Cross-cultural online communication: making connections through project-based learning

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Publication Details
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Abstract: This paper examines a project that encourages cross-cultural communication among teacher-education students through online discussion and project-based learning. An authentic case was presented to eleven students (divided into two groups) who volunteered to participate in the project over one semester. The case focussed on the development of a website by the two groups which would provide information to local Hong Kong students visiting the University of Wollongong on an intensive English immersion programme. The students were encouraged to seek advice from their HKIEd mentor and UOW advisor via synchronous and asynchronous communication tools available in the Blackboard Learning Management System. A development-based research approach was utilised for the project and perceptions were collected from the students, mentors and advisors using reflective journals, video-interviews, focus groups and the final completed project.

Introduction

Online learning, global learning and project-based learning represent key topics within the international community of educational technology. With the advent of Information and Communication Technologies (ICT) and the continual improvement of Learning Management Systems (LMS) such as Blackboard there is an almost unlimited potential in using online communication for teaching and learning which extends beyond the campus boundaries and includes students and staff from overseas. Project-based learning focuses on meaningful activity in which realistic, intriguing, relevant learning occurs through participation in a challenging and motivating project. It also emphasizes situated learning and apprenticeship learning which deals with real-world issues. Open-ended generative tasks are advocated in which there is not a prescribed approach or solution and in which the learners generate their own questions, plans and goals. Collaborative decision-making and problem-solving is necessary as teams work on projects in which they discuss, consult, collaborate and problem-solve in order to create a product. Project-based learning changes the role of the teacher to a cognitive coach who models, coaches, guides and encourages independence in goal setting and decision-making and promotes reflection (Howard, 2002). In this case, online learning and global learning principles were used to enhance project-based learning activities for teacher-education students involved in an authentic project.

The use of online discussion groups also allow staff and students to share their understandings and become aware of multiple points of view, allowing students to learn from their peers as well as their teachers (Jonassen, Mayes & MacAleese, 1993). Koschmann (1996) suggests that “learning [is] reflected in the language of learners” (p.14) and advocates computer supported co-operative learning research which “focuses … on participants talk, the artefacts that support and are produced by a team of learners, and the participants’ own account of their work” (p.15). Communication within discussion groups can be easily organized, stored and retrieved and can be analysed throughout a project in order to determine how learning is reflected in the language and artefacts created by two groups of students interacting with overseas advisors. In addition, principles of global learning were relevant for this project. “Global learning is the combination of global reach, achieved through the use of modern technologies, and global perspectives, arising from the interaction of students and faculty living in different countries, to produce a
global graduate for a global workforce” (Rimmington, 2003a, p.1). In addition these global students should be able to develop multiple perspectives through interactions with other people in “different geographic locations with different cultural, linguistic or religious backgrounds. Global learning provides this outcome through experiential learning, in cross-cultural student and faculty teams, with a social constructivist and project-based learning approach” (Rimmington, 2003b, p.1536).

**Authentic Task**

This paper examines a project that used an authentic case to immerse students in project-based learning and online discussion between two groups of students from the Hong Kong Institute of Education (HKIEd) and two international collaborators from The University of Wollongong (UOW). The project aimed to provide further insight into online communication by teacher-education students and determine whether effective communication could be enhanced via online communication. In particular the study focussed on the types of communication utilised by the students with their virtual tutors located in another country. Eleven HKIEd students participated in the project. They were divided into two groups with both a HKIEd tutor and a mentor from the UOW. A project brief made up of an authentic case description was distributed in the introductory session. Each group was required to create a web site providing information to HKIEd students who were about to visit the UOW to participate in an intensive English immersion program. Students were encouraged to seek advice from their HKIEd Mentor and UOW Advisor via synchronous and asynchronous communication tools available in the Blackboard e-learning system.

The case description was as follows:

*Your task is to create a Web site to provide information to Hong Kong Institute of Education students who are to visit the University of Wollongong to participate in an intensive English immersion program. The students from HKIEd are studying in the Bachelor of Education program and will travel to Wollongong for three weeks in November and December. They will spend their time in classes at the University and undertaking practice teaching in local schools. The students will stay with local families and have free time on the weekends for leisure activities. The Web site should provide some orientation information to introduce them to the Australian school education system, the Wollongong area and Australian cultural and social life. Specific orientation about the program will be provided to students when they arrive in Australia.*

To help you with this task, an academic in the Faculty of Education at the University of Wollongong will be your team advisor for this project. You will also need to communicate with your advisor at least three times throughout your project to:

- Find out background information to base your content on.
- Get feedback on your draft Web site design.
- Get a final evaluation of your design.

Use the synchronous and asynchronous discussion tools provided in Blackboard to help you with this. In addition, there will be a LTTC staff member at the HKIEd who will be your team mentor throughout the whole project.

You have 6 weeks to complete the project according to the suggested timeframe.

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Read and discuss the project brief in your team and with your mentor</th>
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<tbody>
<tr>
<td></td>
<td>Make a list of questions to ask your UOW advisor</td>
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<tr>
<td></td>
<td>Arrange a chat session with your advisor</td>
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<tr>
<td></td>
<td>Follow-up any issues on the discussion forum</td>
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<tr>
<td>Week 2</td>
<td>Work on collecting your content and developing your design for the site</td>
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<tr>
<td></td>
<td>Talk to your mentor about how you can record your project ideas</td>
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<tr>
<td>Week 3</td>
<td>Contact your advisor with a description of your design and ask for feedback</td>
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<tr>
<td></td>
<td>Organise a chat session or use the discussion forum</td>
</tr>
<tr>
<td>Week 4</td>
<td>Develop your ideas into a draft Web site</td>
</tr>
<tr>
<td></td>
<td>Ask your mentor for any help you need at this stage</td>
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</tbody>
</table>
The HKIEd mentors also provided three face-to-face sessions at scheduled times throughout the project in order to provide some guidance to the students in the development of the website and to equip the student participants with the basic skills of creating a web site. The three sessions included an introductory session, an ‘information architecture’ workshop and a web authoring consultation session.

In order to examine the “learning of the students as reflected in their language” the “participants talk” in the form of online transcripts were collected and analysed. The synchronous and asynchronous communication data through the discussion forum and virtual chat room in the Blackboard e-learning system were analysed. In addition the “artefacts … produced by the team” were examined as well as the “participants’ own account of their work” in the form of reflective journals. Two video interviews were also conducted (in the middle and at the end of the project) with HKIEd Mentors and one audio interview (at the end of the project) with each UOW Advisor (Koschmann, 1996, p.15).

### Participants’ talk

A focus group was undertaken with each of the groups in the project. It appeared that the nature of the task was challenging. One student suggested that the two main difficulties involved the content and technical issues. 

*In addition to surfing the web for information, our content … mainly came from our Australian advisor. From the technical side, if we faced a problem that we can’t settle after our discussion, we would seek advice from our HKIEd mentor (Focus group)*

When asked about their roles and responsibilities in the project the students tended to focus on the information or content of the website as opposed to more traditional roles of project manager, graphics, web authoring or editing. For instance, many commented on ‘searching for information’ and ‘finding supplementary information’ as important aspects of their role. In fact Group 2 participants all considered searching for information as part of their role. Group 1 had very different issues with communication and roles and responsibilities. Most work appeared to be left to two of the students. *Some of our members tend not to do as much as we expected.*

It appeared that being immersed in the project provided some students with an insight into the whole picture of designing and developing a website, which was an explicit goal of using project-based learning. For example: *I did not realize the whole workflow of the project before, and it is out of my expectation that it was so systematic. At first I was thinking that I just need to create a website…* Another student suggested that *…we need to consider communication and time management, and many other things. It’s not just only creating a website.* Another student expressed a similar view. *This made me realize that making a website not only requires technical skills, some other skills are also needed.*

Group 2 students also realised that searching the web for information was insufficient to develop a website for the target audience. They needed to speak to their Australian advisor who would assist them to pinpoint the most pertinent information. For example: *We needed to gather information via communication with our Australian advisor for many times before we could get the relevant information.* In this situation the students are learning about the need to design for a specific audience and purpose which is not always an easy task. As they discovered, sometimes speaking to people knowledgeable in the area is the only way to obtain this important information.

Communication did not appear to be a major issue with their Australian advisor. *When I work on the web page, I have difficulty in understanding the information; it was more difficult to write up pages in my own words in English. But I feel better when communication with our Australian advisor…* Students also reverted to other means of communication within their group. *Most of the time we communicate via ICQ because the response will be quicker.* One student even suggested that *ICQ is a must component in our project.* In addition students met face-to-face and
contacted each other by mobile phone with one student suggesting that *I think the most efficient way to contact is via the phone* particularly when dealing with urgent matters. In addition the students did not tend to use the discussion board because it was seen as less reliable and because they preferred direct contact. *No matter which way we used, we would choose a way in which we could have direct contact (or instant feedback). We picked the means that was most convenient.* This need for instant feedback appeared to be a major theme running through the communication patterns used by the students within the project. As a result, much of the communication between students was not accessible for analysis.

**Participants’ own account of their work**

Students were also asked to complete a reflective journal within the Blackboard Learning Management system on a regular basis. They needed to complete three entries over the length of the project. The following table outlines the questions addressed by the students.

<table>
<thead>
<tr>
<th>Please address the following questions in your FIRST REFLECTIVE JOURNAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Why are you interested in participating in this project?</td>
</tr>
<tr>
<td>2. After reading the project brief, what are your learning expectations?</td>
</tr>
<tr>
<td>3. Do you have any experience in online learning and multimedia/web authoring? Please describe.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Please address the following questions in your SECOND REFLECTIVE JOURNAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are your current perceptions about the project?</td>
</tr>
<tr>
<td>2. How have you utilized the feedback you have received from your UOW advisors and HK Mentors?</td>
</tr>
<tr>
<td>3. Do you think you are making good progress on your project?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Please address the following questions in your THIRD REFLECTIVE JOURNAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comment on your draft web site in terms of how it was designed.</td>
</tr>
<tr>
<td>2. How did you utilize the feedback to improve your design?</td>
</tr>
<tr>
<td>3. What do you think about your final product and the process?</td>
</tr>
<tr>
<td>4. What difficulties did you face in this project?</td>
</tr>
<tr>
<td>5. What have you learned in this project?</td>
</tr>
</tbody>
</table>

Why are you interested in participating in this project? *After the announcement on immersion for English Major students in December, this year, I had thousands of questions about the place I am going to. In the coming summer, I will be going to Canada. Although I had been to Canada when I was ten, I almost forgot everything. Lecturers for the programme just simply gave me the website of the University I am going to. I had no idea of what would happen when I arrived. I am extremely nervous about going to Canada, because I cannot see the whole picture yet. I guess most students will have the same problems as I had, thus, when I saw the announcement of this project, I participate in it without a thought (Student reflective journal).* There are two aspects to this comment worth addressing. Firstly, the motivation to participate in the project was focussed on addressing his concerns about going to Canada. By participating in the project this student felt that they would know some of the important aspects of visiting another country. He was interested in the transfer effects of developing the website for his future visit to Canada. Another student suggested that *…after the project briefing, the crucial thing that I expect to learn is the use of the online system. I know using online forum of online learning in teaching is a trend. So the more I learn about it is a must for my career path.*

Communication was a recurring theme throughout the reflective journals as expected by the nature of the task. There were the issues of communicating within the group and communicating with the Australian advisor as well as the HKIEd mentor. One student was capable of designing his own webpage, but the prospect of working with other students was quite daunting. *Communication is another challenge for me. In my experience in making a homepage, I only design and create in the way I like. I now need to ask for others permission or approval. But this project is group based. I have to meet so many communication problems and try to find out solutions together (Student reflective journal).*

Other student comments reflected similar views: *I have learned that communication is very important. If we have communicated well, we could have managed time and divided the work more effectively and efficiently. We could not*
communicate well and I think the most effective communication method is face to face, especially for those who are not familiar with each other (that's us) (Student reflective journal).

I think that the cooperation between each other is very important. As there is a lot of information and resources that we can choose in our website, it is important that we have good communication between each other to decide what things to put on our website. On the other side, when we have some questions, we will put the questions into blackboard and then ask our UOW advisors or HK Mentors. (Student reflective journal).

Throughout this project, I have learnt how to communicate with the others. As different people will have different opinions, we need to justify which one should be used and which one should not be used. We also need to accept others opinion and adjust our work. Communication is very important in a group project; I also learnt how to communicate with others, how to present your work systematically to persuade others to use your ideas (Student reflective journal).

Personally, I think improving peer collaboration, as well as making compromises are good ways to enhance our working pace (Student reflective journal).

Time management is very important in this project, so we should do more preparation and concern more about the academic schedule of the students if we conduct similar project in the future. Moreover, high involvement and motivation should not be neglected. The level of engagement would be decreased when the time goes by (Mentor reflective journal).

In addition, the advisors and mentors were asked to write a reflective journal throughout the project. They commented on the emphasis on face-to-face interaction as opposed to online interaction and the need to develop a connection with the group using only online communication.

The main problem ... is that the students are not used to discussing online either synchronously or asynchronously, although they are all technically competent and the Internet is always accessible to them. Their habit of communication is still face-to-face. Besides that, it may also be due to the reason that they knew one another very well before joining the project (some of them are classmates and hallmates respectively), therefore they have a lot of face-to-face meeting chances. In fact, the popular attributes (jargon) of online learning, like anytime, any place and anywhere seem not so crucial for them at this stage (HKIEd mentor).

Communication was conducted mostly using the asynchronous discussion forum. We started with introductions. I initiated this because I felt isolated from the group and wanted to get to know them a little better. Also I wanted to get them to start posting to and checking the forum. I wonder if it might be a good idea to formalise this more as having a photo together with a standard bio would also have helped me (UOW advisor).

**Artefacts produced by the team**

Upon project completion two web sites were completed. The students demonstrated a good ability to work with their overseas advisor to obtain the necessary information for the website. The following two screen captures illustrate the nature of this design work.
Implications for the local setting

There were four major goals for this project which focussed on the learning benefits for students, staff, the centre and the institute. These included:

**Tier 1: Student Level**
- develop skills in online project-based learning
- enhance online discussion skills in synchronous and asynchronous environments
- develop and enhance skills in collaboration, critical thinking and knowledge construction
- explore creative web design for communication and educational purposes.

**Tier 2: Staff Level**
- explore a novel approach to using project-based learning in teaching and learning
- enhance facilitation skills in an online environment
- further enhance teaching and learning skills with a small group of students at the Institute
- evaluate the student involvement in project-based learning, web-design and online discussion
- review the differences in the collaboration, web design and online discussion between the two groups of students.

**Tier 3: Centre Level**
- develop an exemplar suitable for demonstration to academic staff about project-based learning in seminars, consultation with the LTTC and on the web
- disseminate findings of this approach to other colleagues and in recognized publications and presentations
- encourage development activities by two staff within the LTTC.

**Tier 4: Institution Level**
- foster a collaborative undertaking with an internationally-recognised University in the area of educational technology and online learning
- promote novel approaches to the use of online learning at the Institute

**Conclusion**

Overall, the above goals for the students were largely achieved. The students developed skills in project-based learning and through their comments in focus groups, reflective journals and their artefacts in the form of the website they produced an outcome that would fulfil the needs of the target audience. The authentic case appeared to be successful in getting students immersed in a real-world project. Students commented on obtaining insight into the whole process of creating a website which demonstrated the importance of other factors besides the actual website design. Students struggled with the necessity of online communication within their group as opposed to using convenient face-to-face, mobile phones or ICQs. However students choose methods of communication that were considered to be effective for their needs. Online communication was utilized for their interactions with their Australian advisor which appeared to be largely successful. There were difficulties in intra-group communication in one group in particular and difficulties with allocating roles for the project which were not overlapping. Overall the project demonstrated to the students the importance of communication on projects which would have implications for their future teaching career. The success of other goals mentioned in tiers 2, 3, 4 above is yet to be determined. Further analysis of the qualitative data will provide implications for Staff, the Centre and the Institute.

**Acknowledgement**

The authors wish to acknowledge the excellent work completed by Christine Wong, the research assistant on the project.

**References**


