Cultural Disconnection in Virtual Education – A Small-Scale Study of A Higher Degree Level Course In Educational Research

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Abstract: - This qualitative small-scale study examines how learners' learning behaviours are different across cultures and languages, and considers the implications for designing and facilitating online communication among culturally diverse learners in the context of a higher degree level course in educational research. The study provided preliminary data and information that could enable online tutors to understand more clearly the learning behaviours of students with diverse backgrounds and the differences that exist, and, on the basis of this understanding, to reconsider the design of the online environment and materials incorporated within it.

Key-Words: - cultural disconnection, language differences, online communication, virtual education, online learning environment, multicultural context, situational analysis, sociocultural theory

1. Introduction

Culture and language privilege particular ways of learning and knowledge. However, when an online learning environment is the medium for global learning, there is a dissonance because the gestural and bodily elements of communication are absent as locational factors which form the cultural milieu. There is a further dissonance because of the difficulty of aligning the conceptual structure and inner speech of the first language with that of the second. This paper describes research on cultural disconnection in virtual education in the education department of a university in the UK. The aim is to develop a theoretical framework that accounts for cultural differences that can be applied to virtual education. The small-scale study described here was undertaken as important preparatory work prior to conducting the main field study of the research.

It is well known that learning behaviour has a direct impact on cognitive learning. In a multicultural context, learning behaviour is commonly affected by a variety of cultural factors. The purpose of this study was therefore to find out how learners' learning behaviours are different across cultures and what the implications are for designing and facilitating online communication among culturally diverse learners. Learning behaviour in this study can be defined as those actions which involve learners' self-motivation, interaction, communication and satisfaction of their learning in an online environment. Two research questions needed to be addressed: (i) how do cultural and language factors affect online interaction? and (ii) does adding cultural and language elements into online courses improve learning effectiveness in a multicultural context? Particular objectives were set up for pursuing the research questions: first to identify the characteristics of different cultures and the significant environmental factors; and secondly to examine communication issues in the relationship between culture, language and virtual education.

2. Current issues

2.1 Cultural disconnection

Culture has been categorized in many ways by different scholars. The most significant types include:
- *high context culture* which implies that a lot of 'unspoken' meaning is transferred during the communication; and *low context culture* in which all the information is directly contained in the utterances [1];
- *individualistic culture* which emphasises personal achievement at the expense of group goals, resulting in a strong sense of competition; and *collectivistic culture* which emphasises family and work group goals [2];
- *affirmative culture* which typifies a situation where the social distance is not great and can be easily transversed with easygoing interaction; and

deferential culture which typifies a situation where the social distance is considered great [3].

Cultural concepts and tools are conveyed further through communication, which is also the link between cultures, and the way people think. In a global learning environment, cultural differences refer to the understanding and sharing between different cultures and its positive value to the learning process. The 'gap' which may result from cultural differences cause disconnection between tutors and learners, and among the ways in which peers form and display knowledge.

2.2 Language disconnection

In a sociocultural perspective, language enables learners to participate, interact with others and to solve problems; it is essential to learning. Mayor and Swann (2002) state that human languages are viewed by sociolinguists as symbolic practices that derive their meanings from layers of collective experience within a culture [4]. To people with knowledge of two or more different languages and cultures, it is usually self-evident that language and patterns of thought are interlinked [5]. For learners who have English as a second or foreign language, linguistic issues also mean a deficiency in English which includes low speed in reading and writing in English, slow responses when trying to construct ideas in English, and misunderstandings during discussions with native English speakers. Learners with limited proficiency would exhibit lower levels of interaction with English-speaking classmates. Language differences might cause changes in the learners' original attempts to learn.

2.3 Inappropriate online course design

In a virtual environment, teaching and learning becomes an indirect process. If a computer is a mediation tool for helping knowledge reconstruction, learning content must be supported by curricular instructional design and multimedia technologies to engage learners in social practice. Cairncross & Mannion (2001) argue that the very richness and complexity of interactive multimedia can lead to problems if the needs of the learners are not given careful consideration [6]. As technology is used increasingly to 'deliver' education, it is important to keep in focus the human factors and not to let technology drive the process [7], especially given the lack of consideration of culture and language elements in an online learning environment. The gap between applying what is known from studying theories of learning and promoting highly technical 'solutions' is not bridged. The design of online courses sometimes has the effect of reproducing strong stereotypes when there is no underpinning theoretical framework. For learners who are from different backgrounds and have English as

a second or foreign language, current instructional design could not provide a cultural and language sensitive environment to help them to learn and communicate effectively.

3. Research approach

When determining an appropriate approach for the study, the primary aim was to apply the concept of situational analysis into a real situation. Situational analysis enables the researcher to identify the characteristics of different cultures and significant environmental factors, like organisational and social factors of the learning group. The approaches adopted, therefore, were the collection of both descriptive and in-depth qualitative data from selected participants.

3.1 Context and sample of data collection

In this university education department, doctoral students are required to undertake four taught modules to give a broad introduction and explanation of key concepts of educational research. The modules were delivered using a traditional face-to-face teaching method, but a new online support environment has been set up in the academic year 2004/2005 to allow students to improve their understanding through questioning, inquiry, debate and dialogue in this online environment. It creates a supportive learning environment for active learners and study of the environment offers insights into the research questions. The sample group comprised 5 British students and 23 international students who were undertaking a module on educational enquiry as part of their research degree programme in a British university. The group engaged for a short time in a collective online discussion forum. Some members were studying full-time, others part-time.

3.2 Methods

The research methods were chosen carefully to meet the aim of the study and comprised questionnaire, online observation and semi-structured interviews. Initially, students were required to complete a questionnaire which was designed to collect background information and to investigate their attitudes towards an online learning environment in a multicultural context. Students were then invited to join an online discussion in WebCT. The discussion topic was closely related with the syllabus of the module, but was extended by adding a cultural element to it. To do this, students were asked to identify something about the cultural differences surrounding them. It gave them a wide range of socio-political considerations in relation to their philosophical thinking. Semi-structured interviews were undertaken

with 8 students, selected to represent geographical and cultural groups from Asia, America and Europe. The purpose of the interviews was to give these students a chance to express their opinions in more detail and this helped the researcher to get a better understanding of the issues addressed in the questionnaire.

4. Data analysis

Questionnaires were distributed to 28 students and 22 responses were received, giving a response rate of 78.5%. Of the 22 respondents who responded, 7 (31.8%) were learners who have English as a first language and 15 (68.2%) were learners who have English as a second and foreign language. A situational analysis was undertaken to inform the organisational and categorisational data. It included the categorisation of the different cultural types and native languages of the respondents (see table 1), and the environmental influences from their backgrounds.

Continents		Counties included	Language	Cultural types
Asia	Eastern	China	Chinese	Collectivistic High Context Deferential
	South-Central	Iran	Farsi (Persian)	Collectivistic High Context Deferential
	Western & Middle East	Oman & Saudi Arabia	Arabic Arabic	Collectivistic High Context Deferential
America	North	Mexico	Spanish	Collectivistic Low Context Deferential
Europe	Northern	United Kingdom	English	Individualistic Low Context Affirmative
	Southern	Ireland	English	Individualistic Low Context Affirmative
		Greece	Greek	Collectivistic Low context Affirmative

Table 1 Categorisation of interviewees' cultural backgrounds

The online discussion was observed by the researcher. Data from the discussion forum were analysed based on the content of the discussions, the frequency of the discussions and the response rate; to find out whether the students' online behaviours had matched the characteristics of the different culture groups. Qualitative data from the semi-structured interviews were analysed to reinforce the understanding of the data gathered from the questionnaires and online discussion forum. Coding and development of themes were used to analyse and synthesise interview data. The analysis aimed to find out the students' own thoughts about the idea of adding cultural and language elements into online learning, and to identify any new factors which

were emerging. In addition, it also complimented the outcomes of the quantitative data analysis.

5. Key Findings

Data from the questionnaires indicated that although doctoral students have problems with communication for a variety of reasons, cultural and language differences are the main drawbacks (see Figure 1). In many respects the qualitative data confirmed and supported this outcome. Three of the most significant themes which emerged from the interviews were: doctoral students' expectations towards virtual education; cultural differences in the field of social science learning; and language difficulties in relation to the issues required of taught module.
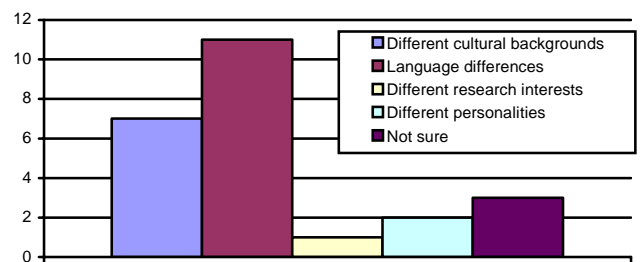

Fig. 1 The reasons for encountering communicational problems

5.1 Doctoral students' expectations towards virtual education

From the responses generated, it was clear that the knowledge provided in the taught module was extremely helpful in guiding new doctoral students to educational research, but the questionnaire showed that a significant number (87.5%) considered that there was not enough opportunity provided for classroom-based peer interaction and out-of-class communication. Of those students who used the online support service during their study, 13 of 16 (81%) agreed that the online learning environment (WebCT) provided them with a communication space regardless of the issues of time and location. The lecture recording system fulfils student expectations of virtual education as it helps them to reinforce their understanding of new ideas by being able to re-listen the lecture online. However, for those students who have previous online learning background, they commented that the website didn't provide enough up-to-date information relating to the module. On the other hand, the statistical data identifies email as being the most well-liked tool for online communication among the doctoral students. From the questionnaire data, 67% of students prefer to use writing and reading rather than speaking and listening as their main method for communication. For those students who joined the WebCT discussion forum, they (62.5%) found that the

asynchronous discussion forum allowed them to communicate with others without feeling a time pressure. This made it particularly suitable for students who aren't competent in English. Students commented that the online discussion is another learning process after the face-to-face lecturing and it provided them with a good atmosphere in which to exchange learning experiences. Conversely, those who didn't join the discussion, considered that communicating by writing required more time to prepare, especially for those students who don't have good English writing skills. Online discussion could therefore be very time demanding. Besides the problem of time constraints, personal identity in online communication is another concern, especially for English students. The divulgence of personal identity has limited free expression, and it was reported to be one of the reasons which caused a low response rate with regard to use of the online discussion for native English speakers. A considerable number of students pointed out that the low response rate for online discussion also was due to the lack of any online tutoring or the presence of a tutor; none of the tutors participated in the forum or other online actives.

5.2 Cultural differences in the field of social science learning

Questionnaire data revealed that a majority of students (86%) claim to have a cultural awareness while being in a multicultural context and they (77%) agreed that being involved in such an environment would benefit their research. However, cultural differences did affect their learning and communication. The study found evidence of cultural disconnection from different preferred learning styles, different communicational styles, different personal expectations and a lack of fluency in English. In particular, the study found three more cultural differences which were extended from the content of the taught module: the ability to be critical, the differences of ethical considerations, and the differences of policy making.

▪ **Different learning styles**
Learning style preferences are partly shaped by culture. Some students had been tutor-oriented learners in their native countries and tended to rely heavily on direction from their teachers, even in the interactive online learning environment. In contrast, other students tended to be peer-oriented learners who believed that more interactions among students should be encouraged. Based on observations in the online discussion, learning styles would seem to be changeable in different situations. Students who played an active role in classroom based learning tended to be very passive in the online environment, whereas students who were passive in classroom learning, were much more active in online communication.

▪ **Different communicational styles**
Observations of the online discussion forum revealed that there were a majority of international students who regularly joined the discussion, posted messages and replied to the comments and opinions of others. Often these same people showed much more passive styles in classroom debates. They felt that online communication could help them improve their linguistic weaknesses such as spelling and basic grammar and also they had time to check the relevant materials if they were confused by any unclear terminologies or concepts of the module. The following two comments show the different communication preferences of two of the students:

"I prefer writing to oral communication. It is difficult to get people's point through face-to-face talking, especially for the philosophical debates." (Greek)
"I prefer a real time discussion rather than a asynchronous discussion forum, I don't have any problem with language and I prefer to get an immediate response." (British)

▪ **Different personal expectations**
Students with different backgrounds have different personal expectations for their learning. This has a direct effect in separating people in a learning environment.

"Some people from my class, they didn't smile, they didn't langue and they didn't show any positive reaction...after a while, I understood that the way I expected was not the way they expected..." (Iranian)

▪ **English deficiency**
Students pointed out that the language deficiency brings about problems such as a lack of confidence. This can cause a disconnection between native speakers and non-native speakers. The problems students encountered in online discussion forum included: the low speed in reading and writing in English; the slow responses by constructing ideas in English and the misunderstanding during the interpretation of others' comments. The students who struggled with English suggested that the analysis of cultural differences should pay serious attention to the language issues. One student noted:

"Although I love to communicate with people, I couldn't (do it) as I don't competent in English...for me, cultural differences are earlier to bridge compare with language differences." (Omani)

▪ **The ability to be critical**
Most of the international students commented that they had encountered problems with understanding the concept of being critical; they reported that they felt very disconnected when they were asked to be critical. The main reasons identified for this was the different philosophical thinking within different educational systems embedded in different countries.

"...We have been asked to write several critical analyses. But, what does the word 'critical' mean here?

Although I knew this term is very popular in the Western higher education, I never really catch what it exactly means, because in our country, such term seldom appear in the circle of education." (Chinese)

- **The differences of ethical consideration**

Because of the different educational backgrounds, some of the international students have difficulties in applying prior research skills to a British educational research field. Despite the fact that during the module students spent time learning Western research ethics, they considered that doing research in their own countries was easier. They also found difficulties when applying the Western ethical requirements to their own cultural contexts.

"...in the UK researchers are supposed to conduct their studies in a formal manner and comply with certain well-defined policies of code of conduct using, for example, an informed consent, and treating the participants with a high degree of respect and value, whereas in my country, researchers don't bother to design an informed consent, and when a researcher asks participants to sign an informed consent, the participants find that amusing, funny, or even lack of trust." (Saudi)

- **The differences of policy making**

Conflicts between different cultures often occur at the political, social and economic levels. Politics as one of the environmental factors has a direct influence on educational research. While students had been required to develop an understanding on the relationship between educational research and political and power factors, it resulted in confusion between Western policy making systems and those in their own counties.

"...while policy makers in the UK make evidence-based decisions, in my country most politicians would make decisions based on their intuition or on what other countries do without considering the context..." (Mexican)

5.3 Language difficulties in relation to the issues required of subject module

Both native and non-native English speakers refer to language differences as one of the contributing factors in the breakdown of cultural connection in virtual education. The online environment enables students to minimise misunderstanding from verbal interaction as they mainly communicate by text, however this can brings in new difficulties as the writer may not communicate his/her original meaning correctly when working only with written text. Also, the usage of words and writing styles are strongly influenced by cultural elements and the ways a writer's original words are interpreted can cause misunderstandings. Apart from difficulties with English, 75% of students noted that the module was hard to understand because of the

unfamiliar philosophical terminology involved. 62% of international students also experienced problems with philosophical concepts which related to 'Western' philosophical history, again showing the links between language and knowledge. Some of the native English students explained that they prefer to communicate with other native English speakers because it was more straightforward for them. Similarly, most of the international students (66%) felt more comfortable when communicating with those who have English as a second or foreign language rather than native English speakers. As a result, lack of relative knowledge of the subject, together with an inherent deficiency in language caused a separation of the learning group.

6. Discussion and suggestion

The investigation of student learning behaviours and their perspectives towards virtual education shows that the online learning environment has the potential to fulfil student expectations for active learning. In this study, the sample of students experienced significant problems with regard to culture and language differences, specifically in relation to some of the core issues required of this taught module in educational research. From the findings some issues have been identified with regard to future online material design and support services. It confirms that language plays a significant role in cultural study and it provided early indications that future research on the impact of cultural differences should pay particular attention to the language elements. This research gave insights into the design and ways of facilitating communication so as to better align cultural and language disconnection in virtual education. It was evident that cultural and language differences are affected by a wide range of factors. In different contexts, people might act differently and their behaviours might be totally opposite to their culture type. Hence any changes to the online course design should consider different dimensions of the environmental characteristics but recognise different personalities will still play a part. Having summarised the findings of this study, it is evident that the current online support system used for this course needs to be adapted in order to mediate learning for postgraduate students who have diverse backgrounds. From the positive feedback from students, adding cultural elements into the subject learning may increase learning effectiveness and make this multicultural environment more connected.

6.1 Summary of points noted with practical suggestions for improvement

(1) The international students felt they were not adequately prepared for online learning, a way of working with which they were not familiar. A series of pre-session workshops would help them become familiar with the learning environment and how to work within it. This might include support for improving reading and writing in English, the forms of communication most needed for online work, as well as other study skills directly relevant to working in a virtual learning environment;

(2) Because of the complexity of the subject matter, the asynchronous discussion tool is the one which is most appropriate for online communication. It is therefore important to focus on making any necessary improvements to this particular mode of communication. One possibility might be the inclusion of a spelling and grammar facility linked to the discussion forum as the non-native English speakers were often conscious and concerned about what they viewed as their limited written English skills.

(3) To be able to access the face-to-face lectures online was seen as a very useful facility, as this allowed students to go back over the lecture in their own time. This facility would be of particular benefit to the non-native English speakers given the linguistic difficulties some have when attending face- to-face lectures;

(4) This is a complex subject area, with many words and terms used which not in daily use. An online glossary providing an explanation of unfamiliar terms would be a valuable support.

(5) The design of the online course should consider how time consuming working in an online environment can be and offer a wider choice of ways to communicate which some might find a preferable and more efficient communicational platform for some purposes. The possibility of incorporating a real-time voice (audio) chat facility should be investigated. This would enable users to have a more immediate, active and 'natural' form of communication. Taking this a step further, to address the difficulties of understanding, the possibility of having a text support for this system, where the spoken words or the key words of the conversation could be simultaneously displayed on the screen would be very helpful for those wanting to try communicating in this way but find spoken English more challenging;

(6) Socio-cultural theory acknowledges that learners need support and assistance to learn. It notes that the participation of senior and skilled members is vital in online learning. Online tutors should be made fully aware that they are the most important aspect when it comes to meditating online actives and reconnecting the various differences.

7. Conclusions

This study addressed the research question of how do cultural and language factors affect online communication. Despite its limitations in terms of sample size, the study draws attention to the reasons for the current issues in virtual education. It has therefore enabled improved identification and understanding of cultural and language elements. The study raises an important question for online course developers of how can online course design accommodate different cultures in a synergistic way to enable students from diverse backgrounds work together effectively. The next stage of this research involves developing a framework to account for cultural and language differences, and to take the associated further actions to address the issues raised. Findings of this study may not apply to other settings because of the context specificity, but for this context the study provides data and information that could enable online teaching staff to understand more clearly the learning behaviour of their students and differences that exist, and, on the basis of this understanding, to adapt the design of the online environment, support systems and associated course material.

References:
[1] Hall, E, T., *Beyond culture,* New York: Doubleday, 1976
[2] Hofstede, G., *Cultures and organizations: intercultural co-operation and its importance for survival,* London: Harper Collins publishers, 1994
[3] Brown, P. and Levinson, S. Universals and language usage: politeness and phenomena, In Goody, J (Ed.) *Questions and politeness,* Cambridge: Cambridge University Press, 1978
[4] Mayor, B. and Swann, J., The English language and 'global' teaching, In Lea, M.R. and Nicoll, K. (Ed.) *Distributed learning: social and cultural approaches to practice,* London, New York: Routledge, The Open University, 2002
[5] Hunt, E. and Mahzarin, R.B., The whorfian hypothesis revisited: a cognitive science view of linguistic and cultural effects on thought, In Bernard et al. pp.57-84,1988
[6] Cairncross, S. and Mannion, M., Interactive multimedia and learning: realizing the benefits, *Innovations in Education and Teaching International,* Vol.38, No.2, 2001, pp.156-164.
[7] Walker, J., *"The princess bride": letting the resources drive the instruction*, In proceedings of ED-MEDIA 94-world conference on educational multimedia and hypermedia, Vancouver, British Columbia, Canada, 1994