

Online Communication Tools

IT 648 Project 1 Report
Spring 2016
University of Southern Mississippi

Adrienne McPhaul
Chantanna Gholar
Danianese Woods
Mingyu Li
Justin McKenzie

March 20, 2016

Introduction

The purpose of this project was to explore utilizing the online communication tools Blackboard Collaborate and Blackboard Instant Messenger. Initially, this project was supposed to include the online communication tools such as voice board, voice presentation and voice mail. However, there was an issue with the server and the website, so we could not use those tools for demonstration purposes. Instead, our group performed various tasks and activities using the tools Blackboard Collaborate and Blackboard Instant Messenger. There were some advantages with using the tools and designing learning activities that involved every member. Audio and video was clear and audible within Blackboard Collaborate. As a group, the synchronous function of Blackboard Collaborate allowed for us to interact with each other and collectively participate and provide feedback in real time. We also were able to create and share information when the moderator shared their screen to demonstrate different activities.

Some members were not as familiar with the tool Blackboard Instant Messenger. We were able to learn by teaching each other step by step about how to download the tool and discover the various functions of Instant Messenger. Blackboard Instant Messenger has to be downloaded separately from the app with a separate username and password. It was interesting that within chat rooms, users were allowed to communicate through text and audio. Emojis can be used in the app, although the symbols could use some updating.

One of the disadvantages and challenges for this project was finding a time that suited all five group members. Another issue was technical difficulties. We had issues with computers restarting, having audio issues and having to logout of Blackboard and re-enter the online session as User #2 with the same name. Overall, the benefits and advantages to the online communication tools outweigh the disadvantages, which will be discussed within this project.

Function of the Tools: Blackboard Collaborate and Instant Messenger

Blackboard Collaborate is an online tool designed to provide engagement, learning and collaboration among its users in an online learning environment. The tool allows for users to access it anywhere and anytime that is convenient for them. The web-conferencing tool is used by students, educators and business professionals. Blackboard Collaborate can be used for live instruction, which allows students to interact with the instructor and other students, replicating a physical classroom setting. The online tool also allows for asynchronous content development. Instructors can take advantage of the recording and playback functionality. Welcome messages or student orientation videos can introduce students to Blackboard Collaborate and podcasting allows for immediate lectures and feedback. According to Blackboard.com (2016), “Instructors can create a more engaging and effective asynchronous environment by adding a voice component that facilitates vocal instruction, collaboration, personalized coaching, and assessment.”

Virtual meetings can also be conducted with Blackboard Collaborate instead of using expensive teleconferencing tools. These meetings can be for business or the classroom, where the employees or students are in different locations but can interact virtually in real time. Student and parent orientation is another type of meeting that can utilize Blackboard Collaborate. For example, Northampton Community College in Pennsylvania uses Blackboard Collaborate as a tool that can attract prospective students in various geographical location and have both live and recorded sessions for student orientation (Blackboard, Inc. 2016). This also allows for the possibility of remote guest speakers and virtual field trips. It can be expensive or inconvenient for speakers to travel to certain destinations. Blackboard Collaborate makes it less costly and more convenient for anyone to interact with others regardless of the distance. Field trips are also

costly but students get the opportunity to visit and explore areas and events without the leaving the classroom.

Tutoring programs can be developed with Blackboard Collaborate. Students can get one-on-one help with homework and assignments. Blackboard, Inc. (2016) states that “...sessions can be scheduled, or students can drop into to an existing virtual room to connect with the tutor.” Instructors can develop virtual office hours, too. Teachers can extend their availability to students and meet virtually one-on-one or in groups with students. The instant message feature also allows for additional chatting with the instructor or with a tutor.

Blackboard Instant Messenger provides instant collaboration with its users, in which students and teachers can connect to users in certain assigned courses. Blackboard Instant Messenger promotes learning through features such as video chat, screen sharing, and whiteboard. The application allows students to chat instantly, place audio or video calls for conversations, use the whiteboard for visual instruction, and screen sharing for one-on-one or group learning sessions. Instructors can also separate students into different groups for activities or projects. Members are only allowed to participate in group chat and web conferencing with other members of their group, whenever the instructor creates groups. The whiteboard may be utilized within groups because two or more users can modify and add content simultaneously.

Advantages of using the tools

One of the main advantages of Blackboard Collaborate and Blackboard Instant Messenger is the ability to record and playback sessions. Instructors can hold a learning session live and record it for playback later. Students that missed the real-time session or desire to study with the recordings can playback the sessions at their own convenience. These recordings can be used for orientation sessions, virtual meetings, and professional development courses. Some

recordings provide tutorials about how to use Blackboard. Within the program, Blackboard offers a virtual help desk. The help desk has the capability to access one's computer to demonstrate how to use the application and discover any technical issues from another computer.

For many institutions, the use of online asynchronous and synchronous tools increases student completion rates and retention. Research has demonstrated that more interaction can improve online learning for students. One example is the Sunchild E-Learning Community that was designed for a Canadian Aboriginal community. First Nation high school students received online education in both urban and rural areas of Alberta, Canada. Sunchild had an "...80% success rate with diploma achievement, a dramatic increase from the 17% graduation rate of the traditional education system." By using Blackboard Collaborate, the community had more graduates in the recent three years compared to the previous 40 years.

Blackboard Collaborate accommodates different learning styles of its users by providing two-way online communication, instant messaging and a whiteboard that displays classroom content. For example, EBUS Academy in Canada had a learning session that "...included using the interactive whiteboard to indicate locations on a map, doing a craft project, singing songs together using the microphone, texting answers to questions during a game, visiting a web site, and reading a book that was scanned in" (Blackboard, Inc. 2016).

Blackboard Collaborate and Blackboard Instant Messenger are both cost effective compared to other online tools by eliminating expensive teleconferencing and travel costs. The online tools eliminate geographical barriers. Online classes can be filled with students from different campuses. One teacher can teach multiple courses, which eliminates additional hiring. Classroom instruction is not limited to the physical classroom and can include activities and guest speakers from anywhere in the world all accessible at their fingertips. For example,

Georgia State University faculty has used Blackboard for about 90 meetings that included up to 400 participants. The online tools are used for “...online office hours, guest lectures, and one-on-one collaboration sessions” (Blackboard, Inc. 2016). Other institutions are following suit by offering more online courses and programs such as the University of Southern Mississippi. USM offers an array of undergraduate, graduate, hybrid degrees and certificates online to students that live in 44 states (USM, 2016).

Teaching Strategies

Blackboard Collaborate serves as a virtual classroom and, as such, offers a forum for many of the same teaching strategies that may be used in physical classrooms. This tool offers many options to instructors and students in online courses.

Blackboard Collaborate may be used for synchronous instruction. Online classes may schedule meetings or have regularly scheduled classroom hours where all students and the instructor will be in Blackboard Collaborate simultaneously. One option for synchronous instruction is for the instructor to deliver a lecture through Blackboard Collaborate. Students will be able to view video of the instructor and listen to the lecture. Questions may be asked through the audio function or in the chat window. The lecture may also be accompanied by a slide show, which will be visible in the Blackboard Collaborate window. The instructor may also share his or her screen with the class. This allows the student to see real-time demonstrations of using online tools and/or allows the class to follow the instructor to web sites or to view documents and other items the instructor may bring up on the desktop.

Blackboard Collaborate may also be used for asynchronous instruction. Lectures, slideshows, or screencasts may be recorded in Blackboard Collaborate and then archived for students to access at the time of their choosing. It is also possible to have guest lectures and

instructional sessions recorded so that students may access them as needed. One example of this is the Eagle Scholars Program for Undergraduate Research at the University of Southern Mississippi. The program maintains a shell for award recipients in Blackboard. Tracy Englert, the Science & Technology Librarian in Hattiesburg, recorded a screencast through Blackboard Collaborate showing students how to access resources through the University Libraries web page. The tutorial may be accessed multiple times, at any time, by students in the program.

Blackboard Collaborate is also an ideal medium for the “flipped classroom” model and for student presentations. This online environment allows students to share a slideshow, use audio to address the class or to share their screens. There is also a shared whiteboard where students may diagram things in real-time for the class to view. These same functions can be used with guest speakers as well. A guest may come in and lecture or instruct the class and, unlike a physical classroom, sessions can be archived for access by students that were unable to attend. Blackboard Collaborate archiving feature is also a perfect way for students to watch lectures or videos before class and then interact during class time. At Edge Hill University, instructors using Blackboard Collaborate with a flipped classroom strategy found that student access to recorded lectures helped reinforce their learning. They were also able to utilize the Blackboard Collaborate mobile app, break out rooms and applications sharing and students expressed an interest in using Blackboard Collaborate again in the future (Wilcock & O’Connell, 2014).

Blackboard Collaborate also lends itself easily to student collaboration and cooperation. Students may meet in small groups through Blackboard Collaborate and utilize the same tools that instructors do during class meetings. They can share screens, share a slideshow, work together on the whiteboard and use the audio and video features of Blackboard Collaborate while working together. At University of York, Matt Cornock found that Blackboard Collaborate was

also very useful for campus-based classes. He found that Blackboard Collaborate allowed students scattered across multiple physical spaces to come together and, “share results and ideas with each other during the group activity.” He also found that, “Within the group work session, the lecturer can deliver introductions, mini-lectures or address issues being raised that are useful for all groups remotely to all spaces.” He also found that students were able to use Blackboard Collaborate to have reading or study groups and that using Blackboard Collaborate for extended group projects was a way to keep everyone in the group on track and in touch (Cornock, 2016).

There are also several teaching strategies that can incorporate Blackboard Instant Messenger into the online and physical classroom. According to a 2015 Pew Research Center report, 79% of all teens instant message their friends and 27% use instant messenger on a daily basis (Lenhart, 2015). This would indicate that instant messaging technology is part of daily life for many students and that using this technology in the classroom would be an easy transition for most of them.

Blackboard Instant Messenger is a natural tool for collaborative/cooperative learning. Unlike email, students can instantly connect with their classmates through instant messaging. Chester & Gwynne discovered that some students that may be too shy to interact in collaborative or group projects in a classroom setting were more confident in an online environment (Chester & Gwynne, 1998). Students could also develop confidence by being able to communicate without interruption. Blackboard Instant Messenger also includes video chat, screen sharing, and a whiteboard, which all increase its usefulness as a collaboration tool. Susana M. Sotillo wrote a case study in 2006 describing a pilot study she conducted with her English as a Second Language (ESL) students involving, “the provision of corrective feedback to ESL learners through collaborative work utilizing the text-based chat and audio features of Yahoo! Messenger (Yahoo

IM), a form of synchronous desktop videoconferencing (DVC).” Sotillo found that through indirect, or implicit, feedback during the chat sessions, her students corrected their own errors (Sotillo, 2006).

Blackboard Instant Messenger is also ideal for discussion strategies in teaching. Bringing students together to discuss assigned readings is a productive way to use instant messaging. It could also be used in Blackboard after watching a real-time lecture or a video. It is important to note that this technology allows students that may have hearing disabilities to participate in class activities without any special accommodations. Deaf students can contribute to the class discussion and receive feedback directly. Pagano and Quinsland found that instant messaging was also a great way to bring in guest subject specialists to the classroom for discussions. Their deaf students were able to interact directly with the guests in the same manner as all the other students in the classroom (Pagano & Quinsland, 2007).

Many instructors also find that instant messages are a great way to incorporate writing into their courses. Through their interactions, reflections and discussions, students are required to critically think about their classmates’ answers as well as formulate their own. A 2007 article from Education Week illustrates again that instant messaging can be useful for students that are learning english as a second language. An example is given of Elena Nehrebecki at Hudson County Community College in Jersey City, N.J. Nehrebecki has students copy their instant messages on the board and then the class works together to turn the text into academic language. She also uses the instant message text to point out colloquialisms, spelling errors, synonyms and complete and incomplete sentences (Martineau, 2007).

The social interaction inherently present in instant messaging also can also build a learning community in the physical and online classroom. A 2008 study found that using instant

messaging created community not only among the students, but among the teachers and between the teachers and the students (Doering, Lewis, Veletsianos, et. al., 2008). Other studies have found that instant messaging can help students feel more of a bond with their teacher and classmates and they may even form a learning group that stays connected after the class or activity is over (Lauricella & Kay, 2013). Many online instructors also find that instant messaging is a great way to offer virtual office hours. If students know that the instructor will be online at certain times and days during the week, they know they can have instant access to them and this can help with feelings of isolation that may develop in online students. One of the advantages of Blackboard Instant Messenger is that it automatically populates with the names of the student's classmates and instructor.

Example Learning Activities for Blackboard Collaborate

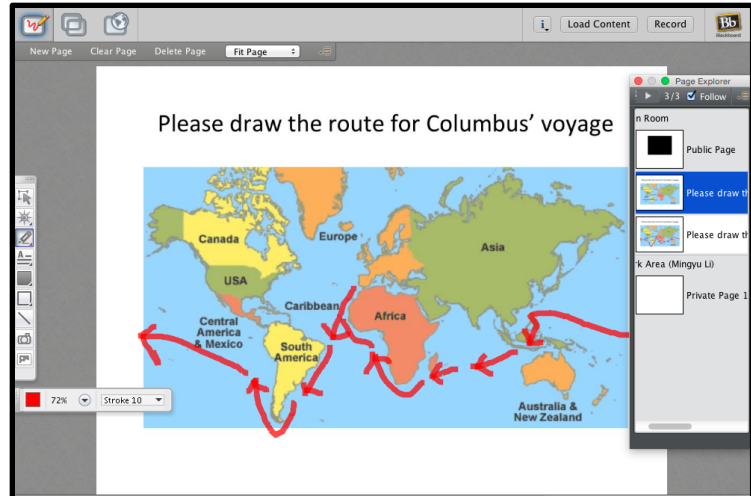
Activities integrated with Blackboard Collaborate are supposed to apply multi functions of the program. The three example activities involved in this report are developed with the help of whiteboard, screen sharing function, room breakout function, whiteboard editing toolbar and function of loading contents. Group three members met online several times in March 2016 and tested the activities, assuming themselves as students in real classes, aiming at experiencing the activities by themselves, thus evaluating the feasibility and possible difficulties.

Activity I - Live Presentation

During the live presentation, a pre-created PowerPoint file will be imported into Blackboard Collaborate and then be presented to all the online members in that same room, with the whiteboard editing toolbar utilized if necessary. Class members read the assigned materials before the meeting and one of them is required to create the slides. When the class meets online,

the one who prepared the PowerPoint slides will present it to the whole online class along with his/her voice narration.

One of our group member, Mingyu, was the instructor during the test. The topic of this class is *Christopher Columbus's voyage*.



Adrienne in our group was assigned to do the live presentation when we met online. Through clicking *Load Content*, Adrienne imported the slides and started presenting. During the process, she also used the editing toolbar to point out the key points and also other members answered her questions using their microphones.

In one of her slides, Adrienne asked the rest of us to draw the route of Columbus's voyage. Justin answered the question by using the toolbar to draw the route in red. At the end of this class, Mingyu as the instructor, exported the whiteboard pages as a pdf file and shared with the class.

Summary of Blackboard Collaborate Activity I:

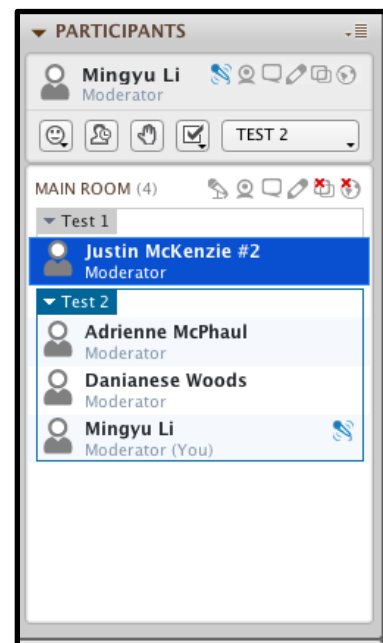
Advantages	<ul style="list-style-type: none"> ● Live presentation enables online learners to thoroughly read and better understand the course materials. ● It strengthens learners' ability in summarizing long text and grabbing key points. ● Other learners are able to ask questions anytime during the process by using Raise Hand function. ● All of the editing histories on the slides can be saved as PDF file and shared with the class members, which can be used as class notes and future reference.
Problems and Possible	<ul style="list-style-type: none"> ● Some of the learners may feel uncomfortable showing

Solutions	<p>their faces during the presentation. Instructors should respect students' preference and allow them to narrate the contents without showing their faces.</p> <ul style="list-style-type: none"> • Transitions and actions cannot be shown in Blackboard Collaborate since once you import the slides, they are all converted to images. Instructors should remind students don't apply any animations to the objects or add any transitions because they are not available in Blackboard Collaborate.
-----------	---

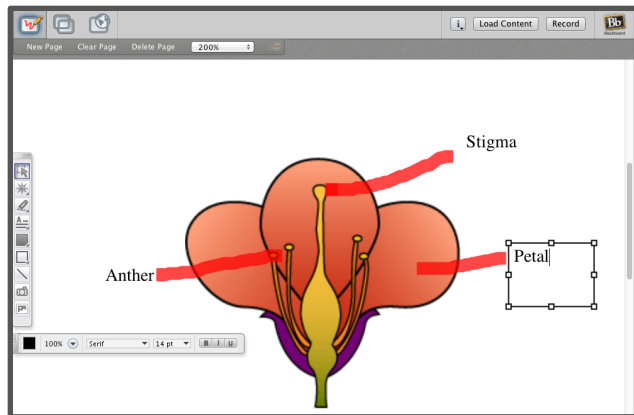
Activity II – Mini Group Collaboration

The second activity requires instructors to break out the main room and assign learners evenly into several mini rooms to collaborate with each other. Instructors will assign activities for each group to discuss and finish within their own rooms and then they return to the main room to share the discussion result with everybody else.

The tested example of Mini Group Collaboration incorporated whiteboard, the function of whiteboard copying as well as content loading. Mingyu, as the instructor, broke out the main room into Test 1 and Test 2. Justin was moved to Test 1 and Adrienne & Danianese were moved to Test 2 as shown in the screenshot on the right. The topic of this class is *the basic structure of a normal flower*. Each group got a flower picture from the instructor. In their separate mini rooms, group members worked together to label all the basic parts of that flower. After that, Mingyu copied all the separate whiteboards to the main room, closed the breakout



rooms and brought everybody back to the main room. Then they checked the answers on whiteboards page by page.



Summary of Blackboard Collaborate Activity II:

<p>Advantages</p>	<ul style="list-style-type: none"> ● Mini Group Collaboration allows online learners to be more engaged in the discussion. The mini size of the group makes it more possible for each single learner expressing themselves and contributing to the discussion product. ● All of the whiteboards in each breakout rooms can be copied to the main room, which makes it convenient for the class to view the discussion result together in the main room along with the guidance and explanation of the instructor. ● As the moderator, the instructor can choose to randomly and evenly attribute learners into different rooms or, move the learners one by one. Moving themselves to other rooms are also available under the instructor's approval.
<p>Problems and Possible Solutions</p>	<ul style="list-style-type: none"> ● If the instructor stays in the main room, he/she can only see the small microphone sign or the text sign, which means he/she will know the students are discussing something. However, the problem is that he/she cannot know the contents they are discussing unless constantly switching from one room to another. Thus, it's important for instructors to design activities that require paper-based results such as drawing or text and maybe let students sign their names next to their contribution, through which instructors can make sure everyone are included in the discussion and really contributes something.

Activity III – Synchronous Quizzes

Blackboard Collaborate allows moderators to create embedded online quizzes using the quiz function of this program. Learners are then able to finish the quiz synchronously and the results will be calculated and shown to the instructor as the screen capture presented on the right.

Mingyu, as the assumed instructor, asked group members to read a short article describing the basic knowledge of ADDIE model before their online meeting. Then in order to make sure that learners are actually reading the materials, within Blackboard Collaborate, the instructor designed a short quiz with only 3 questions and handed it out at the beginning of class. After the learners finished the quiz, the instructor viewed the correct rate of each question and also learners' individual performances. Based on these data, the instructor was able to be sure about which part in the article needs more clarification.

Summary of Blackboard Collaborate Activity III:

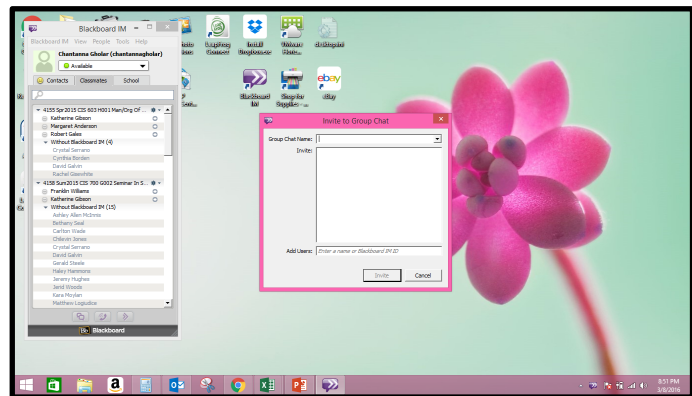
Advantages	<ul style="list-style-type: none">● Short quizzes are easy to create and distributed to each online learners within Blackboard Collaborate.● It's convenient for instructors to offer immediate feedback to the learners. At the same time, learners are able to raise their questions toward the questions they met during the quiz. Explanation in audio is much clearer than in text format.● Although the exported version of the quiz is in vcq format, which is unusual to most instructors. It can be opened and viewed with Microsoft Excel.
Problems and Possible Solutions	<ul style="list-style-type: none">● Only two types of questions are available in Blackboard Collaborate quiz creator, one is Multiple Choice questions and the other is Short Answer questions. However, since these embedded quizzes are only for the quick check purpose, these two types of questions are enough. Adding a few more options could be a possible solution.

Example Learning Activities for Blackboard IM

In recent years, technology has become a forefront in classroom instruction in both grade schools and colleges. In fact, virtual high schools are slowly becoming a “normal-sounding” term. Instant messenger is an extremely convenient communication tool that is used to allow learners and instructors to communicate virtually without requiring physical face-to-face meeting. In determining activities that can be used with Blackboard IM, the assumption was creating activities that can be used for achieving major assignments such as group projects and research papers. Therefore, the first activity is Information Gathering and Brainstorming.

Activity I - Information Gathering and Brainstorming via Group Chat

During those times that instructors want students to work together (whether as a class or groups), Blackboard Instant Messenger can be utilized to gather information. A general room, break-out groups, or pairs can be used to brainstorm and throw ideas out at each other.



Example: The instructor, Chantanna, assigned a project in which learners get into groups and use their past experiences to determine how to apply favorable outcomes in situations in which they have limited control. First, Chantanna created group chats. The image to the right depicts the “Invite to Group Chat” function in which the instructor would include a group name and learners to invite. Once students were in their groups, they shared past and/or current experiences related to the project by sharing back and forth. They also brainstormed to determine which points would be more beneficial for the project’s sake. Having this communication tool available allows for group members to meet in more than one way. Physical, face-to-face

meeting is still available, but online meeting may be more beneficial for most of the learners.

Another useful feature of Blackboard Instant Messenger is the student's ability to save the chat if needed for future reference. Sometimes talking face to face is not as beneficial as having a “technology trial.”

Activity II - Assessment

Using Blackboard Instant Messenger for assessing students’ knowledge of information is a useful activity. The instructor can open a whiteboard in which he/she will post the questions and students can submit their responses via private submission.

For example, Chantanna posted the following question, “Choose or create a product to go through the product life cycle.” Before submitting, she required that all students submit their product via public chat so no one chose the same item. Students then were instructed to submit their response via private submission to the instructor only. This method helps reduce cheating, as students can also send private chat to one another.

Using Blackboard Instant Messenger for assessing students eliminates the use of paper, the energy from running the printer, and the use of ink. Many students have experiences where they still have to come to the school to take a paper test or computer test even though they are taking online courses. Those courses, to some degree, are NOT fully online. Blackboard Instant Messenger is a tool that can help to eliminate online students having to come on campus to complete assessments.

Pros for using Blackboard IM for this activity:

- Easily accessible
- Convenient

Cons for using Blackboard IM for this activity:

- Higher risk of cheating
- Less dedication
- Students using “Google” to find answers

Activity III - Instructional Time

Blackboard Instant Messenger can be used for many things, but it is ideal as a platform for normal classroom instructional time. Imagine having a classroom with 25-30 students. It could potentially be noisy and hectic, depending on the age-level and maturity of the individuals. This activity can be used for online courses, as well as traditional in-class courses.

The activity would include the students gathering in the chat room as a class and having normal instructional time. There will be no extraordinary features to it, but simply logging in and joining the chat. The teacher, in this case, Chantanna, used the chat room for poll-taking close-ended questions, which is the teacher asking a question and the students responding with one of a few responses such as yes, no, maybe, or unsure. Chantanna also asked multiple choice questions in which students were required to choose one answer from a series of possible answers.

During instructional time, Activities I & II can take place. Unlike traditional class times, this instructional time will be structured into a brief session, anywhere from 1-4 hours. Students will be expected to learn at an expedited fashion in order to thoroughly get through the course.

Summary of using Blackboard IM in all activities

Advantages	<ul style="list-style-type: none">● Ability to reach more students● Information can be shared via chat without noise barriers● Students who are normally shy in physical situations have the opportunity to share without the limitations that face-to-face interaction may cause● Students and instructors have the ability to experience the convenience of online learning and communication● Quicker response time when compared to writing for note-taking
Disadvantages	<ul style="list-style-type: none">● High possibility of technology failing● Communication barrier from the possibility of students participating from various parts of the world (different jargon and slang)● Higher risk of students cheating on assessments (Many instructors use the “Lock-Down” browser, but that does not stop a student from googling questions on their tablet, cell phone, or other computer)● Instruction may be too speedy for some students

Summary

Although most of the Blackboard communication tools, such as voice board, voice presentation and voice mail, were not tested and discussed as planned in this group project, the in-depth discussion of Blackboard Collaborate and Blackboard Instant Messenger are included with detailed descriptions. After several online meeting collaborations and also offline individual exploration, Group 3 members present several aspects of the two communication tools, including their functions, advantages, and teaching strategies. Example activities were also designed, tested and reported in order to inspire the readers to combine the two communication tools with their actual teaching and learning. Group members assumed themselves as students to experience the disadvantages of the tools and then discussed about the possible solutions.

Thoroughly understanding the pros and cons of each communication tool will not only benefit the possible readers but, at the same time, is helpful for the group members. During the process of getting familiar with the two communication tools and generating more detailed ideas and discussions, our group members tried to relate our newly gained experiences with the former assigned readings of this course. Thus we were able to form a clearer understanding of digital communication tools and their possible applications in the real context, which will guide us to better make a decision among the different telecommunication tools based on the diverse course requirements.

References

- Blackboard, Inc. (2016). "Blackboard Collaborate." <http://www.blackboard.com/online-collaborative-learning/index.aspx>. Accessed February 28, 2016.
- Blackboard, Inc. (2012). "Blackboard Collaborate Enterprise Instant Messaging User Guide." <http://www.blackboard.com/docs/documentation.htm?DocID=504001PDF>. Accessed March 2, 2016.
- Blackboard, Inc. "Blackboard IM sign up." https://www.blackboardim.com/user/faces/guest_page.xhtml. Accessed March 2, 2016.
- Blackboard, Inc. "Top Ten Benefits of Using Blackboard Collaborate Web Conferencing." <http://www.blackboard.com/getdoc/7061b4b6-b2f2-400f-9130-e3c2a9a947c1/top-ten-benefits.aspx>. Accessed February 28, 2016.
- Blackboard, Inc. "Top Ten Ways of Using Blackboard Collaborate." <http://www.blackboard.com/getdoc/38480300-186c-416e-bdef-246b353d97d7/top-ten-ways-of-using.aspx>. Accessed February 28, 2016.
- Chester, A., & Gwynne, G. (1998). Online Teaching: Encouraging Collaboration through Anonymity. *Journal of Computer Mediated Communication*, 4(2). <http://onlinelibrary.wiley.com/lynx.lib.usm.edu/doi/10.1111/j.1083-6101.1998.tb00096.x/abstract> Accessed March 08, 2016.
- Cornock, M. Blended learning designs using web conferencing for campus-based programs. E-learning Development Team. <https://elearningyork.wordpress.com/2016/01/22/blended-learning-designs-using-web-conferencing-for-campus-based-programmes/> Accessed March 09, 2016.
- Doering, A., Lewis, C., Veletsianos, G., & Nichols, K. (2008). Preservice Teachers' Perceptions of Instant Messaging in Two Educational Contexts. *Journal of Computing in Teacher Education*, 25(1), 45-52. <http://lynx.lib.usm.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=34875051&site=ehost-live> Accessed March 08, 2016.
- Lauricella, S., & Kay, R. (2013). Exploring the use of text and instant messaging in higher education classrooms. *Research In Learning Technology*, 21.

<http://www.researchinlearningtechnology.net/index.php/rlt/article/view/19061> Accessed March 08, 2016

Lenhart, A. (2015). Teens, Technology, Friendships. PewResearchCenter.
<http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships/> Accessed March 08, 2016.

Martineau, P. (2007). Tapping Instant Messaging. Education Week.
<http://www.edweek.org/dd/articles/2007/09/12/02im.h01.html> Accessed March 08, 2016.

Pagano, T. and Quinsland, L. K. (2007) Pedagogical Applications of Instant Messaging Technology for Deaf and Hard-of-Hearing Students in the Science Classroom. Journal of Science Education for Students with Disabilities. 12(1)
<http://scholarworks.rit.edu/jsesd/vol12/iss1/5> Accessed March 08, 2016

Sotillo, S. M. (2006) Using Instant Messaging for Collaborative Learning: A Case Study. Innovate: Journal of Online Education. 2 (3), <http://nsuworks.nova.edu/innovate/vol2/iss3/2> Accessed March 08, 2016

University of Southern Mississippi. (2016). "Online at Southern Miss Programs."
<https://online.usm.edu/programs/>

Wilcock, M., O'Connell, M. (2014) Distance makes the brain grow stronger: using Blackboard Collaborate with the flipped classroom model to teach distance learners.
<https://www.edgehill.ac.uk/solstice/files/2014/06/4.-Distance-makes-the-brain-grow-stronger.pdf> Accessed March 09, 2016.