Facilitating Cross-Cultural Learning through Collaborative Skypecastings

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ABSTRACT

The authors were involved in an international project in which first year (freshman) students studying comparable IT courses at two universities, one in the United States and the other in Australia, formed virtual teams and engaged in collaborative learning and content creation via the Internet. Each team was tasked with jointly producing a short “Skypecast” (an audio podcast recorded over Skype), in which team members from each institution participated in conversations on topics related to technology and culture. The students had to overcome issues related to cross-cultural communication, as well as other challenges that arose from working with people whom they were unable to meet face-to-face, across disparate time zones. This paper presents an analysis of the views and experiences of the students from both institutions, elicited through surveys and focus group interviewing. The findings suggest that in addition to developing their technology skills and enhancing their understanding of the course material, the exercise provided the students with exposure to diverse perspectives from their peers on the topics studied. It also fostered the development of generic skills in research, interpersonal communication, and teamwork essential to the 21st Century knowledge worker. In the absence of the need to produce tangible objects of shared activity (Skypecastings) and without the explicit articulation of common goals within each team, the students may not have used the available technology to engage in the processes of collaborative dialog and problem solving that were evident in their reflective self-reports. In addition to its successes, the problems encountered and lessons learned from the experience are discussed, before outlining the authors’ future plans. It is hoped that the paper will be of value to other educators wishing to undertake similar efforts, and make a contribution to the development of best practice in the area of Internet-mediated, cross-institutional collaborative learning.

Categories and Subject Descriptors
K.3.1 [Computers and Education]: Computer Uses in Education – Collaborative learning, K.3.2 [Computer and Information Science Education]: Information Systems Education.

General Terms
Human Factors.

Keywords
Computer-supported collaborative learning (CSCL), Cross-cultural learning, User-generated content.

1. INTRODUCTION

The last two decades have seen a heightened emphasis on defining and developing the qualities that university graduates should possess [1][7]. In the same vein, there has been an increased focus on the transition of students from university into the workplace, in particular preparing graduates to be “job ready” [1][17]. This includes not only the transfer of subject or domain-specific learning into the workplace, but also the development of generic skills sought after by employers. The Joint Task Force for Computing Curricula 2005 [28] asserts that one of the key elements that should be incorporated into any computing degree program, irrespective of the specific discipline, is “The identification and acquisition of skill sets that go beyond technical skills ... [including] interpersonal communication skills, team skills, and management skills” (p. 35). Learning experiences should focus on the actual development of these skills as opposed to merely emphasizing their importance, and help foster in students the ability to apply the skills to a range of situations and in a variety of contexts.

In particular, the 21st Century knowledge economy demands that workers have the skills in managing and effectively completing collaborative projects where the participants are in geographically diverse locations [18]. According to Chand, David, and Kumar [8], “IT [Information Technology] professionals are now faced with managing and working with personnel who they have never met before, who live in places they have never visited, and whose lifestyles and societies they know little about” (p. 1).

This paper reports on a project in which the authors set up a controlled, geographically diverse, collaborative environment for students to experience using Voice over Internet Protocol (VoIP) technology to communicate and work together with others whom they have not previously met, to produce tangible products in a relatively short amount of time. In this exercise, introductory IT students at colleges in the United States and Australia were paired up, and each team was assigned the task of creating a five to seven minute recorded conversation over Skype on a topic related to technology and culture. The students had to apply a range of technology and critical thinking skills in order to accomplish the task, which also required them to develop interpersonal skills to be able to work effectively with unfamiliar partners.
2. PROJECT AIMS
The main aims of this cross-cultural, cross-continental learning project for the students were:

1. to encourage them to learn about a current topic in information technology that may have cultural or societal influences;
2. to give them experience in using VoIP and other current Internet technologies for synchronous collaboration;
3. to create a context in which they had to work effectively with international partners to create a tangible product within a set timeframe.

The overarching research question that framed the project was:

*In what way(s) do collaborative learning assignments, which require students to interact with one another and produce shared digital audio artifacts through the use of synchronous computer-mediated communication tools, contribute to students’ learning of both subject-related as well as generic knowledge and skills?*

The study was largely exploratory in nature, intended to afford broad insight into the views and experiences of students undertaking the cross-cultural collaborative learning exercise, as well as to illuminate some of the benefits and issues/challenges that may arise in an attempt to implement such an exercise. It was hoped that the results of the study would help guide and inform directions for further research, which in turn would eventually contribute to the development of best practices in the area.

3. VOIP, SKYPE, AND CROSS-CULTURAL COLLABORATIVE LEARNING
The Internet has enabled collaborative learning and cross-cultural exchanges through the use of a variety of computer-mediated communication (CMC) tools such as VoIP, instant messaging, video conferencing, and email. As VoIP technologies have increased in popularity and reliability in recent years [6], instructors have introduced these technologies into their classrooms to enhance learning experiences from elementary schools through college and beyond.

Skype [26] is one of several instant messaging clients (along with AOL Instant Messenger, Yahoo Instant Messenger and Google Chat) that support real-time Internet telephony. In addition to holding real-time voice conversations, Skype users can also exchange documents and engage in text-based chat and conference calls with up to four other participants. The process of recording interviews or conference calls with Skype, saving the audio in MP3 format, and posting the audio to a blog has become known as Skypecasting [3][16]. A free Skype add-on called Pamela [22] allows for seamless recording of Skype conversations. PrettyMay [24] is an alternative add-on with comparable functionality. Skypecasting is becoming more popular as people post their conversations, interviews, and language exchanges to their blogs [6]. The fact that these services are free for computer-to-computer calls “opens up some uses that might not [previously] have been considered” (p. 62).

Students have used Skype to speak with native speakers of foreign languages they are learning as part of language courses [6][9][16]. Gibson et al. [14] used video conferencing and email for elementary school students in the United States and Australia to create a virtual community of learners to enhance understanding of mathematics and science. It was their belief that “cross-cultural reflection and communication would positively affect the students’ self-efficacy related to the teaching and learning of mathematics and science” (p. 2364).

Slotte and Tynjälä [27] argue that “being active and developing initiative” (p. 193) are necessary skills for any collaborative learning project. In their study, students from Finland and China participated in a college course on human resources development that used web discussions for collaborative learning. LeBaron, Pulkkinnen, and Scollin [19] taught a web-based graduate course connecting students in Finland and the USA addressing issues of distributed education and flexible learning. Their findings indicate that there is significant additional effort on the part of the teaching faculty in delivery of the course, and that “deep collaboration” is required to promote cross-cultural awareness among partners.

4. THE STUDY

4.1 Context, Participants, and Methods
Bentley College is a tertiary-level business institution in Waltham, Massachusetts, USA, which prides itself on the integration of business and technology in the curriculum. Charles Sturt University (CSU) is a university located in inland New South Wales, Australia and serves a number of regional and rural communities. It is the eighth largest university in the country. First year students in Bentley’s Technology Intensive sections of IT 101 (Introduction to Information Technology) and CSU’s ITC 105 (Communication and Information Management) courses worked in cross-institutional teams to engage in two scheduled Skype conversations on topics of mutual interest and relevance to their respective courses. As there were more Bentley students than CSU students, those Bentley students who were not paired with CSU partners completed the same assignment with other Bentley students, usually working with students from another section of the course. These teams, consisting entirely of Bentley students, also had the additional responsibility of scheduling their two Skype calls on their own.

Students were encouraged to select topics related to technology and cultural influences, so that they might learn more about technology concepts and the “world” of their partners. Each team consisted of two Bentley students and two CSU students, and was responsible to jointly research, plan, and produce an audio recording conducted over Skype. Add-on software PrettyMay and Pamela facilitated the recording of the conversations. This resulted in the production of an audio file which could be edited later and then uploaded to a web server for distribution. Each group held two instructor-facilitated synchronous meetings over Skype over a two-week period in March 2007. All participants were 18 years or older when the exercise was conducted.

4.2 Student Goals
The goal of the exercise was to produce a Skypecast of approximately seven minutes in length, focusing on the chosen
topic. Students were encouraged to develop dialogic Skypecasts (i.e., in the form of conversations), with each member participating approximately equally, as opposed to having a single student speaking in monolog. It is important to note that while the instructors chose Skype and Pamela or PrettyMay for the project because of their seamless ability to record a conversation over the Internet, any VoIP application that supports voice could have been used. Bentley students then used Audacity [2], a free and open source digital audio editing application, to edit the raw audio to its final form. Finally, the students posted their Skypecasts to a Wiki, a collaborative web site that allows users to easily add original content, and edit content posted by other users.

4.3 Skype Calls
The purpose of the first Skype call was for members to become acquainted with one another and to agree upon logistical and scheduling arrangements for the remainder of the exercise. Students were advised to share general introductions (first name, where from, course/program of study enrolled in, outside interests) with their team members, and develop a plan for the second call. What aspects of the topic would each person research or plan to talk about? Would they share questions with each other? How would they communicate during the week? What tasks needed to be done so students would be prepared for the second Skype conversation? Who would do what, and by when?

During the second call, the team members were to hold conversation in which each person contributed, sharing information and asking each other questions about their selected topic. To help them prepare for their conversations, some students chose to semi-script their dialogs, providing their partners with potential questions that they might ask one another. Both calls were recorded; Bentley students edited the audio from the second call into a Skypecast of approximately seven minutes in length, and posted the completed files on the project Wiki.

The Bentley students were told to be online five minutes before their scheduled calls, so that the Australian students could call them. Because of network and firewall restrictions at CSU, the Australian students needed to complete their calls using a shared computer dedicated to this project, located in a specific computer lab on their campus. To make sure students kept to schedule and in order to be available to assist in case of technical difficulties, the lecturer at CSU monitored all calls as they were taking place. Because Bentley students used their own laptops and had unlimited Internet access, they arranged their own locations for the Skype calls, and the Bentley instructor did not monitor them.

4.4 Discussion Topics
Students researched various topics related to technology and its impact on culture, so as to promote cross-cultural understanding of technology and society among the participants. The instructors supplied some of the topics, while other topics were suggested by the students from both institutions. Bentley students signed up for time slots and entered topics, and then CSU students chose time slots based on their interest in the topic in an available time slot.

The students in each group also used a page within Wiki to maintain an ongoing online journal, adding an entry each time they worked on the project, whether jointly or individually (Figure 1). This page served as a common workspace for group members to share information, track progress, and make findings available to others in the group. In addition, it provided an opportunity for the students to maintain a collaborative journal and reflect on their learning journeys throughout the project.

4.5 Project Wiki
The instructors used a Wiki to disseminate information about the project, facilitate sign-ups, and share photos with each other’s classes. For scheduling purposes, students used the project Wiki to sign up for their two Skype call appointments. The sign-up page listed the local time and date in both countries for each call. Bentley students signed up for time slots and entered topics, and then CSU students chose time slots based on their interest in the topic in an available time slot.

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4.6 Data Collection and Analysis Procedures
At the end of the exercise, a survey was conducted. The survey instrument used is reproduced in Appendix A. The survey

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**Figure 1. Sample Group Log page on class Wiki**
responses, together with the students’ online journals/logs, formed the primary data sources for the study.

Descriptive statistics were performed on the quantitative data collected from the survey and online journals. For the qualitative data, a simple content analysis [23][5] process was employed to identify, code, and categorize primary patterns in the data. Originating in communications research, content analysis is a generic name for a variety of means of textual analyses that involved comparing and categorizing a corpus of data [21].

The data was first read at face value to produce a preliminary (candidate) list of themes or issues. This list was gradually refined as subsequent passes were made through the data, with the content being reviewed in greater detail and common strands factored out. As part of this iterative process, categories were added, deleted, renamed, combined, and divided as necessary.

Eventually, the text was categorized according to the themes/issues identified, to reveal those themes/issues that appeared to be the most pertinent, or worthy of mention in the present paper. These “distilled” themes/issues were then reported on in the sections that follow. All in all, the aim of the process was to attempt to present a broad, overall or “birds’ eye view” picture of student perceptions of and learning from the exercise.

5. RESULTS
21 Bentley students completed the exercise in nine groups of two and one group of three, with 21 CSU students. An additional 24 Bentley students completed the exercise with one another, in most cases pairing off with students from another section of the course. 49 students from both institutions completed the survey: 18 from Bentley who “Skyped” with other Bentley students; 19 from Bentley who Skyped with CSU students; and 12 from CSU who Skyped with Bentley students. Table 1 summarizes the genders and numbers of users responding to the survey from each institution with previous Skype experience.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Number of Responses</th>
<th>Genders</th>
<th>Previous Skype Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentley</td>
<td>38</td>
<td>28 M / 10 F</td>
<td>30</td>
</tr>
<tr>
<td>CSU</td>
<td>11</td>
<td>6 M / 5 F</td>
<td>2</td>
</tr>
</tbody>
</table>

Of those who had used Skype before, nine explicitly stated that they had used the application to contact friends or family in other countries. Few had ever set up or participated in a conference call, whether Internet-mediated or otherwise. Only one of the 49 participants had ever recorded a Skype conversation before.

The students were encouraged to find ways to communicate with their team members during the week, both synchronously (through AIM, Skype, or other Internet chat) and asynchronously through email, to complete their projects. Between their scheduled Skype conversations, no CSU/Bentley pairs participated in synchronous communication with their overseas partners, probably due to the fact that on-campus Skype access at CSU was limited or unavailable to CSU students outside their scheduled call times. A majority of Bentley students used Skype or other forms of instant messaging to liaise with their Bentley partners to plan their projects (Figure 2).

6. LEVELS OF LEARNING
6.1 Personal/Technical Skill-Based Learning
At the most basic level, this assignment required students to demonstrate their mastery of specific technology skills using Skype, and editing audio. Students discovered that they were also using critical thinking skills and learning more about their topics and the software as they worked on the exercise. They learned about multimedia by their very involvement in creating it. In the words of one student:

“I never knew you could do so many things with audio, such as fixing the amplitude and cutting out the parts that are not of interest.”

By using Skype as a technology for computer-mediated communication, students were able to see its relevance in their own lives. Students remarked that:

“Skype can be a very good alternative to group meetings, especially... in college when... weather/transportation prevents you from meeting in a common area.”

They commented on how
“...you can easily connect with people from other countries or other dorms. Skype is free if you sign up. This makes it free to talk to other students around campus if you need to discuss something. Conference calls would make group interaction easy too.”

Those who were new to Skype saw its value as a telephone alternative. Said one student:

“I learned how easy it can be to have a free phone conversation with someone outside the United States. Prior to learning of Skype, I thought that the cheapest way to keep in contact with someone... [outside the US]... was by getting calling cards.”

6.2 Topical Learning

Students learned the valuable lesson that they can become domain experts on a topic in a short time, and with some preparation, be able to engage in an informed and coherent discussion about the topic. This “just-in-time” acquired knowledge can prove useful in the business world. A student in the group preparing to discuss online gaming observed:

“Most of us knew next to nothing about online gaming, but with a little research, we were able to become versed enough to discuss the topic for the allotted time.”

6.3 Critical Thinking

Slotte and Tynjälä [27] argue that collaboration “involves the production of a joint outcome and thus demands sharing and generating new knowledge together with one’s peers. In this way, it provides individuals with better opportunities to use higher-order thinking skills and problem-solving skills in the construction of their ideas about practice” (p. 193). Participants in the exercise also found themselves, on a deeper level, engaged in an exercise in critical thinking, as they had to understand what was relevant, and determine what could be removed from their audio recordings. Thus this is another example of how an “introductory technology course… integrates liberal learning activities to develop a fundamental understanding of technology applications.” [13] (p. 196).

One student remarked:

“The difficulty I had in completing the exercise was editing the Skype conversation. I did not know what to leave in and what to keep out. Then in the end I realized that there was some off topic stuff that I really did not need so I took that out in the end.”

Indeed, the students had to think about planning a conversation, which they found to be different than planning a group presentation.

6.4 Lessons in Interpersonal Communication

For some students a difficulty was trying to keep a conversation going (or be prepared enough to participate in one) for 20 minutes. Some felt that 20 minutes was too long:

“...we ran out of things to say beforehand, but we managed to continue to talk...”

“we had a difficulty in continuing the conversation, so we just continued to ask questions and give statistics...”

In contrast, others felt the time allotted was insufficient:

“I wish we had more time, say 30 minutes, and that we met three times over Skype instead of twice.”

“It was not long enough... To overcome this, we spent less time exchanging information about ourselves and more time talking about the topic.”

Several students used the word “awkward” to describe their initial meeting, and discussed how they worked beyond these awkward moments of their conversations:

“It was awkward when we first Skyped. To break that up, we introduced ourselves and had a normal conversation talking about various things.”

“It was tough to speak formally about a topic we were still learning about, especially with other people. It was kind of awkward at first, but it worked out.”

“We had an ice-breaker first conversation, which made things less awkward.”

For many students, this was the first time that they had communicated (with Skype, or over the Internet in general) with people whom they had not met before. According to Eustace and Hay [12], online participants in a distributed workgroup endure three essential stages of growth when meeting their peers and building within the group (p. 97):

- Stage 1: Socialization – sharing biographies and having fun;
- Stage 2: Alliance-building – making friends through dialog;
- Stage 3: Workgroup formation – commencement of project work.

Seeing their team members’ pictures on the Wiki site helped the students “put a face to the voice” and become better acquainted, as part of this ice-breaking process. They overcame difficulties in understanding one another’s accents by requesting that their partners speak more slowly and clearly. Some suggested that the conversations might have been less awkward if they got to know their Australian and American partners better by exchanging emails, for example, prior to the first Skype conversation.

Despite the abovementioned difficulties and notwithstanding the short timeframe of the project, many students felt an affinity with their international partners. One student exclaimed:

“These kids sounded nice, and it’s a shame that we won’t ever talk to them again. Field Trip!”

7. CHALLENGES ENCOUNTERED

Both the students and the organizers of this project faced several challenges in its planning and execution.

7.1 Technical Challenges

Despite the fact that most students individually tested the use of Skype prior to their scheduled calls, several groups experienced some technical difficulty during at least one of their calls. In many cases this was at least partly due to the fact that some of the Bentley students used laptops with wireless network connections in various locations on their campus, which meant that the audio quality varied depending on the signal strength, as well as the volume of network traffic at the time. Moreover, some of the Bentley students did not have headsets, and so had to make use of their laptop’s built-in microphone and speakers, which led to sound feedback between the microphone and speakers. Many groups became frustrated because their calls needed to be restarted due to this overpowering feedback. Fortunately, all of
the CSU students were able to use a dedicated PC with headphones and a wired connection.

Especially since some of the students’ conversations were unmonitored, it would have been beneficial to provide them with some simple “tips” and “pointers” beforehand – For example, “switch cell phones off,” “be present for the entire conversation,” “speak clearly,” “use a wired network connection,” “point external speakers away from the microphone,” “use a headset or ear buds,” “be online at least five minutes before the scheduled time,” so that the experience would run smoother for all parties involved. Some of these issues improved in the later calls, as the students learned from their experience and that of their classmates.

7.2 Administrative / Scheduling Challenges
From the point of view of the instructors, scheduling the activity was problematic due to the differences in the academic calendars of the respective institutions. Bentley students began their Spring semester in January, and had Spring Break in March. CSU students began a new semester in March and then had an extended break at Easter. The need to find two overlapping weeks late enough in the semester for both classes, left few options.

Bentley students were also surprised to learn of the limited Internet access and heavy firewall restrictions at CSU, since Bentley has virtually unlimited wireless (and wired) access throughout its campus.

Some groups commented on the administrative difficulty of getting everybody available at the same time. CSU students had to wake up at an early hour to make the scheduled calls with their Bentley partners; Bentley-Bentley groups had to manage four people’s schedules to arrange their own meeting times. One student reported:

“The biggest problem was getting everybody on Skype at the same time. With class schedules and a tendency for forgetfulness, it made completing the calls very difficult. Fortunately we were finally able to come together and find a common time and everybody showed up.”

7.3 Cultural and Geographic Challenges
The two Skype calls were scheduled one week apart. The first call was held between 5:00 pm and 7:00 p.m. for the Bentley students, which corresponded to 8:00 am to 10:00 a.m. the next morning for the CSU students. Because of a daylight savings time change during the weekend between the first and second calls, the times for the second call for Bentley students were one hour later than the first. This time change caused a bit of confusion for some of the students.

Several CSU students had to commute significant distances in order to participate in the exercise, since they did not reside on-campus. Many of the Bentley students displayed sensitivity to their Australian partners’ situations. One Bentley student commented:

“We should make our times a little better for the Australian kids... our partners didn’t ask much because they had just woken up.”

Similarly, to improve the exercise in the future, another Bentley student also suggested attempting to find

“... a better time for the Australians because they had to get up very early.”

Some of the CSU students commented at the lack of technical preparation on the part of some of their American counterparts, and some Bentley students commented on the fact that their Australian peers seemed to be “more tentative or more formal” because their teacher was in the room monitoring and listening in on the conversation as it was happening. Students from both institutions occasionally used local idioms and slang words/expressions that needed to be explained or clarified.

8. LESSONS LEARNED AND FUTURE PLANS
In the near future, the authors intend to conduct one-on-one and focus group interviews to elicit further feedback, and to gain deeper and richer insight into the students’ views and experiences of the exercise, with a view to further improving the process for future cohorts. They also plan to transcribe and analyze the end products of the students’ collaborative efforts (i.e., the Skypecasts) in conjunction with the data gathered during the process of completing the exercise (online journals) and the students’ retrospective reports (survey and interview responses) from a knowledge building [4] and knowledge creation [20] perspective. From this perspective, the focus is on “… the production and continual improvement of ideas of value to a community, through means that increase the likelihood that what the community accomplishes will be greater than the sum of individual contributions and part of broader cultural efforts” [25] (p. 1371). Activity theory [10][11] may be used as a lens through which to perform this analysis. Using this lens, the technology and shared task may be seen as instruments or mediators of the joint activity, whose ultimate goal is to advance knowledge and contribute to the intellectual capital of the group.

While the paper refers to the audio files produced as Skypecasts, the authors originally considered distributing the student-produced audio files as podcast episodes. The plan was to make the podcasts available to all students in both cohorts, and the general public, for manual download via a web page, as well as through a Really Simple Syndication (RSS) feed. Had the semester calendars of both institutions better coincided, it might have been interesting to stagger the calls over a longer period, producing a weekly podcast episode from each Skypecast in a series on “Cross-Cultural Technology Conversations” (after [15]). This might have created an incentive for students to listen to their classmates’ conversations over time, and better integrate the content they generated with their learning in face-to-face classes. Unfortunately, it was simply unreasonable to expect the students to listen to all of the Skypecasts that their classmates created over a two-week interval.

A future iteration of this project would take steps to improve the technical quality of the calls, providing wired connections and noise-canceling headsets for all participants. To help students become better acquainted with each other’s institutions prior to the exercise, the instructors might Skype each other’s classes during a class session, or invite some students to prepare a short video or “vodcast” introduction. If time permits, students might email each other with an informal introduction to break the ice prior to the first conversation. Finally, some students may use webcams during at least one of their conversations so that they can see the people with whom they are working, in real time.
9. CONCLUSION
The present paper described a collaborative effort between students on different continents, who used Skype to plan and record audio conversations on topics related to technology and culture. In such scenarios, students learn on three different levels. First, they must develop technical skills, in this case to use Skype and recording software to conduct and record their calls, as well as audio editing software to produce the finished Skypecast. Next, they must perform sufficient research and reading to be able to carry on a conversation on a topic with their team members. Finally, they must use both technical and social/cultural tools to collaborate in order to produce a high-quality final product within a short period of time. This last accomplishment requires critical thinking and analytical skills to “plan” a conversation, determining how it will flow, as well as what elements are essential and which should be edited out of the final recording. The organizers were able to facilitate an exercise in which students gained real-world experience in managing time and working in groups with team members whom they had not previously interacted. In this way, the exercise integrated several learning elements and created a controlled environment that simulated some of the complexity and collaborative challenges that are becoming increasingly common in the business world.

10. REFERENCES
APPENDIX A: SURVEY INSTRUMENT

Your Institution:
Charles Sturt / Bentley (Circle one)

Bentley students only: Institution of your partner team:
Charles Sturt University / Bentley College (Circle one)

1. a) Have you used Skype prior to this exercise?
   Yes / No (Circle one)
   b) If Yes, please state for what purpose:

2. a) Have you recorded a Skype conversation prior to this exercise?
   Yes / No (Circle one)
   b) If Yes, please state for what purpose:

3. List and briefly describe three things you learned from the exercise, from a subject/course content point of view.
   i. _______________________________________________________________
   ii. _______________________________________________________________
   iii. _______________________________________________________________

4. List and briefly describe three other things, such as non-subject/course related knowledge and/or generic skills, you learned from the exercise.
   i. _______________________________________________________________
   ii. _______________________________________________________________
   iii. _______________________________________________________________

5. List and briefly describe three difficulties that you faced in completing the exercise, and how you overcame them.
   i. _______________________________________________________________

6. List and briefly describe three improvements that could be made to the exercise in the future.
   i. _______________________________________________________________
   ii. _______________________________________________________________
   iii. _______________________________________________________________

7. a) Not counting the two arranged Skype calls, how many times did you meet synchronously (ie, live – such as over Skype or Instant Messenger)?
   __ minutes

8. b) What did you discuss, primarily?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________

9. a) How many asynchronous messages (emails) did you exchange with your partners in between the two arranged Skype calls?
   __ messages

10. b) What were they for, primarily?
    _______________________________________________________________
    _______________________________________________________________
    _______________________________________________________________