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Peer support in cyberspace: co-presence and common ground in students' informal digital communicative spaces (0213)

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In higher education, peer support is an important aspect of student learning, acknowledged by institutions and students' themselves. Informal and affective student practices are under-researched areas and lack visibility. This paper draws on an empirical study of digitally mediated communication activities amongst undergraduates. Students on a 12-week module were asked to collaborate in online special interest groups (eSigs) using digital tools. The paper reports on the different ways in which the students communicated and the kinds of peer support that were evident. It is argued that in the instant messaging conversations, peer support was enabled through lengthy conversations over time where common ground was continuously updated. Co-presence and intimacy were also established through the synchronicity and continuity that the space engendered. Conversations, in which artefacts participated in the communicative transactions, were also co-constructive, demonstrating some of the ways in which common ground and co-presence contribute to collaborative work amongst peers.

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Peer support is acknowledged as an important aspect of higher education student learning, particularly in an environment which challenges education to become a 'joint venture' between students and institutions (HEA, 2008, p8). Undergraduates report that a "students' network of course-mates is an extremely valuable learning resource, both in terms of dealing with any concerns, but also for autonomous learning and discussion." (NUS, 2008, p. 26). However, informal practices are under-researched in higher education and are often invisible to academic staff and institutions. Furthermore, little attention has been paid to the affective side of being a higher education student, though moves towards transformation and a holistic view of the learner represent an implicit acknowledgement of this (Beard, Clegg and Smith, 2007). Shared, 'unique' histories are also critical in creating the necessary bonding for developing shared understanding, necessitating overlaps with the informal or social aspects of the person's life (Crook, 2000).

This paper reports on an empirical study of digitally mediated communication activities in undergraduate education. The study draws on cultural historical theoretical ideas (Cole & Engeström, 1993) in which communications and collaboration are understood to be culturally mediated, social practices where artefacts and tools mediate human activity (Cole, 1996). Dialogue is an *idealised* form of communication with alternating utterances which presuppose each other (Bakhtin, 1999). Collaboration is contingent on establishing and maintaining common ground through *grounding* in communications where mutual beliefs, knowledge and assumptions are continuously built by participants (Clark & Brennan, 1991).

The study explored the different digital communication tools that campus-based undergraduate students use, identifying the patterns of communication that support collaborative learning across formal and informal boundaries. This involved two groups of third year undergraduates, studying an optional ten-credit module in a post 1992 university in the UK in 2006 and 2007. This included a collaborative small group research project conducted in online special interest groups called eSIGs. Students were encouraged to communicate online, to meet face to face and to use a variety of digital communication tools to work on the eSIGs.

Students were recruited as research partners, drawing on participative approaches used in co-operative inquiry (Heron & Reason, 2001). Study groups of 8 to 10 students collected personal communications data from instant messaging tools (MSN messenger, Skype), mobile phones, blogs and email. Students also participated in student-led video recorded group interviews. Communications data from the institutional virtual learning environment (VLE) was collected and tutor interviews were also conducted.

The study found that, on both modules, communications with other members of the eSIGs were very limited throughout the 12-week modules. The study group members reported that they did not know others in their eSIG and found it hard to establish common ground and collaborate with them. Communications using the institutional VLE discussion board lacked dialogism, where messages were frequently unaddressed or unanswered and a sense of anonymity pervaded the group discussions.

In contrast, students in the study groups collected a large number of instant messaging conversations (using MSN messenger and Skype) that had taken place mainly amongst existing friends, both within the eSIG groups and amongst other friends on the module. These communications frequently lasted several hours, sometimes throughout the night. Students reported that the computer and the instant messaging tools were 'always on' and they maintained conversations whilst doing other work or leisure activities. One of the constraints on grounding is the extent to which the participants can establish "co-presence" - the extent to which you can see and hear what other participants are doing (Clark and Brennan, 1991). In face to face settings this is more obvious, however, the constancy of the instant messaging conversations can be argued to contribute to maintaining co-presence.

The instant messaging conversations also revealed ways in which intimacy and understanding were developed and maintained through alternative sets of conventions conveying emotion, affirmation and shared history, as this extract shows:

Date	Time	From	To	Message
17/04/2007	21:40:02	ALEX	LUKE	BOOOOO
17/04/2007	21:40:19	LUKE	ALEX	ha
17/04/2007	21:40:28	ALEX	LUKE	howz ur working going
17/04/2007	21:40:36	LUKE	ALEX	given up now
17/04/2007	21:40:46	LUKE	ALEX	lol...
17/04/2007	21:40:50	LUKE	ALEX	for today i think
17/04/2007	21:41:07	ALEX	LUKE	haha i gota get e-bix done tonight

17/04/2007	21:41:10	ALEX	LUKE	biz
17/04/2007	21:41:22	LUKE	ALEX	hahaha.
17/04/2007	21:41:24	LUKE	ALEX	gd luck
17/04/2007	21:41:25	LUKE	ALEX	lol
17/04/2007	21:41:38	LUKE	ALEX	how can u possibly do a whole SIG in one night :S
17/04/2007	21:41:39	LUKE	ALEX	lol

Figure 1: MSN Conversation between Alex and Luke (pseudonyms): eBusiness and Law sig, e-Business module

Introducing the conversation in Figure 1 with 'BOOOO' is both intimate and playful and illustrates co-presence and performance by creeping up on someone. The use of 'lol' (laugh out loud) confirms understanding and shared history in the way that gestures function in face to face communications. 'Ha' is an expression of surprise and 'haha' appears to act as simulated laughter. Corrections are made immediately (eBix is corrected to eBiz), maintaining understanding. Alex and Luke also support each others' progress through constant comparisons which act as motivational way markers.

In other examples, students constructed shared meaning by introducing resources (for example, assignment documents) directly into the communicative space which could be negotiated and mutually transformed, particularly in the run up to assignments, where students would comment and advise on each others' work.

The synchronicity, constancy and resource-richness of the instant messaging communications contrasted strongly with 'formal' communications in the eSIG groups, where less engagement and empathetic support was evident. Whilst peer support undoubtedly takes place in face to face settings, these digitally mediated conversations augmented the ways in which these undergraduates mutually supported their studies. Studying such communicative spaces also enabled us to make the peer support practices visible. Furthermore, the co-presence and performative elements of these conversations were co-constructive. This study, therefore, offers some insights into the ways in which common ground needs to be built to contribute to collaborative knowledge construction, which remains a continuing challenge to both teachers and learners in higher education.

997 words.

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