# Collaboration in Online Courses: Drawing Insight from Learners for Effective Learning Design and Learner Support Services

### Melinda dela Pena Bandalaria

University of the Philippines Open University, Philippines mbandalaria@upou.edu.ph

#### Abstract

Teachers set the stage and provide enabling mechanisms to facilitate collaboration in online courses. There are various reasons, backed by learning theories, as to why collaboration among learners is desirable. These theories include the active construction of knowledge as a result of peer-to-peer communication and interaction. It is clear, at least on the part of the teachers, what outcomes they hope to accomplish when they require students to collaborate as part of the directed learning process and the course is typically designed to suit this purpose. Designing activities that will require students to collaborate is easy in a residential or conventional education setting, with the learners located in one physical or geographical space. Collaboration, however, could be a challenge in a distance education setting where students and teachers are physically and geographically separated from one another. This paper describes how distance education students collaborate to fulfil required course activities. Specifically, the paper provides answers to the following questions: (1) How do learners go about collaborating with one another to fulfil course requirements?; (2) What are the issues/challenges learners encounter in the process of doing collaborative work; (3) What are the implications in course design and learner support services framework? Two offerings of a graduate course at the University of the Philippines Open University were studied by doing content analysis of the course guides, students' posts in the online discussion forums and the personal journals submitted by the students as part of the course requirements. Results show that students made the most use of social media, especially Facebook, to facilitate collaboration. Two major concerns encountered were scheduling/timing when meeting online, given the different time zones of the students and technical concerns because some of the group members still had to learn the use of the software to facilitate online collaboration.

The students, however, found the collaboration work highly satisfactory in terms of achieving the learning goals and in building communities for learning support. Recommendations for designing collaboration among learners in distance education courses as well as some implications for learner support services are also discussed.

Keywords: online courses, eLearning, collaboration, distance education

#### Introduction

Achieving learning goals is always the concern of teachers, whether in residential or distance education modes of delivering instructional content. Teachers design activities that will help achieve these learning goals. In most cases, these learning activities require students to work as a group or collaborate with one another. There are various reasons, backed by learning theories, why collaboration among learners is desirable.

One major reason for collaboration is the promise of active construction of knowledge, enhanced problem articulation, and beneficial exploration and sharing of information and knowledge gained from peer-to-peer communication (Haythornthwaite, n.d.).

Collaboration among students is not a problem for residential students, as they are physically present in one location. It is, however, a major concern among distance education learners. Geographical or physical separation, however, should not prevent teachers from including collaboration work if such is critical to the achievement of learning goals. Teachers should set the stage and provide enabling mechanisms to facilitate collaboration in online courses. Aside from the basic consideration of physical separation, what other concerns should teachers look into when designing collaborative activities in the distance eLearning context?

This research looked into collaboration among learners in a distance eLearning environment. Specifically, it aimed to:

- 1. Describe how learners collaborate in an online learning environment
- 2. Determine the issues and challenges in doing collaborations in an online learning environment

3. Draw insights relevant to learning design and learner support services framework

#### Review of related literature:

Collaboration in an academic context involves learners working together on tasks, creating shared definitions, pooling and sharing of knowledge, and creating emergent outcomes (Haythornthwaite, n.d.). Haythornthwaite further described the range by which collaborative activity can be designed as follows:

"...from division of labour to joint construction, from application of knowledge to construction of shared, co-constructed knowledge." (p.12)

It is therefore important for the teacher to design collaborative activity depending upon what outcomes he/she hopes to accomplish.

Stacey (1999) elaborated upon how collaboration facilitates co-creation or social construction of knowledge and how it helps build supportive environment to distance education learners. According to her, collaborative work allows the students to "move from responding as interacting individuals to actively socially constructing knowledge" because all members have to contribute to complete the task. As members of the collaborating group, learners go through the following processes: (1) clarification of ideas through group communication; (2) obtaining feedback on ideas from fellow learners; (3) sharing and learning from the diverse perspectives of group members; (4) sharing with group members resources, new ideas and expert advice; (5) affirming or negating the construction of knowledge through continuous sharing and discussions with fellow learners; (6) practicing the new language of the knowledge community; and (7) practicing the learning in a safe setting for risk (Stacey, 1999). The same study also showed that the communication that happened while doing the collaborative work provided the students with "friendship and sense of belonging that helped motivate them when they were finding it hard to manage particularly because of the conditions of studying at a distance".

Pallof and Pratt (2005: 1), citing various studies, also noted that "involvement or social presence better known as a feeling of community and connection among learners has contributed positively to learning

outcomes and learner satisfaction with online courses". Misanchuk and Anderson (n.d.), on the other hand, proposed that one potential strategy to reduce dropout rates is to encourage students to support each other and make them feel that they are part of a community. Thorpe (2002) and Tait (2014) both emphasised the need to rethink student support systems given the affordances of modern information and communication technologies that make possible collaboration among distance e-Learners.

### Methodology

To answer the research questions, two offerings of a graduate course offered at the post baccalaureate level by the University of the Philippines Open University (UPOU) were studied. The course Social Marketing and Social Mobilisation for Development (course code DEVC208) is offered under the Master of Development Communication program. The two offerings studied were those for the 1st Term 2012–2013 and 1st Term 2013–2014.

The research used content analysis to gather the needed information. The following materials were content analysed:

- 1. The Course Guides of the two offerings. The Course Guide is a document given to students enrolled in the course at the start of the school term, and it is usually the first document that the students read on Day 1 of the course. It contains information about course learning goals, course content, course requirements, grading system, schedule and other information deemed necessary to help students enrolled in the course to complete all course requirements on time. The part of the Course Guide that discusses course requirements was subjected to content analysis to determine the following: (a) which activities required the students to collaborate; (b) the specific learning goals set for the course which these requirement satisfied; (c) how the specific course requirement which required students to collaborate related to other learning activities; and (d) the specific instructions given to the students to facilitate collaboration.
- 2. Posts made by students in online course sites/Discussion Forums. One of the features of the university's online course sites or the virtual learning environment (http://myportal.upou.edu.ph) is the

Discussion Forum where students can interact asynchronously. For each of the courses in this study, a Discussion Forum designated as "Cyber Café provided the venue for students to discuss concerns that were not directly related to the lessons, such as coordination for collaborative work. Posts that discussed the collaboration to fulfil the course requirement were content analysed to gain the following information: (a) how students formed groups or teams; (b) how students facilitated the collaboration; (c) issues and concerns the students encountered in the process of doing collaboration work (e.g., inactive team members).

3. The personal journals submitted by students as part of the report on the collaborative work that they did. The personal journals were submitted individually by the students and contained the selfreflections of the students in doing the collaborative work. Content analysis of the personal journals took into consideration the following information: (a) How the group collaborated; (b) issues and challenges encountered in doing the collaborative work; and (c) personal assessment by the learner in terms of learning the subject and how the activity helped him/her as a distance education student.

From the materials subjected to content analysis, the students own narratives were taken into consideration to answer the research questions set for this study.

### **Results and Discussion**

# Profile of Course Enrolment

Physical separation among the learners is one of the major features of distance education. The eLearning aspect, however, of the course studied made possible the communication, collaboration, and cooperation among learners. Table 1 shows the geographical locations of the students enrolled in the two course offerings included in this study.

**Table 1** Geographical locations of the students enrolled in the two offerings studied

	Term course was offered	
Geographical location	1st Term 2012–2013	1st Term 2013–2014
	(Batch 1)	(Batch 2)
Abroad/Outside the Philippines	23	30
In the Philippines		
• Luzon	28	43
<ul> <li>Visayas</li> </ul>	16	8
<ul> <li>Mindanao</li> </ul>	9	11
<ul> <li>Metro Manila</li> </ul>	41	91
Total	117	183

The first group, total of 117, consisted of 94 students based in the Philippines and 23 students based in 10 other countries namely United Arab Emirates, United States of America, Singapore, Brunei Darussalam, Papua New Guinea, Taiwan, Thailand, Oman, China, and Vietnam. Those students based in the Philippines were still widely spread across the various provinces and regions: Luzon (28); Visayas (16); Mindanao (9); and Metro Manila (41). The second group were those students (183) enrolled when the course was offered during the 1st Term 2013-2014. For this group, 30 were based outside the Philippines: United Arab Emirates; Singapore; United States of America; Qatar; Korea; Maldives; Mauritius; People's Republic of China; Kingdom of Saudi Arabia; India; Bahrain; United Kingdom; and the Netherlands. As in the case of the first group, even those based in the Philippines were in areas far from each other, where physical meeting was not only impractical but costly as well. Given the geographical whereabouts of the learners, there was no other option but to engage in a computer-mediated communication and collaboration to complete the required task.

### Description of the course requirement where the students need to collaborate

The course DEVC208 is titled Social Marketing and Social Mobilization for Development. One of the learning goals set for the course is to enable students to plan and implement a social marketing and social mobilisation program. One of the activities that the students were required to do was to plan and implement a simple social marketing and social mobilisation program as a group. The idea was to simulate a real implementation of a social marketing and social mobilisation program which involves different agencies/organisations and individuals assigned to do or take charge of specific tasks or responsibilities. Following Haythornthwaite (n.d.) classification, this collaborative activity requires the students to apply the knowledge/concepts learned from the course. In the process, however, they have to share their own understanding and interpretation of these concepts, and they will have had to agree on how these concepts would be applied to actual tasks.

Batch 1 students were given the leeway to select their group mates to form groups or team of 5-6 members, while Batch 2 students were already grouped by the faculty in charge (FIC) of the course. For both groups, the instructions as per Course Guide were as follows:

> "As a group, plan and implement a simple social marketing and social mobilisation program taking into consideration the principles and processes discussed in this course".

It was observed that even for the Batch 1 students who were able to choose who would compose their group; the location or whereabouts of the students did not become a major consideration. The primary considerations were observed to be the already established rapport among learners, because most of them were part of the cohort or batch of students admitted to the program at the same time, and their initial academic performance in the course, as evidenced by the posts already made in the course Discussion Forums. While a few inquired about how online collaboration would be achieved, a simple explanation from the FIC on the use of online tools to facilitate collaboration and some examples of social marketing and social mobilisation programs conducted online guided them on how to go about completing the course requirement.

### How do students collaborate in an online learning environment?

It was observed that the students used different online tools to work as a group. Some of these were as follows:

- 1. Online collaboration sites as indicated in a group's activity report. "Comments and updates were posted by members on a more or less regular basis through the group's collaboration site."
- 2. Google chat "The group convened on Google chat at the start to socialise a bit and set up the agenda for the session."
- 3. Discussion Forum (DF) in the course sites opened by the teacher for the purpose of collaboration. This was usually the Cyber Café Forum, where a member of the group initiated a topic specific for their group.
- 4. Group emails
- 5. Social Networking Sites (SNS), predominantly Facebook
- 6. Yahoo Messenger (YM) chat
- 7. Skype

These online tools were used by the students for the following purposes:

- 1. To form the groups as per requirement of the course
- 2. To coordinate group activities
- 3. To inform the rest of the class and the teacher of the progress of the respective group activities
- 4. To submit group reports and reflection papers

The students were given a free hand to select the online tools that they would use for their group work. These online tools became a necessity as the students were geographically separated from one another. The online tools served as their way to connect with one another. It was observed that the choice of the online tool was governed by the following factors:

1. Ease and familiarity of use. This is evident by the choice of social networking sites like Facebook for most of the groups. Most of the groups brought their collaborations to Facebook, where it was assumed everyone had an account, which almost everyone

- regularly accessed. The use of emails and YM chats could also be explained by this factor.
- 2. Accessibility of the tool. Many groups also used the Discussion Forums in the course site, which were opened for the purpose of group collaboration. It should be noted that the students were required to visit the course site regularly; hence, using the venue for all course related discussions would facilitate everyone's participation as well as providing updates on group activities.

It was also observed that students also formed groups and collaborated even in some activities that they were not required to do so. This was evident in class reporting where individuals were assigned a topic to report. For each topic, there may have been approximately 4-5 reporters who lead the discussions for the topic. This could most likely be explained by the sense of community that is also formed among online learners, bounded by the common goal of completing the course and their respective degree programs. It should also be noted, however, that once the groups be formed, the students would always resort to the use of the online tools enumerated above and most likely for the same reasons of familiarity, ease of use, and easy access to the preferred online tools.

# Issues and concerns expressed by students in online collaboration

There were several issues and challenges encountered by the online students in doing collaborative work. These are as follows:

Schedule/Time Factor. Almost all (96%) of the personal journals submitted by the students included in this study cited scheduling as the major concern in online collaboration. This was evident in some of the quotes.

"Due to incompatible work schedules, the meeting was attended by only two participants..."

"The main challenge of synchronous session is the scheduling. Our group had to email one another to schedule a convenient time for everyone in the group. Unfortunately, [three of us] are on a different time zones. Fortunately, we were all ready to make accommodations for our group meeting. Luckily, Saturday was a convenient day for everyone."

"Finding the most convenient time for everyone was difficult since members are in three different time zones and with varying work schedule. It was however set after several email exchanges, and [we] proceeded as scheduled."

"The schedule although the most convenient to everyone, was unholy to those in the different time zones (11-12am), as well as to those in Manila as it cuts across lunchtime (11-12:30). As such, there was a rush to close the session."

This concern was somewhat expected to occur given that the students were based in different countries and, consequently, in different time zones. The number of students based outside the country (Philippines) also implied that for each group, there would always be that possibility of having one or more members located in different time zones.

*Technical concerns*. Because collaboration was highly dependent upon the use of online tools, various technical concerns were encountered by the students

"The static and varying audio output quality of the participants affected the sharing – some are strong and clear, others are soft and sometimes inaudible; review of the recording of the session revealed that some of the static or the noise in the background could be due to a software bug or wrong settings."

"The varying rate and sometimes changing speed of internet connections, as well as the different computer set-up of the participants hindered the smooth shifting of browsers or opening of new tabs to check the online materials being discussed – downloading was fast for some, yet slow to others."

"During the sessions, another challenge posed to the participants is the grasp of the functionalities and the navigation of the tool. Thus instead of discussing immediately the topic, a preliminary online meeting and a continuous chat using an outside tool like Google Chat assisted the participants to fully use the tool."

Technology for physically challenged members of the class. This concern was specified in one of the reports submitted.

"Challenging for our visually impaired groupmate as the Skype screen reader sometimes slowed down or stopped in the middle of the discussion. At times the screen reader cannot catch up with the fast-paced sharing and exchanges and thus, reactions were sometimes delayed. Nevertheless, it did not stop [her] from engaging actively in the discussion."

### Implication to Learning Design

Learning design refers to the process of planning, structuring, and sequencing learning activities (http://www.slideshare.net/pmundin/r-whatis-learning-design) that will lead the students towards achieving the learning outcomes.

Results of this study show that if critical to the achievement of the learning goals, teachers should not hesitate to include activities that will require online learners to collaborate. The mode of delivering instructional content should not be a hindrance to performing necessary tasks to achieve authentic learning. As in the case of distance eLearning, students are learning under different contexts, which poses a challenge to designing learning activities. However, such situations can also be used to advantage to design activities based upon the real situations of the students.

As shown in this study, learners were able to adapt to the use of modern ICTs to facilitate the collaboration and were able to satisfy the graded requirement of the course. Further, the results also showed that such collaboration also provided the students with a sense of belonging to the community of learners. By learning together, by accomplishing the course requirement together, and by sharing the journey of completing the course and the program, the learners apparently no longer felt alone and were more motivated to continue with the course and complete the program. These concepts are evident in excerpts from the students' personal journals.

"Having a collaborative activity in my DE courses is an opportunity for me to gain new friends as it gives me a chance to interact with my classmates in a more personal level. Since I don't literally see them, synchronous communication via chat or conference call gives me a chance to hear their voices and feel that I belong to a group."

"It was fun and a challenge for all of the group members to attend the meeting through Skype. I came home late around 7 pm because we had something to do in school, meeting will start @ 11am Philippine time and I have to sacrifice my

favourite program "The Big Bang Theory" . I feel anxious and excited because I don't know what to say to my classmates. I just know them by their pictures whenever I open UPOU portal, and it is a little different feeling to hear their voices as we are accustomed to just reading their answers on assignments

and opinions. However, when the conversation started and some threw in their jokes in our native language, I felt more confident and relaxed."

"The synchronous interaction itself was very helpful for me in the sense that at that particular moment I felt that I am with real people, in a community, pursuing the same goal. I felt more encouraged and motivated in my learning. Simply put, the interaction brought me happiness that day (who doesn't want to be happy?)."

Many studies have shown that satisfaction, sense of belongingness, and motivation all contribute to the success of a distance education learner, meaning those who score highly in these attributes are more likely to complete their online programs.

This supports Tait's (2014) observation that dropout rates are not a function of instructional delivery mechanisms but of more effective learning design, and his proposition that learner support services should not be divorced from the academic concerns of learning design.

In designing collaborative learning activities, results of this study also show the need to do the following:

- 1. Maximise the affordances of the Learning Management System being used, as well as those of the various online collaboration tools to promote communication and collaboration among learners. Online course sites can be designed such that groupings can be facilitated or students will be assisted to form groups. This will help learners get on with the tasks or the collaborative work they need to do.
  - Learning Managements Systems (LMS) like Moodle have features to group enrolled students, and students can immediately see to which group they belong. This will make it easier for them to contact/connect with their groupmates.
- 2. Provide clear instructions regarding how groups should be formed, if groupings were not previously made by the teacher. There should also be clear instructions on what the groups should do, what course requirements will be satisfied by the collaborative work, and how their work will be evaluated.
  - As in the case of the courses in this study, the teacher provided instructions on what evidence of work completed should be

submitted, e.g., report, pictures, links to the website created, videos made, etc. There was also clear instruction on what requirements should be submitted as a group and what should be submitted individually e.g., personal journal.

It should be noted that students are motivated to perform tasks if such would contribute to their overall objective of completing the course and their respective degree programs.

# Insights and implications for course design and learner support services framework

Even during the early generations of distance education, the role of learner support services has been fully recognised. The physical and geographical separation of the learners from the academic community was bridged by the various forms of support services, which included once-a-month faceto-face tutorial sessions in Learning Centres. The early generations of distance education required the students to study on their own using the course packages provided by the academic institution. The focus, then, of student support services was to help the students become independent learners and to help them overcome whatever difficulties they may encounter in understanding the lessons.

The advancement in information and communication technologies also drastically changed the way distance education programs are delivered. These changes include the blurring of the lines that separate academic concerns from learner support services (Tait, 2014). However, the basic principle of why learner support services should be provided remains to help learners succeed as DE students.

Results of this study imply a changing of expectations from students so they can successfully complete the course requirements. The Distance eLearning (DeL) context now requires the students to collaborate online, search for materials themselves and not just rely on the course package given to them, in addition to being independent learners. Results of this study show the need to consider the following as integral to student support services framework:

- 1. Technical support, beyond just access to the online course site, that includes the use of common collaboration tools like Google Chat, Skype, etc. An on-demand tutorial module can be included in the student portal so students can access it if and when they need it.
- 2. Finding and evaluating resources. As mentioned, students can now access a wide array of materials, which they can use to learn their lessons. Unlike before, where the only source was the course pack developed for the purpose, both teachers and students can now take advantage of the rich and more recent resources available in the Internet and in various formats too e.g., video, podcasts, texts. However, students should be taught how to look for these resources and how evaluate them for academic use.
- 3. Creating resources and sharing them. Students are always required to create knowledge products or resources as part of their course requirements. It has always been assumed that they know how to go about it. However, the vast resources available to them also make them ask, "What other new things can I do?" Students should be guided on how to make use of the available resources, the copyright limitations, what can be considered new even if they are using "recycled" materials, etc. Moreover, once created, students should also be taught the various mechanisms for sharing them, e.g., YouTube, so they can also contribute to the building of open educational resources.

#### Conclusion

Collaboration among students of online courses can be integrated into the course design if such is essential to achieve the learning goals. The mode of instructional delivery should no longer be a consideration in regard to what the students can and cannot do in regard to learning activities. There are various online tools which can be used for this purpose and which can also serve as a venue for communication, collaboration and cooperation among online learners. Online collaboration also provides the students with that feeling of belongingness, which motivates them to continue studying until program completion. There was also an observed shift with what the students need in order to be successful DE learners, and these needs should be taken into consideration when developing student support services programs.

### References

- Haythornthwaite, Caroline. n.d. Facilitating collaboration in online learning. Collaboration in online courses: Drawing insights from the learners for effective learning design and learner support services. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.104.2245&rep=rep1& type=pdf (accessed 15 August 2013).
- Misanchuk, M and T. Anderson. n.d. Building community in an online learning environment: Communication. cooperation and collaboration. http://www6.svsu.edu/~cagilbre/ETD517/Building%20community%20in%20an %20online%20learning%20environment.pdf (accessed 13 May 2014).
- Palloff and Pratt. 2005. Learning together in community: Collaboration online. http://www.oakland.k12.mi.us/Portals/0/Learning/04\_1127.pdf (accessed August 2013).
- Stacey, E. 1999. Collaborative learning in an online environment. Journal of Distance Education. http://web.mit.edu/acs/faq/Online-collaboration/collablearning files/stacey.htm (accessed 15 August 2013).
- Tait, A. 2014. From place to virtual space: Reconfiguring student support for distance and eLearning in the digital age. Open Praxis 6(1): 5-16.
- Thorpe, M. 2002. Rethinking learner support: The challenge of collaborative online learning Open Learning. 17(2). http://myportal.upou.edu.ph http://www.slideshare.net/pmundin/r-what-is-learning-design.