Investigating Social Presence in the Voice-Based Chat Room and the Text-Based Forum in the Chinese Online Learning Context

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A thesis submitted in partial fulfilment of the requirements of the University of the West of England, Bristol for the degree of Doctor of Philosophy

Faculty of ACE, University of the West of England, Bristol
September 2014
Abstract

Social presence has long been considered to be a key factor in enhancing learning in online contexts (Garrison, Anderson & Archer, 2000; Gunawardena & Zittle, 1997; Kehrwald, 2010; Ko, 2012; Tu, 2002b). New modes of online interaction, however, require researchers to engage in constant re-evaluation of social presence theory. This study set out to investigate online mediated interaction in the voice-based chat room and the text-based forum in the context of Chinese online education. The main aims were to compare the level of social presence generated using the two technological tools, to explore how learners form an online community and to contribute to theory in this area.

A mixed-method approach was taken to investigate levels of social presence, drawing on data from 124 questionnaires, 96 postings of text messages and 3 hours and 12 minutes of voice messages collected from the text-based forum and the voice-based chat room and eight one-hour interviews with students, either individually or in pairs. The answers to the questionnaires were subjected to statistical analysis, the interactional data of both the text and voice messages were analysed using Rourke et al.’s (2001) categories and indicators of social presence while the interviews were transcribed and subjected to a more qualitative analysis.

The statistical analysis of the questionnaires showed that students tended to use text to a much greater extent than voice, probably because of technical constraints, and that students’ perceptions of social presence in the two media were not significantly different. The analysis of the interactional data revealed that the density of social presence overall was slightly higher in the voice-based chat room than in the text-based forum, but the difference between the two media was not statistically significant. However, the density scores for the interactive category were shown to be significantly
higher in the voice-based than in the text-based interaction, while the opposite was the case for the cohesive category. When affective categories were compared, text and voice data were not significantly different.

As the voice-based chat room was synchronous and had the advantage of sound, students became more involved in the communication and thus a greater sense of community was created. As students developed closer relationships with each other, cohesive features could be dispensed with in the voice-based chat room, and this was why the text-based forum had a higher density of cohesive features. Voice-based interaction clearly enhances social presence and a community of learning. However, for technical reasons, it is currently recommended that students work in small groups for discussion activities and learners should have strong technical support.

From a theoretical perspective, the study underlines the need for the constant renewal of analytical tools and categories in the face of rapidly evolving interactional practice online. The multi-media resources drawn upon by students may include social media as well as university platforms and the use of emoticons, special symbols, multiple punctuation, photos and video-clips – not to mention the use of avatars and virtual worlds, which have not been considered in the context of the current study.
Acknowledgments

I feel excited to have finished this thesis and at the same time have some regrets at coming to the end of an interesting piece of work which has filled my life with a lot of experiences for the past five years. When I look back on the process of doing this research and writing the thesis, many good memories come to my mind about summer schools in UWE, seminars, conferences and social activities. Many people have contributed to the successful completion of my thesis in a number of different ways and I would like to express my gratitude to them.

I would like to thank Dr. Kate Beeching for the supervision of this thesis. Kate is a great teacher in many unimaginable ways. She always tries to understand students from their point of view, which is the most difficult thing in teaching. Kate’s guidance, support and knowledge helped me to shape this thesis and without her help this thesis would have never been finished.

I am grateful to Dr. Mari-Carmen Gil who has followed the development of this thesis and made a number of suggestions to improve its quality. Her perfectionism has spurred me to achieve a great deal, and has kept me focused on achieving my targets.

Numerous people gave me generous help that made the thesis possible. I cannot name all of them because of the limited space in this acknowledgment. I would particularly like to thank Professor Gu Yueguo, Cao Wen and Tang Jinlan. They encouraged me to conduct this research and gave me the opportunity to make it possible. I’m also indebted to my colleagues and students who gave support in various ways which were all crucial for my thesis. I would like to thank in particular my PhD colleagues, Zheng Qun, Zhang Jian, Chi and Ian at UWE for their emotional and intellectual support throughout different stages of this research.

My deepest thanks go to my wife, Li Dongmei for her support and her patience. Throughout my PhD years, she shared the difficulties of my learning process. My son has remained very independent and has avoided troubling me although in the past five years I know he has gone through many difficult periods in his life.
My gratitude goes to Guoxing Yu, Helen Watts and Ren Wei who read my work and gave me good advice. I am thankful to Wang Yongjing who was a coder for my interaction data, to Wang Yuwen who constantly offered help when I needed it, and to all my friends for their messages of encouragement. I am grateful to many housemates for making my five-year study in Bristol a memorable experience.
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