

Multicultural, Virtual Work Places: Opportunities and Challenges for LIS Educators

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Abstract

The article discusses a trial undertaken in a LIS education program to help prepare students from different cultural backgrounds to work in virtual, multicultural work places. The focus of the trial was developing teamwork, which may now involve global, multicultural and virtual components, for which students need to be prepared, given work place changes of recent years. The trial took place in a school of information studies at a large, multi-campus rural university in Australia. The lecturer grouped students from an off-shore campus, with a different cultural background, with local students to work online on a group assignment. Evaluation involved an anonymous, web-based survey after all group assignments were completed. The survey explored the experiences of students regarding their group work in multicultural teams. The findings highlight the challenges of group work in fully online environments. They include language and cultural diversity, time zone spread and lack of face-to-face communication. Some of these challenges are likely to be replicated in the work place where multicultural team work is involved. Some of these challenges are likely to be replicated in the work place where multicultural team work is involved. Some suggestions to overcome these challenges are included at the end of the article.

Keywords: Virtual Multicultural Work Places, LIS Educators, Team Work, Australia.

Introduction

As in many other work places, work in libraries and information services has undergone profound changes in recent years. The principal reason has been technological developments that have had a huge impact in many ways. One result is that virtual work places, involving multiple locations, are often now de rigueur. Another element, in Australia and other western countries, has been the increasing cultural diversity of the workforce. Thus, Library and Information Science (LIS) educators now need to consider the educational requirements to prepare students for these changed work places. What new skills are now needed for successful work-place participation?

One traditional skill still required in the new environments is team work, though its characteristics are also changing in keeping with the developments mentioned above. A key influence on the advent of virtual work places is the increasing globalisation of the economy. It has been largely a result of global competition, itself encouraged by advances in technology that the western world has seen the rise of the virtual organization and the deployment of global virtual teams. A global virtual team can be described as a culturally diverse, geographically-dispersed and electronically-communicating work group (Massey, Hung, Monotoya & Ramesh, 2001). The ability to communicate effectively with team members and to collaborate with culturally diverse members, are skills that are required of members working in global virtual teams (Goold, Augar & Farmer, 2006; Goold, Craig & Coldwell, 2008). According to Sweeney, Weaven and Herington (2008), due to the globalisation of business and the multicultural nature of society, students can expect to work within multicultural teams. This situation offers both challenges and opportunities for higher education distance education provision. Wholly distance education mode means that students are geographically dispersed and off campus, there are no face-to-face classes at all, and all teaching and learning is facilitated through an online environment. This article will explore the experiences of a group of students studying “Information and Knowledge Management in Organizations”, a third-year undergraduate subject¹ undertaken as part of a Library and Information Management degree at a large, multi-campus rural university in Australia in the autumn semester of 2009. The students undertook a group assignment in mixed cultural groups, the outcomes of which, from the students’ perspectives, were assessed through an anonymous web-based survey. The key research question addressed by the article is: “What are the challenges of working online in mixed cultural groups for distance education students?” Thus the article will focus on the major issues that arose as a result of language and cultural diversity in the students’ groups, as well as the practical problems of widespread geographical diversity and absence of face-to-face communication. The next section presents the literature review which will be followed by the method used for the project and then the findings. The conclusion presents the lessons learned and recommendations.

Review of Literature

The literature review further considers team-working skills, including in virtual environments; the internationalization of higher education, and its ramifications; the role of group assignments in providing students with virtual, multicultural teamwork experiences; the issues of language and cultural barriers; the importance of social relationships; and the gaps in the literature.

Team working skills for library and Information professionals

Levy (1987), predicted that participation in “virtual communities” may become an increasingly significant dimension of information work. His prediction has been realized. The rapid growth of information and development of technology, including the advent of digital resources and services, has resulted in the need and opportunity for team collaboration between libraries within library networks in order to share resources and to reduce costs. In fact, collaboration is now the key to the success of information services as no single library can fulfil all its user needs. Moreover increasingly, in the western world including Australia, library work places are multicultural, reflecting the now multicultural nature of modern societies. As mooted above, the introduction of multicultural, virtual work places has resulted in the need for LIS education to equip students with the skills necessary to function effectively across cultures and nations (Mansor & Ismail 2009). Choi and Rasmussen (2006), pointed out that strong team working skills are essential for working in new virtual environments. The widening of the role of LIS professionals in recent years, to include multidisciplinary fields such as Knowledge Management, has also had an impact on the need for teamwork, whether face-to-face, or virtual. For example, in a research by Hazeri, Sarrafzadeh & Martin (2007), team-working skills were identified as one of the extremely important skills for the engagement of LIS professionals in knowledge management roles. As Myburgh (2003) stated, “The education of skilled information professionals must evolve to meet the many new challenges that have resulted from the complex, knowledge-based environment in which we live”. Thus new work-place developments are presenting challenges and opportunities for LIS educators to equip students not only with the discipline knowledge but also life skills such as communication and team work that are required in the dynamic LIS workplace (Hallam & McAllister, 2008).

Internationalization of higher education

Internationalization of curriculum is one of the elements of higher education in Australia where students now come from many different countries (Bell, 2008). One way to embed internationalization in Higher Education, and also give students experience of virtual multicultural teamwork, is through building mixed cultural groups where students need to work with others from different countries. Reviewing the literature, De Vita (2002), found that the use of cross-cultural work groups is associated with the following institutional and educational goals:

- To counter the predominantly ethnocentric approach to higher education found in most university systems
- To prepare students to function in an international and inter-cultural context
- To enhance all students’ understanding and appreciation of other cultures

- To challenge cultural stereotypes and send an unambiguous message of equality to students (De Vita, 2002).

The role of group assignments in LIS education

Group assignments in LIS courses are one way to provide virtual, multicultural experiences for students. The group assignment is a graded activity in which students are required to work collaboratively and cooperatively to complete a task. Moreover, previous research suggests that teamwork is associated with higher-level learning outcomes (Sweeney, Weaven & Herington, 2008) including greater involvement and accountability of students within the group, redistribution of power, and promotion of student autonomy (Melles, 2004). There has been an overall shift to a preference for the inclusion of group assessment within courses despite the general opposition to group assessment traditionally encountered in tertiary students (Tennent, Becker & Kehoe, 2005). This is likely to be due to the affordability of recent communication and collaborative e-learning tools (e. g., the wiki) that enhance the ability of groups to work together. Donnan (2007), reported that collaborative, problem-based learning (to discover the solution to a given problem), which incorporates online assessment elements within it, is a small but significant spectrum in the overall range of assessment practices in Australian universities.

Language and cultural barriers

Despite the fundamental importance of multicultural group work activities in the curriculum, previous literature has shown that home and international students do not spontaneously mix and would rather be involved in mono-cultural work groups (De Vita, 2002). According to Melles (2004), culture and language is used in Australasia higher education literature to position the Asian learner as “different” and “problematic”, though such cultural models and stereotypes have been the subject of some criticism in recent years. Nevertheless, language and cultural differences have been identified as major barriers to the success of mixed cultural groups. Multicultural influences in language and communication exchange in group learning activities were found to be likely to have an impact upon team performance and learning outcomes by Melles (2004) whose research with Asian students in Australia about their experiences with group work showed that language/culture played a diverse and unexpected role in students’ experience. In reviewing the literature on both language and cultural issues in the group work context, Melles (2004) saw the lack of participation by Asians in group work as sometimes focussed on language difficulties but also to include cultural disposition. Lack of independence or autonomy and dependence on uncritical acceptance of authority figures are some of the attributes of Asian learning culture which result in lack of participation in group work. (Melles, 2004)

The importance of social relationships, based on trust

A key element in successful group work is seen to be positive social relationships. Reviewing the literature, Powell, Piccoli and Ives (2004) identified relationship building, cohesion, and trust as fundamental processes that foster team effectiveness, when working within virtual teams. Although social interaction and the development of relationships are not necessarily the primary function of groups, positive social relationships among group members are essential to academic success, i.e., successful task completion (Melles, 2004). In virtual teams, both the lack of face-to-face interaction and nonverbal cues, and the reliance on computer-mediated communication can pose big challenges (Webster & Wong, 2008). As Snow, Snell & Davison (1996) pointed out, trust is pivotal to preventing geographical distance from leading to psychological distance in global teams. It seems an obvious point that teams that trust each other more will communicate more (Webster & Wong, 2008). But what of the situation where people are placed in a group with others whom they do not know and with whom they do not have a background of trust on which to build? As Staples and Webster (2008) said working with team members who are in different locations (in virtual teams) may introduce communication challenges and reduce opportunities for rich interactions, potentially affecting knowledge sharing and its outcomes.

Gaps in the literature

There is extensive research from working environments which discusses virtual teams including people from different countries. This is especially the case in the IT sector (e. g., Massey, Hung, Monotoya-Weiss & Ramesh 2001; Webster & Wong, 2008; Staples & Webster, 2008). However, the role of LIS education in preparing students to take part in multicultural, virtual work places has not been extensively explored. Although online group assessment has been discussed in the recent Higher Education literature (Goold, Augar & Farmer, 2006), research about mixed cultural group assessment in distance education, where students are off-campus, geographically dispersed, and do not have any chance for a face-to-face meeting, is limited. Indeed, it appears that the present research is unique in that it explores students' experiences in working in online mixed cultural groups in distance education as preparation for work in virtual, multicultural work places.

Research Method

Assignments are the main method of assessment in distance education. The subject entitled "Information and Knowledge Management in Organizations" incorporated two group and individual assignments with the equal weight of 50 percent for each. Twenty-five out of seventy-three enrolled students (34%) in this subject were living in a country other than Australia. Local and the off-shore students were grouped together. For their online

group project which was the first assignment, students were placed in multicultural groups consisting of one or two students from the off-shore campus and two or three students from Australia. There were fifteen mixed groups altogether. Underpinned by problem-based pedagogy, each group was asked to develop a case study project in which they needed to propose solutions for the identified information/knowledge management deficiencies in their chosen organizations. Students worked in virtual teams to complete their case study assignment. The aim of the project, apart from focussing on information and knowledge management issues in the workplace, was to develop team work, communication, and leadership skills through working in collaborative virtual teams. The online learning environment at the university, called "Interact", was used for the project. It has multiple tools to support team work including Wiki, Synchronous Chat, group mail, announcement, and media repositories. Each group was allocated a private Interact site including live chat, group mail, announcement, repository, and a Wiki site. Groups were required to use the Wiki for writing their assignment as well as the other tools for communication and file sharing. Wikis have been identified as a powerful tool for collaborative work (Parker & Chao, 2007; Trentin 2008).

Data collection

The method used to evaluate the experience of the students in their group assignments was a survey. Surveys are used as part of the process of obtaining feedback from students about their experiences in each of their subjects at the university. The lecturer developed a survey questionnaire using Survey Monkey. As is standard practice, the survey was released after the group assessment was completed with the link to the questionnaire being sent to students' emails. Student perceptions were sought on a wide range of factors related to their experiences of online group assessment including working with technologies, communication, and working with students from a different country. There were fourteen main questions and five demographic questions. Questions were both closed and open-ended with the types of main questions including Likert scales to assess level of agreement about particular issues, multiple choice questions and yes/no questions.

The sample

Fifty-one students, or about 70 percent of the class, completed the questionnaire. The demographic information has been summarized in Table 1.

Table 1*Demographic Characteristics of the Sample*

| | | | |
|----------------------------------|--|---|-----------------------------------|
| Gender | Female 85.7% | Male 14.3% | |
| Age group | Under 30 44.9% | 31-40 20.4% | Over 40 34.7% |
| First language is English | Yes 68% | No 32% | |
| Employment | Did not work, or worked less than 20 h/w 20.4% | Worked 20-30 h/w 16.3% | Full-time work 63.3% |
| Internet access | No Internet access at home 2.1% | Dial-up Internet at home 8.3% | Broadband at home 89.6% |

As can be seen from Table 1, the vast majority of students were females; the majority was under 30 years of age; over 60 percent were working fulltime, and just over two-thirds spoke English as their first language. A very high percentage had broadband access to the internet.

Data analysis

Analysis of the quantitative data was undertaken by the same tool which hosted the questionnaire. Survey Monkey collects responses and gives descriptive statistics of them. It also creates figures and charts for quantitative data. Qualitative data (comments to the open-ended sections of the questionnaire) were initially organized into themes and categories. Key themes and categories were then tabulated demonstrating supporting comments. In this paper, findings of the quantitative data are presented by figures and their interpretation. The qualitative data are reported based on the categories relevant to each theme. It should be noted that direct comments from students are not reported. This is because an ethics application was not lodged as the initial aim of the survey was to improve teaching practices. When the survey was seen to have elicited such rich data, a decision was made to write the article. However, quotations could not be used without ethics approval which could not be obtained retrospectively.

Results

The first key question in the questionnaire asked about the most valuable aspects of the group assignment experience. The question was quantitative, students could tick as many categories as appropriate and there was space for further comments at the end. Figure 1

presents the responses.

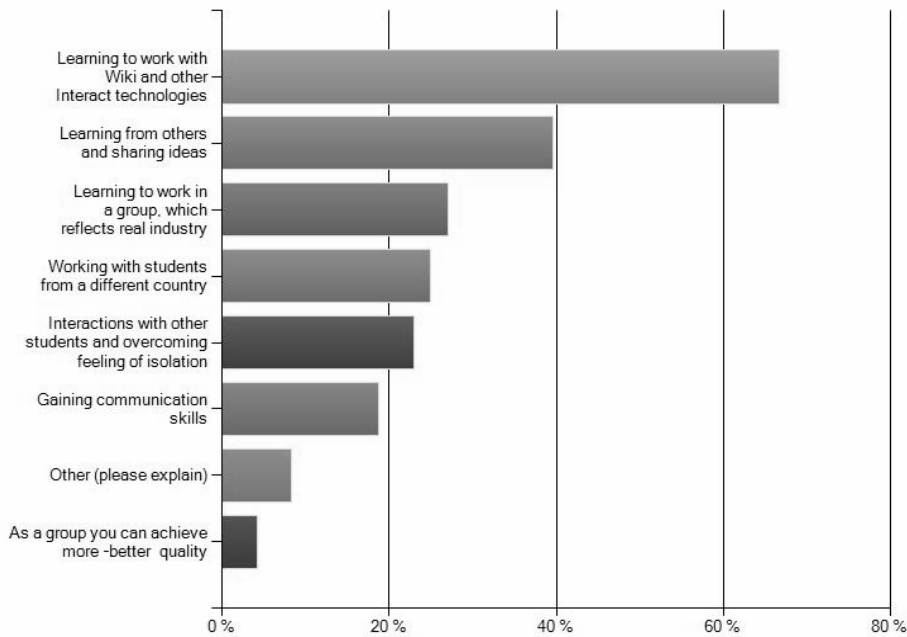


Figure 1. what were the most valuable aspects of your group assignment experience?

As shown in Figure 1, for over 66 percent of students, learning to work with Wiki and other interact technologies was the most valuable aspect of the group assignment experience. Working with students from a different country, which is very important to this article, was considered as the most valuable aspect of the group assignment experience for only 25 percent of students. Nevertheless this is offset, to some extent, by another choice which was learning from others and sharing ideas, considered one of the most valuable aspects by almost 40 percent of the sample.

The second question asked about the negative aspects of the group assignment experience. Figure 2 presents the responses.

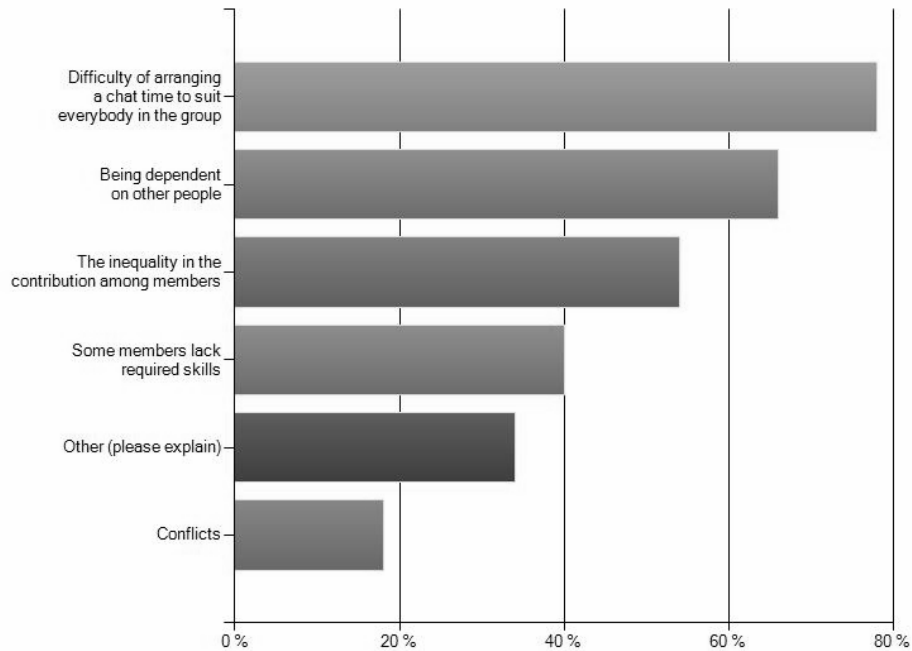


Figure 1: What were the negative aspects of this group assignment experience?

As illuminated by Figure 2, difficulty of arranging a chat time to suit everybody in the group was identified as one of the negative aspects by the greatest percent of students.

The open-ended section of this question elicited in-depth perspectives of the students about the challenges of online group assignment. From the written comments of the students it was clear that, in general, ineffective group work resulted from communication problems. The key reasons for the latter were lack of trust, which was difficult to generate in a virtual environment, lack of face-to-face contact, language and cultural barriers, and time zone differences. Each of these issues is discussed below.

Lack of trust

Some students mentioned that they had difficulty communicating with other students because they did not know who they were. Comments ranged from the difficulty of communicating with people one knows nothing about to the problems of trusting when there is no face-to-face interaction to the notion that students should be able to choose those with whom they have communication. While some of the comments may not have been aimed at students from a different country, others were likely to have been due to cultural differences. In the latter case, there were some comments which made clear that communication problems and lack of trust were linked to having to work with students from a different country.

Lack of face-to-face meetings

Some students believed that there should be some face-to-face meetings as online meetings do not bring effective communication and may cause misunderstanding. These students reinforced the notion that face-to-face meetings help people get to know each other which is necessary for effective communication.

Language barriers

Australian students commented that lack of familiarity with English, on the part of students from the off-shore campus, was a real barrier to effective communication amongst group members in chat sessions. This also caused problems in developing the assignment as some local students made clear that the work written by off-shore students had to be re-written by them. While Australian students complained about the poor English of off-shore students, the latter group complained that their work was not respected by the Australian students.

Cultural barriers

Accordingly, to some students, the different cultures of off-shore students and those in Australia caused difficulties in communication and thus developing the assignment. Some Australian students pointed to the different learning styles and study cultures of off-shore students, when compared with themselves (e.g., greater dependence on their lecturers, lack of independent learning). They saw these as barriers to fair contributions to the group work by the off-shore students.

Time differences

As was mentioned before, difficulty of arranging a chat time to suit everybody in the group was seen as one of the most negative aspects of group assignment experience by the largest percentage of students. At the time of assignment, the Australian and overseas students had to arrange their chat sessions to fit with time differences of between one and four hours. Given that most of students were working, arranging a time for synchronous communication was a challenge.

The synchronous communication requirement of group assignments worked against time flexibility because of which some students had chosen distance education in the first place. They wanted to choose to study whenever it suited them.

Overcoming challenges

To overcome barriers to online group work in distance education, some students suggested that groupings should be based on geographical locations of students so that they could arrange online meeting times more easily and also be able to arrange face-to-face

meetings which bring more familiarity amongst group members and consequently more trust. While grouping students in the same time zones would reduce difficulty of time arrangements for synchronous communications, it does not provide the opportunity of mixed cultural group work which was one of the goals of this group assignment. Also, this approach seems unfair to students who are the only ones in their areas of residence.

Discussion

In spite of the challenges associated with the assignment, all groups, except one, completed their assignments successfully. Nevertheless, there were problems, some of which would be likely to be reflected in the work place. Poor communication among group members was identified as a major barrier for effective group work in mixed cultural groups. This was seen to stem from lack of trust, language, cultural differences, and different time zones. As was reported in the literature review (Powell, Piccoli & Ives, 2004; Melles, 2004), in virtual group work where there is no opportunity for face- to- face communication, trust among group members plays a critical role in promoting effective communication. While the online environment provided several communication channels, it did not seem to help facilitate communication in the absence of trust. Language differences and different learning styles between Australian and off-shore students also caused communication problems and made it difficult for group members to understand each other. Living in different time zones, with between one and four hour time difference was a real challenge in arranging a time for synchronous communication.

Conclusion

There are two sets of linked study implications. First, there are the changes that academics can make to improve the outcomes of distance, multicultural group work. Second are the implications for the work place. The opportunities offered by group work in Higher Education were discussed in the literature review (Sweeney, Weaven & Herington, 2008; Melles, 2004). Academic staff needs to continue to take advantages of these opportunities on behalf of LIS students undertaking distance education. Nevertheless there are specific challenges which need to be considered before introducing group assignments in distance education. Based on the result of the present research, poor communication is the major problem for effective online group work in mixed cultural groups. To overcome communication barriers, it is suggested that students have some familiarity with each other before the start of the group work. One suggestion would be to initiate some informal, stress-free chat sessions to enable students to introduce themselves to each other. This may increase the level of trust among group members which will help with more comfortable communication and sharing of ideas when the work begins. Another consideration is to provide technologies for synchronous communication which go beyond enabling text-based

chat only, and present opportunities for voice and video communications. Such technologies may reduce the language barrier and lead to better understanding amongst students. The above suggestions are difficult to apply when time differences are a challenge for synchronous communication between group members. It is suggested that group work for distance education should be designed in a way that the need for synchronous communication becomes more limited. To enable more non-synchronous work, the group assignment should be as clear as possible with the specific tasks which can be divided fairly among group members. The implications for the work place are parallel in many ways. Findings from the present research suggest that communication is the key for effective team work in online environments especially when participants are from different cultures. Providing chances for some initial face-to-face meetings between team members can build trust between them and make for more comfortable communication within the group in later stages. If face-to-face meetings are not possible, an informal, social online meeting, when new groups begin to work together, may be of assistance. Regular virtual meetings, through video conferencing which most closely mimics face-to-face meetings, at a convenient time for all members, can especially facilitate knowledge sharing between members. Above all it is important to remember that while the global society offers many opportunities, the way virtual communication takes place, especially when cultural differences are involved, needs careful consideration.

Endnote

1. A *subject* refers to an individual unit of study (usually one semester in length) that is worth a certain number of credit points. A series of subjects make up a *course*- such as Bachelor of Library and Information Management degree

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