). This module aims to support teachers in using ICT to enhance their teaching and their pupils' learning. Students selecting this elective are therefore required to display a prerequisite level of computer literacy, since basic computer literacy skills are not explicitly taught in this course. As a means of establishing their current computer literacy skills, prospective students are required to complete an electronic questionnaire and submit it as an e-mail attachment. In addition, students are required to have easy access to a computer and the Internet. It is impossible to make it mandatory that students have access to their *own* computer and printer and have an account with an Internet Service Provider (ISP), as they often don't have the requisite finances available. They are, however, able to use computers in the University computer laboratories, at their schools, local community centres or Internet cafes, depending on which facility is most readily available.

The online debate is the second of four activities in the first of five modules entitled: "An introduction to the use of ICT for Education". A study guide is made available both in hardcopy and on the Web and contains the intended course outcomes, the assessment criteria and deadlines, as well as references to both library and Web resources.

4. Research Design

4.1 Methodology: Instrumental case study

This study reports on three qualitative case studies undertaken within an interpretivist framework (Greene, 1994) and is aimed at investigating the participants' experience of online debating by probing into the perceptions of the lecturer, the evaluator and the students. While the researcher in a case study "typically observes the characteristics of an individual unit – a child, a clique, a class, a school or a community" (Cohen & Manion, 1994:106) the researchers in these case studies "observe the characteristics" of an online community. Cohen and Manion (1994) explain that the "purpose of such observation is to probe deeply and to analyse intensely the multifarious phenomena that constitute the

¹ Each year the electives change depending on the needs of the class and the availability of staff to teach the course.

life cycle of the unit with a view to establishing generalizations about the wider population to which the unit belongs” (pp 106-107). Stake (1994) defines different types of cases studies that reflect the different purposes for studying various cases. As these studies are examined to provide insight into online debating they can be classified as instrumental case studies.

Cohen and Manion also claim that “whatever the problem or the approach, at the heart of every case study lies a method of observation” (1994:107). In this study the researchers took turns at chairing and evaluating the debate. The chairperson was a **participant observer**, who engaged in the very activities that s/he set out to observe. The evaluator, on the other hand, was a **non-participant observer** who stood aloof from the debate that s/he was evaluating and eschewed group membership. In 2000 the chairperson was Cheryl Hodgkinson, Associate Professor of ICT in Education in the Education Department and the evaluator was Markus Mostert, the coordinator of Educational Technology in the Academic Development Centre at Rhodes University. In 2001 and 2002, Markus Mostert (MM) was the chairperson and Cheryl Hodgkinson (CH) was the evaluator.

Cohen and Manion (1994: 107) further note that the case study is characterised by a “diverse range of techniques ... in the collection and analysis of both qualitative and quantitative data”. In this case study the evaluators wrote a **summative report** on their observations on the online debate, while the participants completed an **evaluation questionnaire** that elicited their perceptions on the online debate.

4.2 Participants

The participants in this project included four in-service teachers completing a BEd (Hons) degree and four invited guests in 2000; six in-service students in 2001² and eight in-service students in 2003. The rationale for inviting guests in 2000 was to increase the range of experience and expertise within the group, to enrich the interaction in the debate and to offer alternative perspectives on the debate topic.

5. Online debating process

5.1 Before the debate

The module "An Introduction into the use of ICT in Education" commenced with an e-mail from the lecturer to the BEd students inviting them to introduce themselves to the rest of the group in a “Personal Profile” e-mailed to the group via a distribution list. In 2001 only two of the four BEd (Hons) students knew each other and none of them knew the four invited participants. So these

introductions also served to establish a level of familiarity crucial for the students to function as an online group. In their “Personal Profile” participants had to:

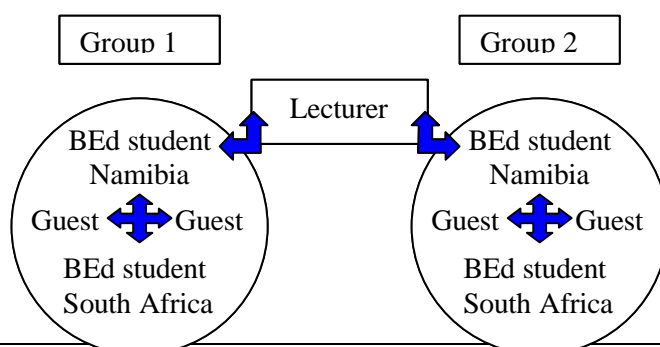
- provide an overview of their family and support structure;
- provide details of their current employment and how ICT could address problems in this environment;
- state their status in the group as either registered students or guests;
- describe their previous experience with computers and what they thought they could contribute to the group; and
- provide a photograph of themselves.

Secondly, the introductory email provided instructions on how to set up a distribution lists in their email clients which they would use to post messages to their team and how to subscribe to a mailing list which they would use to post messages to the whole group. The lecturer's email address was to be included in both the distribution lists and the mailing list.

Finally, this first e-mail message also provided the students with the uniform resource locator (URL) of their online study guide. The information on the website incorporated everything that was included in the printed study guide, but incorporated a few additional references that were added during the course. The readings included specific articles on opposing views of the value of computers within schools.

5.1.1 Allocation of debating teams

After the “Personal Profiles” had been received the lecturer divided the “virtual class” into two teams which attempted to split the class evenly according to the criteria of geographic location, prior computer experience, place of involvement (e.g. university, college, secondary school and primary school) and status as either BEd (Hons) student or invited guest. In 2000 the groups were assigned as follows:



² A guest replaced the one in-service teacher who had to withdraw from the course.

Figure 1: Structure of debating team in 2000

The medium for debate was a mailing list (using *Mailman*) setup by the Information Technology Division at RU and to which the participants were subscribed. This enabled students and guests to participate in this virtual class using three different internet components: firstly e-mail was used for private messages between individual students and between students and the lecturer; secondly, a distribution list was used by members of one team to strategise privately and build their arguments; and thirdly a mailing list was used as the public forum for the debate. This enabled the participants to post their debate responses to a “public” forum, while being able to use a distribution list to discuss their possible responses in a “private” forum. Since the chairperson was included on each of the team’s distribution lists s/he could follow the behind-the-scenes negotiation. The evaluator, however was excluded from the distribution lists and could therefore only follow the actual debate in the “public forum”. Students were cautioned about not sending confidential team messages to the mailing list!

5.2 During the debate

In 2000, the debate itself was introduced in a second email from the chairperson. In this second e-mail the chairperson introduced a contentious extract from Naisbitt’s book aimed at promoting the use of the Internet in the town of Celebration (<http://www.abfla.com/1toct/disney/celeb.html>). The purpose of this extract was to encourage the participants to reflect critically on the implementation of computers in schools.

In 2001, the chairperson (MM) and the evaluator (CH) both had an opportunity to meet with the BEd students during a contact session before the debate started, unlike the previous year. In addition, the chairperson provided a very detailed list of instructions, procedures and rules in an online document to pre-empt some of the potential “side-tracking” activities that had occurred in the previous year. These procedures included instructions for:

- Identifying the names of the teams;
- Defining the various speakers and their roles;
- Using the “subject line” to enable students to follow the debate more easily;
- Requesting that the number of words be limited to 600 words for each posting;
- Requesting participants to refrain from using attachments (See Appendix A for further detail).

Furthermore, in 2001 the chairperson initiated a “Testing Systems” activity which required the participants to check that the following communication channels were up and running:

- Distribution lists
- Mailing list

In 2003 a similar process was followed to initiate the debate. In order to keep the online debate moving, a schedule of activities and associated dates was set up. This schedule also included an indication of responsibilities for the chairperson (C), the students (S) or the evaluator (E):

Online debating activities	Dates
(C) Introductory email from lecturer	2 Feb
Address for the online study guide	
Instructions for introductions via personal profile create a basic level of familiarity test communication with mailing list	
Provide a photograph	
State status as either enrolled students or guests	
Describe previous experience with computers and possible contribution to the class	
Provide an overview of family and support structure	
Provide details of current employment and how ICT could address problems in this environment	
Instructions to set up a distribution list	
Instructions to interact with the mailing list	
(S) Introductions via personal profile	2 - 9 Feb
(S) Set-up and test distribution list	
(C) Introduces the topic through a reading	9 Feb
(C) Introduces motion of debate, the procedures and rules	9 Feb
(S) Speakers 1 & 2	10 – 16 Feb
(S) Speakers 3 & 4	17 – 23 Feb
(S) Open to floor	24 Feb – 2 Mar
(S) Speakers 5 & 6	3 – 9 Mar
(S) Vote	10 Mar
(S) Reflection and evaluation of debate	10 – 16 Mar
(E) Evaluation of debate	19 Mar

Table 1: Online debating activities

Depending on the time available for the debate, each “speaker” was given between 3 and 4 days to discuss and negotiate his/her arguments with the team and then to post the combined response by a specified target date. From time to time these target dates had to be adjusted due to unforeseen technical or personal problems.

6. Strategies used to overcome the problems

As already alluded to in the structure of the introduction to the online debate during 2000, 2001, and 2003, a number of small, but critical changes were made to the process to overcome the difficulties experienced by the chairperson, students and evaluator. These included:

- Providing an explicit set of procedures for online debating (See Appendix A)
- Having students test their systems (e-mail, distribution lists and mailing lists)
- E-mailing individual students to check on their well being
- Adapting the schedule due to unforeseen technical or personal problems.

7. Conclusion

While this overview of online debating reports on an idea still in its embryonic stage, we feel that it is worth refining and pursuing as it has enabled our students, many of whom have limited computer literacy and knowledge about the use of ICT in Education prior to join the course, to experience first hand what it means to be involved in fairly tightly managed online discussion. Rather than requiring them to join an online conference where no specific role for participation is defined, online debating structures specific roles and responsibilities to encourage participation. Although we only had small groups in our study, there was 100% participation in the online debate. While online debating has so far only been used with small numbers of students, we hope to extend this online strategy to include more participants in future.

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