

Blackboard Tools
for
Synchronous and Asynchronous Communication

By

Chase McCullum
Christine Mark
Andrea Moreau
Hengtao Tang

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The purpose of this group project was to learn about the communication tools within Blackboard, a learning management system used as a platform to support online learning. There are tools within the Blackboard environment that support synchronous and asynchronous communication. This report describes these tools while analyzing the benefits and challenges of using them for teaching and learning as well as posing some suggestions for practical use. The tools were explored by conducting the following activities:

1. Live Classroom – Using this program, group members used text, video, and audio during our interactions and one group member was able to call into the virtual classroom via phone feature. The program also allows students to use emoticons, raise their hands to speak, and vote on specific questions posed by the instructor. As we used other technologies, the virtual classroom served as the home-based and we were able to return to the classroom to discuss any issues, problems or concerns.
2. Voice Email – The Blackboard Learning System’s Voice email tool is a simple program that was used by one of our group members to send a voice message/ reminder about an upcoming meeting to other students and group members over the University of Southern Mississippi’s email system. The group members then discussed some of the benefits and potential problems this form of asynchronous communication.
3. Voice Board – To explore the use of Voice Board, each of us used this tool independently, listening to the posts that Andrea created. We then tried out the various options available on this application. The group then discussed the potential uses for this application as well as its benefits and challenges to online coursework.
4. Voice Podcaster – To examine the integration of Voice Podcaster in the education, we each record a podcaster in the blackboard and explore the functions of this tool. Based on the experience and previous knowledge, the group discussed its advantages, disadvantages, and its future integration in the education. Penetrating personal opinions and specific examples are provided during the discussion.
5. Wimba Pronto (Blackboard IM) - To discover the features of this Blackboard tool we IM’d each other using text chat and then did a simulation of office hours. We met using the virtual office application where we communicated using chat and voice. We used the whiteboard where we practiced writing at the same time. We tried the video as well. We took turns sharing our screen with others. Chris showed a PowerPoint and then a video.

The following is a detailed analysis of each of the above tools:

Live Classroom

Function

The Wimba Classroom is a tool that is used by many educators in a variety of settings. The program allows students and educators to interact in a virtual learning environment using text, voice, and video. Professors and other educators are able to share and present documents, lecture, and engage with students using this synchronous technology. The program is easily accessed via a link on the Blackboard website. Students should have the appropriate software (e.g., java) and hardware (e.g., microphone and webcam) prior to entering the classroom.

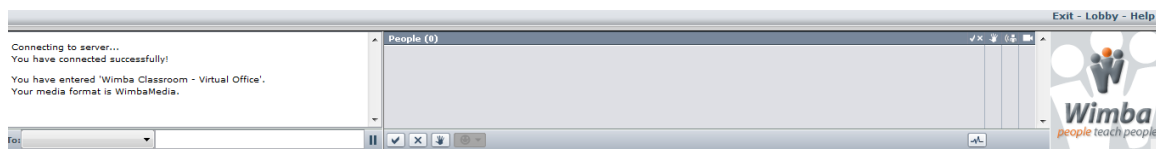


Each of our group meetings were actually facilitated using the virtual classroom. Group members were able to use text, video, and audio during our interactions and this author was able to call into the virtual classroom via phone feature with no difficulty. Students are also able to use emoticons, raise their hands to speak, and vote on specific questions posed by the instructor.

As we used other technologies, the virtual classroom served as the home-based and we were able to return to the classroom to discuss any issues, problems or concerns. Overall, the Wimba classroom made the process much easier and allowed our members to communicate as if we were in the same room.

Advantages of using the tool

- One of the major advantages of this software is its interface. It is easy to use and includes all of the tools that one would need to actively participate in the learning process. The program's features are not difficult to locate and are often initiated with the click of a button.



- The video and voice components were beneficial to our group and would be useful within an online classroom setting because they add a more personal element to the group and/or class dynamics. As one group member stated, strictly text-based interactions do not always meet the needs of all learners and can only convey so much of the message.
- As previously noted, the call-in feature was easy to use and useful for those who may not have direct access to a computer and/or are having problem logging into the system.

Challenges and possible solutions

- Although, the program has a number of positives, it also has its challenges. The Wimba Classroom is sometimes difficult to enter and maintain without a strong Internet connection and/or the most up-to-date software. Some participants had issues entering the classroom during each of our group meetings and the strength of their connections varied throughout the course of the meetings.
 - It would be difficult to resolve this issue; however, instructors should encourage students to be familiar with the connectivity requirements prior to entering the classroom. This may be achieved by posting a tutorial and/or related resource on the course website.
 - Students with potential issues may also be encouraged to call in via phone at times or access the classroom in a setting such as the school's library.



- Hardware issues may also pose a potential problem for some. In order to be fully engaged in the classroom, one would need a webcam, speakers, and a microphone. Issues with software and hardware could pose a problem for some individuals and could cause some students to miss crucial information if course information is only presented during the scheduled meeting time.
 - A possible solution for educators is to archive classes for future reference.

- In addition, the Wimba classroom was observed to be limited with regard to making presentations to and sharing documents with peers. This may be related to the level of control given to students via the program and/or educational institution; however, this lack of access limits the Wimba classroom for group work when compared to similar software.
 - Instructors may resolve this challenge by giving students increased options with regard to document sharing and whiteboard features within the virtual classroom when group work is required.

Ideas or teaching strategies:

- The Wimba virtual classroom comes with a wide variety of features that make it a great tool for educators. As previously noted, instructors teaching any online course ranging from Biology to Statistics could use the tool to provide lectures, share videos related to their course topic, and respond to questions from students in real time.
- An instructor may post a variety of assignments and direct students to complete them using virtual classroom. For example, an English professor may assign his or her students to read a series of poems and ask the students to engage in a “round-robin” discussion in the classroom.
- Another example would be a statistics professor instructing students to meet with each other in groups to flesh out ideas for a research project prior to the designated class meeting.

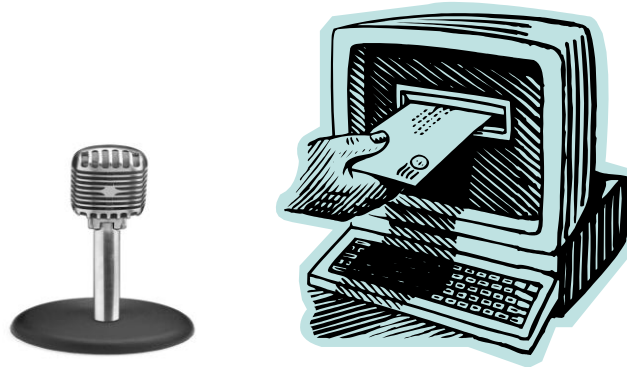
In summary, the Wimba classroom was observed to be an excellent resource for students to communicate and interact within the virtual environment. As with many forms of synchronous communication, the software includes some flaws; however, educators should continue to use this program as either a primary or a supplemental learning environment.

Voice Email

Function

The Blackboard Learning System’s Voice email tool is a simple program that may be used by students and staff members to send voice recordings to others over a learning institution’s email system. The program is accessed directly through a link on the blackboard website.

With the appropriate software and hardware (e.g., microphone), the user is only required to enter the title of the voice email and then press the record button (red dot) to begin the process. Upon pressing the record button, the user has three minutes to record a message.



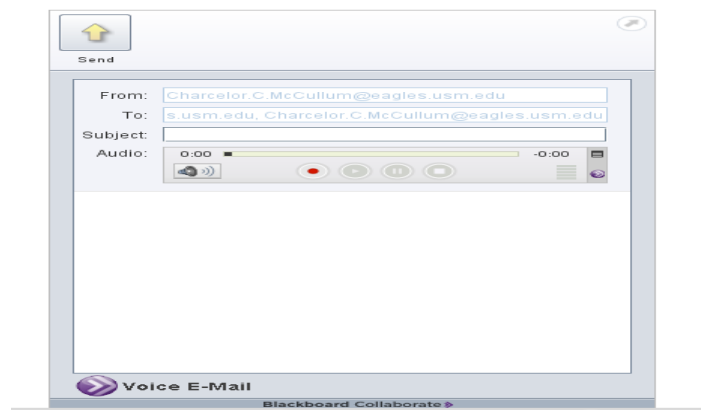
The program also includes a menu with a volume control feature (speaker icon) as well as easily recognized icons for the playback, pause, and stop features. On the far left side of the menu, another button (notebook) may be used for the output, input, and filter features. Once the recording is complete, the user may press the send button, in the upper right corner of the interface, to relay the message to all of his or her classmates.

Once the message is sent, it may be assessed by all members of the class through the institution's email system. Upon opening the message, the email user should click the link, as directed. The user will then be taken to a screen that includes a similar menu with playback, pause, stop, and save features as well as additional information about the message. In order to listen to the message, the user should click the "play" icon. It may also be saved by clicking the "save" link.

Advantages of using the tool

- The major advantage of the voice email software is its ease-of-use and functionality. Instructors and/or students with limited experience with instructional technology would likely be able to use the program to share messages and other information with few problems. It uses universally recognized symbols (e.g., play, record, etc.) and has relatively large buttons.

Voice Email



- The program is also much quicker and more functional, for relatively short messages, than podcasts or other voice programs. As previously noted, the program is already included in Blackboard and may be accessed at the click of a button. Once in the program, one would only have to hit the record button and speak.
- Finally, this software's major advantage is that everyone checks their email and is familiar with the process. Instructors who intend to use this program should establish of sending messages through voice email early during the course and it will quickly catch on and become second nature to students.

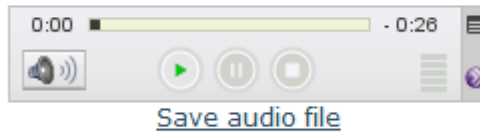
Challenges and possible solutions:

- Although, the program was very easy to use and did its job, this author feels that one of the major challenges of this tool is that it is limited in scope. Initially, my intention was to send a message to my group members about our upcoming meeting; however, I found that the only option available was to send a reminder email to the entire class. This limitation reduces the application's utility for small group and individual communication.
 - Future updates should allow the sender to select particular classmates or groups of classmates.
- Also, there have been many advances in recording software over the years, but this program offered very few of them.
 - The program should be updated to allow users to add effects, alter the tone, and/or edit the message.



- Also, upon receiving the message, another challenge may be related to users ignoring it because they have to go through multiple steps (e.g., clicking a link to open a separate page) to hear the voice email.
 - Simplifying this process would make it easier for both the instructor and students to use the program to share messages and information with each other.
- Finally, our other group members were unable to locate a way to directly reply to a voice email with another voice email.
 - Building in a voice email "reply" feature would definitely improve the flow of communication and encourage students to use the program for both educational and personal purposes.

Ideas or teaching strategies



- The voice email tool may be used to provide reminders to students about upcoming assignments; supplement previously written emails about an important topic or change in the class or curriculum; and/or share new information that is better communicated through using the voice.
- For example, if the due date for an assignment changes, a voice email may be the quickest and easiest way to communicate this to change the whole class.
- The tool may also be used by instructors to quickly answer questions that may not have been clarified during the face-to-face meeting. From my experiences, many learners may be more apt to listen to a voice email and remember the content as opposed to traditional emails.
- In addition, this form of asynchronous communication may be a great way for students to share information with each other about events, such as a link to a great website related to a topic discussed in class, and/or post reminders to the class, such as the dates of a research symposium.

In summary, this author believes that the voice email tool would be beneficial for instructors and students who are attempting to share information with the entire class. Despite some limitations, the program is a useful tool that can be used to improve the quality and scope of our communication.

Voice Board

Voice Board is a tool located inside of the Blackboard web software. Voice Board allows the user to record speech through a computer microphone. Other users can then respond to the original recording. The set up is identical to how a typical discussion board works. A user posts a topic and then others can add on to that topic. All users can see the names of who posted each thread and subsequent post. VoiceBoard has a very simple interface and loads quickly. There are buttons along the top of the VoiceBoard interface. These are "New" to begin a new recording and type a subject, "Reply" which allows you to reply to a prior recording, and an "Options" menu. The Options menu allows the user to select "Play on Click" or "Continuous Play" of an entire threaded discussion. There are also options to expand or collapse a voice thread.

Once the user has clicked on "New," there is a blank to type the subject of the thread. Then the user can click on the red dot to record. Once the user is satisfied with the recording, he may then click "Post." The thread is then listed in a box under "Participants."

When you click on individual posts, in the box below the posts, more information is given such as the name of the poster, the date and time of the post, and the duration of the post.

Advantages:

- Because Voice Board is easy to use, I could definitely see how it could be used exactly like a discussion board in BlackBoard. It's easy to see who posted and to label the subjects. It is more personal than using a discussion board because you can hear the instructor or classmates. Sometimes, when reading text, some users may not readily pick up on humor or intended meaning because voice tone and inflection are not available. This type of discussion board allows its users to do so thereby providing for a more intimate environment. I would think this would also address the problem of isolation that users sometimes feel in distance learning. Such an application might even be more helpful to auditory learners.
- Another advantage is that this is an asynchronous form of communication meaning all users do not have to be present at the same time to use just like the text discussion board. All users can post on their own time.
- It is also possible to save a recording outside of VoiceBoard as an .mp3. This would be useful if a student wanted to save some threads for study purposes, to transcribe, or embed in a website.

Finally, this tool may appeal to some students who do not like to type or who are not good at typing.

Challenges and possible solutions:

- One of the challenges of Voice Board is that the user needs to be a good listener. If the voice post is particularly long, the user should make notes in order to respond adequately and appropriately. In a regular text discussion board, a user can always cut and paste a question or statement in the response box so that he is sure he addressed all parts of the previous post. Here, that is not an option.
 - A solution to this would be to listen to a post again. Just as it sometimes takes several readings of a text post on a discussion board, the same would be true of a voice post. Simply listen again.
- If there are technology deficits or problems on the part of the user, for instance, no microphone or speakers or broken microphone or speakers, then this application would not be usable.
- Another potential challenge would be if you couldn't understand the speech of a poster maybe because of a heavy accent or a disability. Or, it may be possible that the poster speaks too low.
 - Then, classmates or instructor would have to ask the user to post again which would be inconvenient to all. This would not be likely to

happen in a text discussion board. Most users can still understand what the poster is trying to convey even if grammar and spelling isn't perfect.

Ideas or teaching strategies:

- I believe this would be a great change for students on Blackboard to be able to post to discussion boards in this way. It can be used for exactly the same purposes as the discussion board is currently be used, i.e. to pose questions and allow for thoughtful discussion and responses.
- Unlike in synchronous communication like in video or text chat rooms or instant messaging, VoiceBoard allows the user to formulate their responses just like a text discussion board. Responses don't have to be immediate so I would think that would help a student in their public speaking. So this could be used in a class where students are required to practice their speaking aloud and then they can hear themselves back and overwrite if they choose and begin again. Unfortunately, once the recording has been posted, I couldn't find the option to delete. But a user could have as many tries as he needed until he was satisfied with the product.
- This would be a great practice tool in English as a second language classes. Users could practice their English on any topic, hear accents, inflections, and speech nuances that would not be present in a regular text discussion. A teacher could ask a question and users could answer the question and even get feedback on pronunciation and accent. Or, if that would be too critical for the students, then at least they would have the opportunity to listen to themselves after formulating responses in the second language.
- Another simple activity would be at the beginning of a course for the students to create their own thread to introduce themselves to the class and tell a little about themselves. This would create a more personable environment and set a friendly tone at the start of a distance learning course.
- As a librarian, I can think of several uses for such a tool even with my elementary school students if the application was available outside of BlackBoard or if I can find a similar one among Web 2.0 tools. One would be for the students to each add a step of how to find a book in the library media center. For instance, I would start off by telling the students what to do. The first student response would be to "think of a book title, topic, or author." The second student might say, "Go to the OPACs," and the third student may say, "type in the title," etc. Young students love to hear themselves recorded!
- Students could even tell a story using Voice Board, with each post being another sentence or dialogue.

Summary:

I think there are many possibilities for use in distance learning in BlackBoard using Voice Board. If I were an instructor using BlackBoard, I might throw in a few discussions using this tool. Honestly, I prefer text and typing and I don't like the way my voice sounds! But, this might be a preferable tool for many so I would try at least one discussion, get feedback from the students, and see, if in their opinion, they would like to use it. In fact, that could be an option for some students—to give students the option to respond to a discussion either in VoiceBoard or in the discussion board.

Overall, I really like how simple and intuitive the tool was. The simplicity makes it easy to use, unthreatening, and easy to explore with many potential lesson applications.

Voice Podcaster

Function

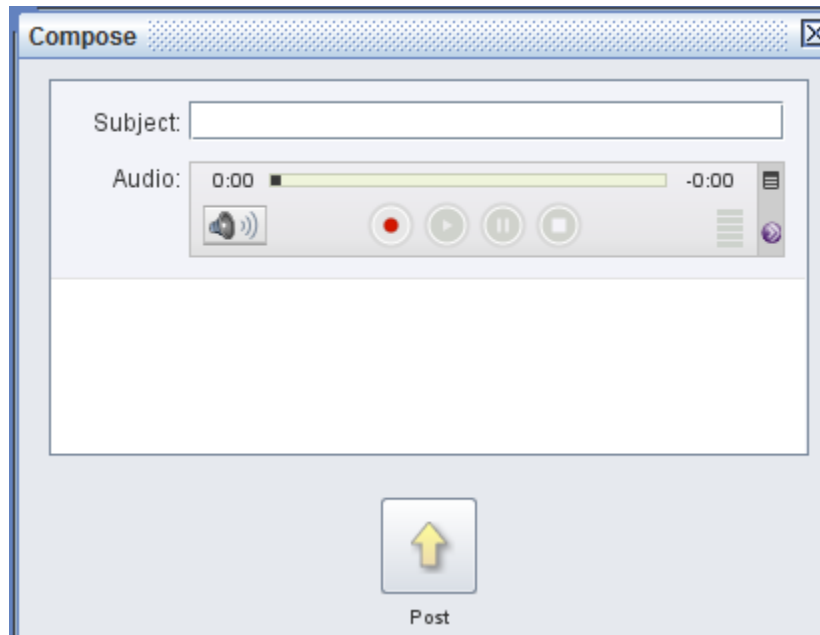
Voice Podcaster is an asynchronous communication tool involved in the Blackboard online learning system. It allows instructors and students to record their own podcast episodes to communicate via vocal information with others in the same course. In addition, the audio files displayed on the board could be downloaded and saved in computers if needed so that users could get access to those files even in the offline situation. Before using the voice podcaster, certain Java components might be required to install. Once the setup is finished, it is possible for users to record or download those audio files.

The process of creating voice podcast files is really easy and convenient. When users sign in the Blackboard system and click button for this communication tool, the following interface will present on the screen (if already successfully set up).



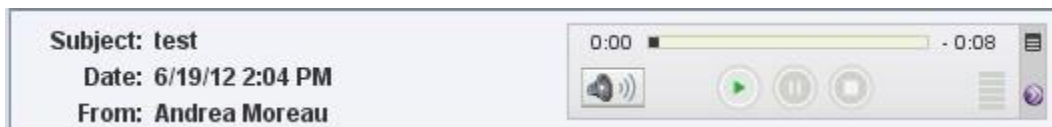
#1: Interface of Voice Podcaster

As the image above, users could click the button “New” to create their own voice podcaster. Once clicking on “New”, a new interface (#2) will show up and users could use the control panel to record the podcast and adjust the volume. Voice podcaster is not restricted merely by vocal information. To make the podcast easier and better to understand, users could type in notes to their contents in the blank area below the control panel. When users finished recording, they could click on the “Post” to present their own podcast on the board.



#2 Compose Interface

All the audio files displayed are available to users. They could set the model for playing in the “Options” and decide whether to play on clicking and playing continuously. After listen to those voice episodes, users could download those they want to save (As shows in #3). What they need do is only to click the tiny square button in the upper-right corner of the play interface and then to select a proper saving routine.



#3 Play Interface

Besides the recording and playing, voice podcasters also allow users to subscribe those audio files. Once they click the “Subscribe” or “RSS Feed” button, a new interface will turn up on the screen. On the subscribe interface, users could select their favored feed reader (iTunes or Live Bookmark) to subscribe those audio episodes. On the RSS Feed interface, it will indicate that user could follow those podcasters if they paste the website link on their favored feed readers. Upon completion of subscribing, it will be possible for those users to keep an update on the newly created podcasters, which is quite convenient.

Advantage

- First of all, voice podcaster, as a kind of asynchronous communication tool, enables users to interact with each other without restriction of time and place. Users are not required to be online simultaneously and they could record, post, and listen to those episodes according to their own schedule.
- In addition, voice podcaster are available to instructor and all the students who are enrolled in this course, which provides a platform for users to interact and collaborate conveniently. It works like a vocal discussion board and users can participate in the interactive learning. In the meanwhile, voice podcaster could support vocal information and allows users to discuss and collaborate via both voice and texts.
- Furthermore, voice podcaster enables users to subscribe those episodes so that they could keep informed of the new upgrading. Users could subscribe through iTunes or Live Bookmark and then read and listen to the new podcasters each time when they open feed readers.
- Finally, it is really easy and convenient for users to set up and operate the communication tool. Only clicking several buttons could help finish the whole procedures of recording and subscribing. By the way, it could also further improve students' ability of oral expression because of more practice.

Disadvantages

- Voice podcaster could facilitate the teaching and learning with its advantages. However, it also possesses the following disadvantages.
- According to students' preference in course IT648, all students only record their voice instead of adding the notes to the content. This situation emphasizes the quality, volume, accent, and tone of the recorder's voice in addition to his/her podcasters' contents. In the meanwhile, it also requires the listeners to obtain excellent listening in order to realize what the podcaster talks, which might be a little bit challenging for those non-native speakers.
- Furthermore, the integration of voice podcaster in curriculum might bring challenges for the evaluation. Imagine if instructors record the course content and send the podcaster to students online as an alternative to classroom curriculum, it is troublesome for him/her to assess whether they could figure out and acquire the knowledge unless students claim. Obviously, it poses a high requirement for self-control of students and more challenges for instructor to evaluate.
- Finally, "Reply" function is not available in voice podcaster interface. It will cause users inconvenience in the process of interactive discussion because users might omit the one they need response to.

Instructional Activities

- Voice Podcaster has a promising future in the curriculum. Per its function, voice podcaster can be considered as a reliable tool for interactive learning. Instructor could integrate the audio podcaster as a vocal discussion board in the curriculum.

It is more convenient for students to participate by a combination of voice and texts.

- Voice Podcaster is an alternative for classroom curriculum because instructor could record the vocal course content and post it on the Blackboard. The integration could help students who have to miss the course because of injury or illness to know the new knowledge. In the meanwhile, the use of voice podcaster will be promising in the online course and mobile learning.
- In addition, voice podcaster could be a platform for assignment. Students could type in their texts and also use the voice to annotate the content orally. The combination of voice and texts makes the assignment more engaging and interesting. Another reason is that voice podcaster could allow students to complete the assignments anytime, even without a computer, as long as they possess a smart phone supporting the Java components the voice podcaster needs. What is more important, the function of “Subscribe” enables instructor and students informed of the latest upgrading.

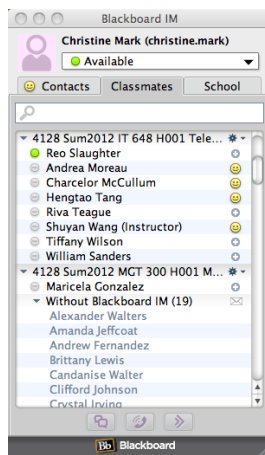
Summary

In summary, Voice Podcaster is a reliable asynchronous communication tool in the Blackboard that supports interactive and collaborative learning. The tool makes it possible to combine voice and texts in a podcaster and provide much convenience and interactivity. As of the instructional integration, voice podcaster could be considered for discussion board, assignment platform, and an alternative to the classroom curriculum. It can be anticipated of a promising future in the online course and distant learning. Even though the tool relies much on vocal quality and oral expression causing challenges for non-native speakers and evaluation, voice podcaster is still promising to be integrated in the education.

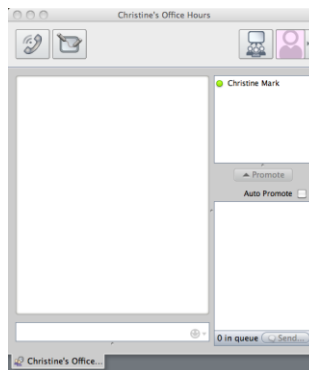
Wimba Pronto (Blackboard IM)

Introduction: To discover the features of this Blackboard tool we IM'd each other using text chat and then did a simulation of office hours. We met using the virtual office application where we communicated using chat and voice. We used the whiteboard where we practiced writing at the same time. We tried the video as well. We took turns sharing our screen with others. Chris showed a PowerPoint and then a video.

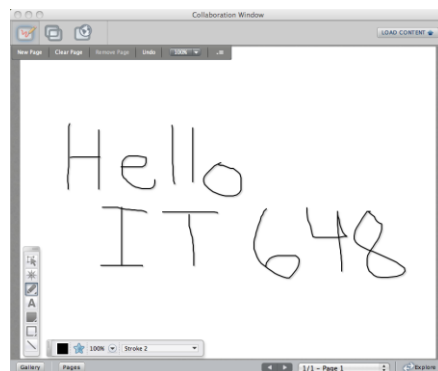
Blackboard IM, as a communication tool has some possibilities for effective communication between an instructor and students and among students. The tool allows students to IM their instructor or other students anytime they are online at the same time. As can be seen by the picture below all students in a class are listed and the ones online have a green button.



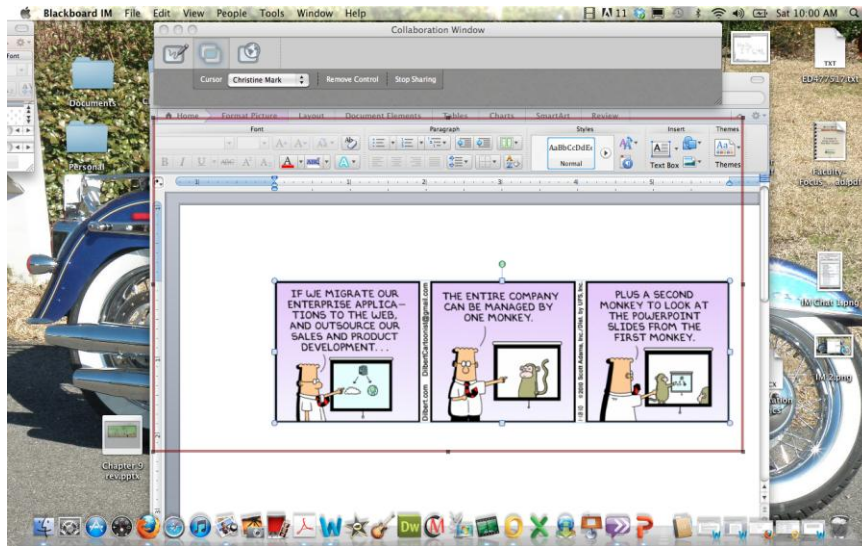
There is an office hours feature where the instructor and students can meet or students can meet to discuss group projects, etc. This feature allows for text chat as well as audio and video chat. The screen is shown below.



From the office hours feature anyone can start a collaboration. In collaboration a whiteboard appears where participants have choices of drawing on the board or typing on the board. Documents can be uploaded for all participants to view as well. The picture below shows this feature.



There is a button in whiteboard where participants can share screens. Whoever initiated the session can toggle back and forth allowing different participants to share their screen with the group (as shown in the picture below). There is also a feature where participants can type in web sites and then all participants can see the web site.



Blackboard IM is a useful tool with the following advantages:

- Allows students to IM their instructor anytime the two are online at the same time. This saves time, when the student has a question they do not have to send the instructor an email and then the instructor reply. The question can be answered on the spot in a quick fashion.
- Students in a class can IM each other when online and discuss issues and get information from each other.
- Online instructors can use this tool to hold virtual office hours with students or meet with groups of students. The application is rich in that it supports text, audio, and video.
- Students can meet in virtual office to discuss group projects, etc.
- The application allows for screen sharing making it possible to have online students do individual and group presentations.

There are some limitations in the use of Blackboard IM such as:

- Students and instructors have to separately download the application on every computer they use.
 - This would be a much better application if it structured more as a Web 2.0 tool and could be accessed anytime from anywhere. The advantage is that participants do not have to be logged into Blackboard to use Blackboard IM due to the fact that it resides as a separate program.
- An instructor may become overwhelmed if there are a lot of students sending IMs at once. It can also be distracting when working to have to stop what you are doing and answer students. It does make the instructor more accessible, but at the same time it makes the instructor more accessible.
 - Instructors are able to “turn off” the application if they do not want to be disturbed.

- The screen sharing part of the application was rather awkward. Some members of the group could not see the others screens and some were loading very slowly. This could be due to the speed of the Internet connection or the type of computer being used. Students have a variety of connectivity and machines causing this to be problematic. It also took some time to get used to how to place what you wanted to show in the viewing box.
 - Practice would be required to use this feature for any sort of presentation.
- Video did not play well in the sharing function. The video appeared choppy and participants could not hear the sound. This is too complex a task for the application.
- At times it was confusing as to who was talking. Sometime participants were talking over each other. In order to speak participants have to press a talk button. It was awkward to remember to keep pressing the button to speak. I found myself saying things without the button pressed and then having to go back and repeat. This requires some practice as well.

Blackboard IM can definitely enhance teaching, especially in an online environment. The following are some practical ways it could be used:

- As a means of instant communication between instructors and students and between students.
- As a way of doing group presentations virtually.
- Using audio and video as a way of making the class more personal and less cold. It would allow participants to hear and/or see each other.
- The whiteboard application could be used in any type of quantitative class to demonstrate how to work problems.
- A way for an online instructor to hold virtual office hours.

In summary, Blackboard IM is a useful application and tool for online instructors and students. It does allow for seamless communication, which is imperative in an online environment. The addition of audio and video adds a personal dimension to communication. Text chat is cold and one-dimensional and lacks personal interaction. The use of audio and video allows participants to see and hear others, adding a level of nonverbal communication through tone of voice and facial cues. The application is not meant to do everything, such as showing videos, but it does offer enough features to make it a valuable tool for teaching and learning.

Summary

The effective use of communication technology has become a critical element for success in both the traditional and online learning environments. Post-secondary students must learn to obtain and disseminate information using synchronous and asynchronous tools. At the University of Southern Mississippi, many of these tools are located on the Blackboard learning management system. Our group used and evaluated several of these

tools, developed learning activities, and shared relevant information with our peers. The resulting information was combined to create a comprehensive resource that provides readers with a wealth of knowledge about the technology that is at our disposal.

Wimba Classroom, as a synchronous communication tool, provides users a variety of features, such as interactivity and engagement, to make learning process much easier and enables users to communicate as in the same room. Voice Email is considered as a beneficial communication tool for users, both teachers and students, to share their opinions or learning resources with others. Compared to traditional email, voice email obviously could better contribute to the interactive sharing and improve communication quality. Voice Board, via its asynchronous and interactive features, is more than a traditional discussion board, which could support both voice and texts in a post. Voice podcaster, as an asynchronous tool, also makes it possible to combine voice and texts and provide much convenience and interactivity. The voice podcaster is a reliable tool for interactive and collaborative learning, which could be considered as a vocal discussion board and assignment platform. Last, Blackboard IM enables seamless communication within an online environment. A combination of audio and video allows participants to learn and communication interactively as in the same setting of classroom.

Each tool has its peculiar advantages and they all have a promising future to be integrated in the education. However, they may all face various challenges in this process of integration. For example, Wimba Classroom and Blackboard IM provide much interest and interactivity for learners but they require a good enough Internet environment to support the operation. Furthermore, voice podcaster, voice email, and voice board are really convenient for knowledge sharing and interactive learning. However, too much emphasis on the quality of voice restricts their further generation among learners.

In order to facilitate teaching and learning, a combination of those communication tools might provide a good solution to those challenges. One instructor could combine those communication tools in his/her course so that learners could communicate both asynchronously and synchronously. For example, voice podcaster might cause trouble with non-native speakers because of the language problems. The instructor could further integrate the Blackboard IM in the course and enable learners to communicate with audio, video, and texts. Even if the learners could not decipher what the podcaster says, they could use the texts to annotate. In the meantime, the voice podcaster retains the advantage of being an asynchronous communication tool. Finally, despite those tools being available for instructors and students in Blackboard facilitating teaching and learning, it is essential to ensure students acquire the basic skills of using the communication tools. More explorative instructional activities pertaining to the communication tool is required to be completed by those learners in order to help them better enjoy the interactive communication environment.

