SUPPORTING THE CREATION OF SOCIAL PRESENCE IN ONLINE LEARNING COMMUNITIES USING ASYNCHRONOUS TEXT-BASED CMC

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The concept of *online learning communities (OLCs)* is constructive as social interaction among students makes a positive contribution to learning outcomes. However, while a collaborative OLC is important, making it happen is not an easy task. The lack of face-to-face interaction and the feeling of social isolation in an online context can possibly lead to a negative learning experience.

To establish a collaborative OLC, the sense of *social presence* must be created. Social presence is one of the most important factors that helps people actively collaborate, thus increasing sense of belonging and social cohesion to the community. However, the creation of social presence in an OLC can be problematic due to the limitations of the communication media used. Lean media such as asynchronous text-based CMC suffer from a lack of nonverbal cues and contextual information. This situation can make learning in online settings impersonal and de-motivating. However, asynchronous text-based CMC is one of the predominant tools used by many educational institutions around the world to support online learning processes. Thus, the major question addressed by this paper is: can we create the sense of social presence in OLCs through the use of asynchronous text-based CMC?

This paper will report the findings from the pilot study at University of York on the potential of asynchronous text-based CMC to support social presence online.

ONLINE LEARNING COMMUNITIES (OLCS)

In the early days, distance education was equated with correspondence courses and was a lonely activity. Throughout the learning processes, students worked mostly on their own, with little contact with other students and teachers. However, the paradigmatic change from 'teaching' to 'learning' (Barr & Tagg, 1995) and the major forces in today's environment, especially rapid technological innovation, have made distance education more vivid and interactive. This new paradigm, based on the concepts of constructivism, is focused more on students who actively process the information they receive, and construct the new knowledge through their own previous experiences. The role of educational institutions and educators in this constructivist student-centred model is to provide students with a learning environment that encourages critical reflection and knowledge construction through social interaction with other students in a *learning community* (Palloff & Pratt, 1999).

Facilitated by modern technologies, the concept of learning community has recently been applied to online settings known as online learning communities (OLCs). OLCs are learning communities that exist in online environments. They are virtual places, consisted of teaching and learning activities in a particular domain, in which the instructor and learners are geographically separated, using ICT to mediate their communication and social interaction. These interactions connect OLC members and allow them to develop emotional connections, social cohesion and sense of belonging to the community.

SOCIAL PRESENCE

Research shows that strong sense of community not only increases the persistence of students in online programmes, but also enhances information flow, learning support, group commitment, collaboration, and learning satisfaction (Dede, 1996; Wellman, 1999). "Without a feeling of community people are on their own, likely to be anxious, defensive and unwilling to take the risks involved in learning" (Wegerif, 1998, p. 48).

In distance education, one of the important factors related to sense of community among distance learners is social presence (Rovai, 2002). Social presence is the ability of learners to project themselves socially and emotionally as real people in a learning community (Garrison et al., 2000). According to Garrison and Anderson (2003), the formation of community requires a sense of social presence among participants. Social presence is therefore a significant factor in improving instructional effectiveness as it helps increase social interaction, encourage learning satisfaction, initiate in-depth discussions and promote collaborative learning. In contrast, the lack of social presence can lead to more frustration and less affective learning.

While social presence must be created to enhance favourable learning environment, the formation of such social element in an online communication is not easy. Although recent technologies have linked people together, geographic separation among participants is still one of the major concerns for effective communication in online communities.

THE USE OF TECHNOLOGY IN OLCS

A number of technologies are available to support online activities and communication in distance education. Over the last decade, the use of CMC has been widely adopted as an effective instructional medium in online education. Asynchronous text-based CMC, in particular, allows people to use at any place any time, which is suitable for students who are in different places and time zones to communicate at their convenience.

Nonetheless, the creation of collaborative online learning processes can be problematic due to the limitations of the communication media used. In a traditional face-to-face interaction, nonverbal cues such as facial expressions, voice tones, gestures, dresses and physical appearances can enhance communication between people. However, in a communication using lean media such as asynchronous text-based CMC, people can suffer from a lack of nonverbal cues and contextual information that results in negative communication. Although CMC is sufficient when messages are very simple or unequivocal, it does not have the capacity to support highly social and affective interaction (Daft & Lengel, 1986; Feenberg, 1989; Hiltz, 1995).

THE CASE STUDY

This paper reports the findings from the pilot study with students in *Health Economics for Health Care Professionals by Distance Learning Programme* at the University of York, UK. Based on learning modules, the programme is designed for those working in the health care sector who want to gain an accredited qualification, but are unable to study full-time. In each module, there is a residential workshop run in York for students to take part in seminars and lectures, and meet other colleagues. The first workshop is compulsory while the remainder are optional. Sixteen students enrolled in this programme are involved in the study. Most communication among the students occurs through the use of asynchronous text-based CMC provided by WebCT®.

The case study used online questionnaires to collect quantitative empirical data. The transcripts from electronic bulletin boards were also analysed to produce more detailed qualitative data.

SURVEY RESULTS

Although at an early stage, the findings from this pilot study suggest that a learning community can be developed online. The attitudes of the students toward the concepts of OLCs are very positive. Most students are highly motivated to study and actively contribute to online class discussions, although many of them are non-native English speakers and a vast majority do not have any prior experience in online learning.

Based on the results, most students in this class are satisfied with learning over distance. In addition, almost all students are very optimistic about the residential workshop. For these students, the workshop acts as a good starting point to introduce themselves and create social identity among the participants. Both formal and informal activities such as groupwork sessions and meals provide students good opportunities to socialise, collaborate, exchange ideas, and create new knowledge. Moreover, face-to-face meetings during the workshop also help students to easily establish an initial stage of personal relationships and trust with other class members, which is very important for future collaboration and knowledge sharing in an online class.

The survey results suggest that asynchronous text-based CMC, especially bulletin boards, is the most common tool for online students in this class. Although synchronous text-based CMC such as chat room is also provided by the learning platform, most students prefer to use bulletin boards and e-mail to communicate with other class members as they can use those tools at their convenient time and place. According to the findings, all students in this class claim that asynchronous text-based CMC allows them to discuss learning subjects in great detail. It also allows them to participate and contribute to the discussion whenever and wherever they want.

In particular, most students enjoy using asynchronous text-based CMC to exchange their knowledge with other class members and gain a positive online learning experience through the use of this tool.

TRANSCRIPT REVIEW

From the review of transcripts on the bulletin boards, there are number of messages that show the development of social interaction and affective communication among online

members in the OLC. Socio-emotional content such as social presence, in particular, can be found in the review of transcripts. An example of social presence can be illustrated by the expression of emotions. According to Garrison et al. (2000), the expression of emotion, feelings, and moods is one of the characteristics of social presence. From the transcripts, the expressions of emotion in text-based CMC can be found by the use of capitalisation and emoticons among members of the class. Another example of social presence found in this study is the use of *phatic*—the verbal communication used to establish social relationships rather than to impart information—shown by the use of greeting and closure in posted messages.

Many studies show that online users have perceived CMC as a high social presence medium (Gunawardena, 1995; Gunawardena & Zittle, 1997; Perse et al., 1992). From the review of the transcripts, there are some examples showing that students in this class can use asynchronous text-based CMC to convey socio-emotional expressions. To some extent, the survey results and transcripts from the bulletin boards suggest that asynchronous text-based CMC has the potential to provide a means to create social factors and socio-emotional content in OLCs.

CONCLUSION

Based on the current research findings from the surveys and the review of transcripts, it is possible to conclude that technology such as asynchronous text-based CMC has the potential to provide the means to create the sense of social presence and facilitate social interactions in OLCs. Although it might take longer time than a traditional face-to-face class, the findings suggest that learning community can be developed online using this type of medium. However, the face-to-face meetings during the residential workshop were also important as they provided the foundation for later online communication.

In fact, collaborative OLCs need both technologies and techniques to support the creation processes. Asynchronous text-based CMC can be used as a tool to support online communication and participation among people in OLCs. However, technology alone is not enough to create a strong social cohesion and sense of community among online members, which are necessary to achieve a true network. It is therefore essential to apply some techniques that help members in online communities to enthusiastically and willingly work together. The next stage of this research also aims to examine the roles of online instructors and suggest pedagogical techniques for online instructors to help create social presence among participants in OLCs.

ACKNOWLEDGEMENT

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