Wimba Virtual Classroom Replacement Options
Evaluation Report

Prepared by:
UNCW Instructional Technology Graduate Student Evaluators:
Thuraya Al Ghafri, Thomas Hillegass, Lisa Lennon, Nick Syrpis

Prepared for:
The Office of e-Learning
Sheri Anderson, Faculty Liaison & Instructional Technologist
Patsy Gonzalez, e-Learning Coordinator
Beth Oyarzun, Instructional Technologist

May 3, 2012

Table of Contents

Appendices

Introduction and Background

This report describes the methodology used to determine the best Virtual Classroom (VC) application to replace Wimba Virtual Classroom at the University of North Carolina Wilmington (UNCW). This report presents the background, the purpose of the evaluation, and the identified stakeholders. It also provides the evaluation framework, the evaluation design, sample population, instruments used, and the limitations of the evaluation. The analysis process used, results of the analysis, and the final discussion with recommendations is also included.

Tom Hillegass, Lisa Lennon, Thuraya Al Ghalfi, and Nick Sypris, graduate students in the Master of Science in Instructional Technology (MIT) program in the Watson School of Education at UNCW, were the primary evaluators working to determine the best recommendation for a replacement for Wimba. This project was conducted for the course, "Evaluation and Change in Instructional Development" and developed under the guidance of Dr. Florence Martin, an instructor in the MIT program at UNCW, who supervised the team during the evaluation process. The evaluators worked with the Office of e-Learning (OeL) at UNCW and were tasked with evaluating various virtual classrooms to be utilized for online synchronous meetings at UNCW.

Synchronous online courses at UNCW utilize virtual classrooms to provide a similar face-to-face experience from a distance. Faculty who teach synchronous, online courses utilize a virtual meeting place to deliver instruction. VCs aim to allow students and instructors to interact as they would in a face-to-face setting. VCs incorporate the use of video, audio, computer desktop and application sharing, chat, emoticons, hand raising capability, presenter sharing rights, and other interactive features including polling and breakout rooms. Students and instructors have the ability to use a web-camera and microphone during the live class sessions so the participants can both see and hear each other as they would in a live face-to-face classroom setting.

The OeL works with faculty to improve their online courses through the use of training and providing resources to guide them in the development of high-quality online and web-enhanced courses. Through individual course consultation along with group training and events, the OeL serves as a guidepost for applied online pedagogy, as well as an information hub for the latest in instructional technology, including virtual classrooms. Faculty are able to gain knowledge of this material through one-on-one appointments, group training sessions and self-instructional materials covering specified content.

UNCW's contract with Wimba Virtual Class is expiring July 1, 2012. The university is purchasing a new VC program to be used campus wide for online synchronous meetings. The OeL has taken the lead by working with the primary evaluators to review the potential programs being considered to replace Wimba Virtual Classroom. This evaluation was strongly focused on obtaining user feedback to recommend a final application purchase. The user feedback in this evaluation came from frequent users of VCs at UNCW. The evaluation started in February 2012 and concluded in May 2012.

The virtual classrooms evaluated were:

- Adobe Connect
- Blackboard Collaborate
- Cisco WebEx Training Center
- Saba Centra

Purpose Statement/Audience

The purpose of this evaluation was to work with the OeL to recommend a virtual classroom application. This evaluation determined which VC application was the best option to be adopted at UNCW according to the criteria: cost, rubric, licensing, available server space, as well as available features. In addition, the evaluation analyzed which application best integrates with Blackboard 9. Ideally, the recommendation would be a single streamlined VC application with all of the desired components that can be

adopted campus wide. The evaluation team has provided the OeL with all of the feedback from faculty and students as well as a recommendation of a VC application that best meets all of the criteria. The OeL then made a recommendation to the Academic Affairs division at UNCW, who is responsible for the purchase of the new virtual classroom product.

Primary stakeholders

The e-learning department and the funding agency were the primary stakeholders. The Oel was the main stakeholder who was interested in and received the results of this evaluation. The funding agency was also interested in the results to assist in the decision of adopting one of the applications according to the convenient licensing format and budget of this software.

Secondary stakeholders

All faculties who will be using one of the evaluands were the secondary stakeholders of this evaluation since they will be affected by the results. Students were also secondary stakeholders since they will be using the adopted software for their online learning courses.

Tertiary stakeholders

All departments at UNCW who will adopt the software in the future are the tertiary stakeholders of this evaluation.

Evaluation Model/Framework

The Utilization-Focused Evaluation (UFE) was used to conduct this evaluation. This approach positions the evaluator as a facilitator who participates in the evaluation process rather than acting as a decision maker who only looks at the evaluation results. This approach involved the stakeholders throughout the process during design,

development, and analysis of findings. During the design process the evaluators met with the stakeholders who provided the evaluators with necessary background about the evaluand. Also, the stakeholders were involved in the development and analysis process of this evaluation as some of the stakeholders were part of the sampling. The main questions the UFE addressed were "What are the information needs of stakeholders and how will they use the findings?" Moreover, the UFE did not require the use of specific data methods, but the evaluators and stakeholders determined the best data methods based on the evaluation key questions. The UFE questions allow for the use of both qualitative and quantitative methods (Russ-Eft & Preskill, 2009.)

Main questions:

1-Which VC application (evaluand) is best to be adopted at UNCW according to the cost analysis rubric, licensing, available server space and other technological considerations?

2-Which VC application (evaluand) best integrates with Blackboard 9?

3-How do instructors rate the VC application (evaluand) based on features in rubric?

4-How do students rate the VC application (evaluand) based on features in survey?

Evaluation Design

The Case Study model was used to evaluate the different VC applications to potentially be used at UNCW. This model helped the evaluators to examine all the applications (Blackboard Collaborate, Adobe Connect, Cisco Webex Training Center, and Saba Centra) by looking at each application and its features. Identifying the VC application which best met faculty, student and campus needs, required using different evaluation methods such as faculty and staff feedback rubrics, student surveys, and interviewing the instructors for more input about the programs. The Case Study design was useful for this evaluation since the stakeholders of this evaluation needed to see the evidence of which program had the most benefits for users. This design was the most applicable for this evaluation for many reasons: the evaluators were not required to have control

over users or settings, it led to understanding of the context of the evaluand, it gathered data using different methods, and it provided rich data with examples.

Sample Population

By compiling a focus group that was made of members who were currently using various VCs, the information and feedback received came from an informed sample population. Because emphasis was placed on budget constraints, faculty and staff was the primary focus of this study. In effect, the final decision of which VC to use was influenced by those most familiar with the capabilities of the various VCs. The staff selected had thorough knowledge and experience working with the VCs, making their feedback highly valuable.

The snowball, non-probability type, sampling was used to choose instructors for the trial VC application evaluation. The reason for the snowball sampling was that the names of the instructors, currently using VCs, were provided to the evaluators by the e-Learning department. Snowball sampling was also used to survey the students since the names of the students used in the evaluation were provided by the instructors using the trial VC applications in their classrooms. The committee of evaluators consisted of university instructors, members of the e-Learning department, instructional technology graduate student evaluators, as well as students of online courses.

Figure 1. Committee member experts on virtual classrooms:

Name	Department
1. *Florence Martin	MIT/EDN
2. *Jessica Magnus	MBA program
3. *Susan Roberts	Clinical Research
4. *Carol Heinrich	NSG
5. *Eric Tessier	Foreign Languages
6. Tom Dorgan (staff)	Learning Systems, ITS

7. Dan Noonan (staff)	Network & Communications
8. Patsy Gonzalez (staff)	e-Learning Coordinator
9. Sheri Anderson (staff)	Faculty Liaison and Instructional Technologist, e-Learning
10. Beth Oyarzun (staff)	Instructional Technologist, e-Learning

*Members considered “power users” who utilized virtual classrooms in a synchronous environment.

Instrumentation

Various instruments were developed to answer each of the key questions defined in the evaluation phase. UNCW faculty, staff and students, as well as the evaluation team were involved in the implementation of the instruments. To answer the first and second key questions, the evaluation team used a rubric, for faculty and staff, to evaluate the technical features and the ability of each application to integrate with Blackboard 9 (Appendix A). This rubric included a table of the main technical features of the VC applications so that staff and faculty could fill in the rubric with their experience of using the features of the VC application. Another instrument used to answer the first and second key questions of the evaluation was the individual interviews with the faculty and staff who conducted trials of the VC applications. These interviews questioned the interviewees about their general experience with the VC applications and asked them to identify any significant experience they encountered during the trial.

For the third key question, a rubric was created to allow those who conducted the trials to score each application and this rubric focused on the technical features of the applications as well as the ability of the application to meet individual classroom needs (Appendix B). In addition, an electronic student survey was developed to supplement information on question 2 as well as address the last key question relating to student needs (Appendix C). This survey was developed on “Survey Monkey” and a link was emailed to the instructors who forwarded it to their students. There were two main questions addressed in the survey: one quantitative related to the technical features of

the applications and one qualitative question (Appendix D) to get general feedback on their experience with the VC application features.

These instruments were utilized to gather data on each of the VC applications. A pilot study for the instruments was conducted to ensure the quality and feasibility of the instruments. This piloting tested the electronic survey and the rubrics with a sample of students and faculty who provided feedback on the content and functionality of the instruments.

Limitations

Four categories of limitations were identified and analyzed as to their effect or constraints imposed on the evaluation.

Sampling: Limitations of this evaluation study included but were not restricted to the limited variance in the testing group due to a small percentage of staff/departments using online course components and the fact that each person reviewing the possible replacement VC applications was not reporting on all of the application options. The students included in this study were chosen from those who were in the chosen instructors' online courses; therefore, this sampling was not random and respondents' data may reflect a bias or a trainer preference and may not be representative of all of the instructors and students on campus. As it is proposed to be adopted campus-wide, the snowball nature of the sampling and the limited representation of the university population may have affected the reliability of the findings. Also, each instructor was only assigned one VC application to evaluate but they had the option of evaluating as many as they desired.

Features: Other limitations included the limited features of and possible negative impressions from short term trial uses of software as well as the varied needs of campus instructors for add-on features. Using trial versions of the proposed VCs

allowed only a thirty day evaluation of each. Trial versions typically only provide the basic features available in each application. This restricted time frame and sampling of features may have result in instructors commenting and evaluating each application based on their first impression of how it performed without the benefit of extended use and full features.

Time: The limited time frame between the decision to evaluate Wimba replacement options and the time for actual adoption was brief and limited the time that could be spent on the evaluation. Each faculty member had the choice of exploring their assigned application on their own or they could have chosen to conduct and actual class through the application they were critiquing. The short time frame may have accommodated only a single classroom trial.

Budget: The recommendation for a replacement VC application was required to fit into a predetermined budget. The format that the application was available in and the price for each available format was a factor in the final recommendation.

Analysis

The collected data was analyzed to understand the perceptions and opinions of users of the VC's. Both quantitative and qualitative instrumentation were utilized in the analysis; surveys, interviews, and rubrics. The analysis included creating tables and charts for the quantitative data. Tables were used to organize the open-ended qualitative data as well. All resources were considered in this analysis. Instructor feedback, student feedback, evaluation of products and features, and feasibility of fitting into the budget were all considered in the analysis. Feedback from primary and secondary stakeholders was the focus, and the design model and key questions were referenced and adhered to throughout the evaluation. Also, time and resource constraints were addressed by evaluators focusing on VCs they were most familiar with.

Student Surveys:

Figure 2. Undergraduate Responses

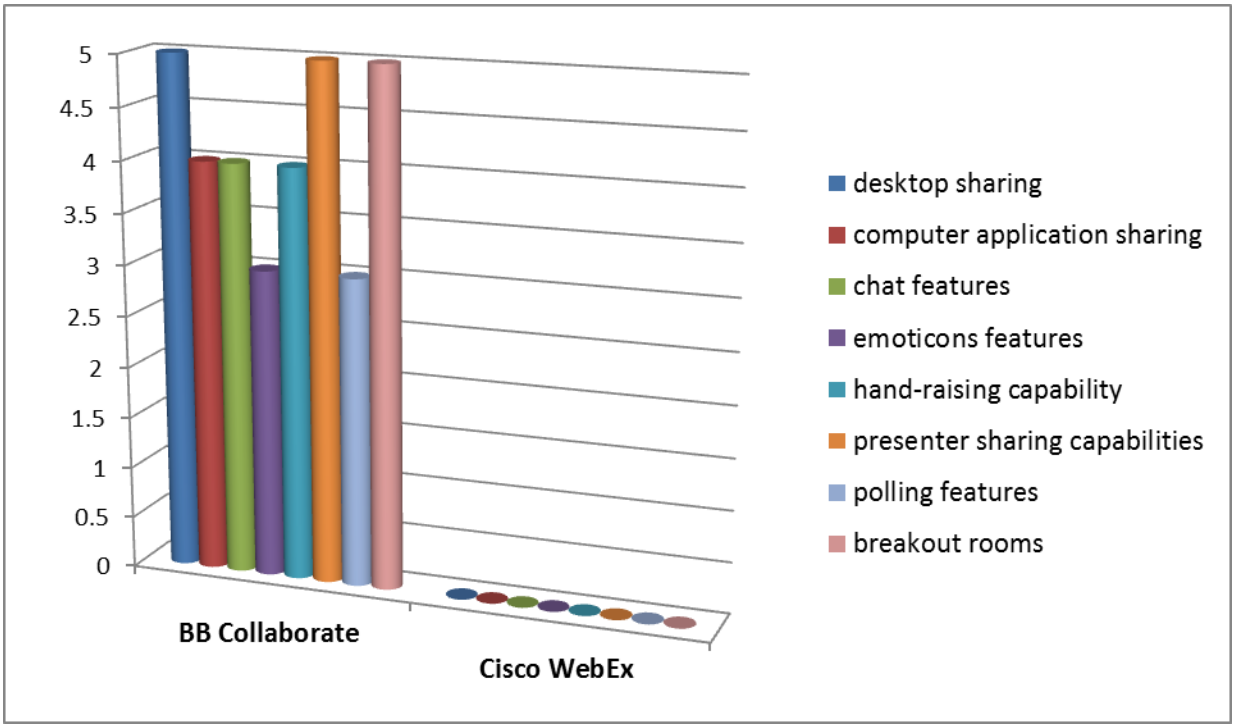
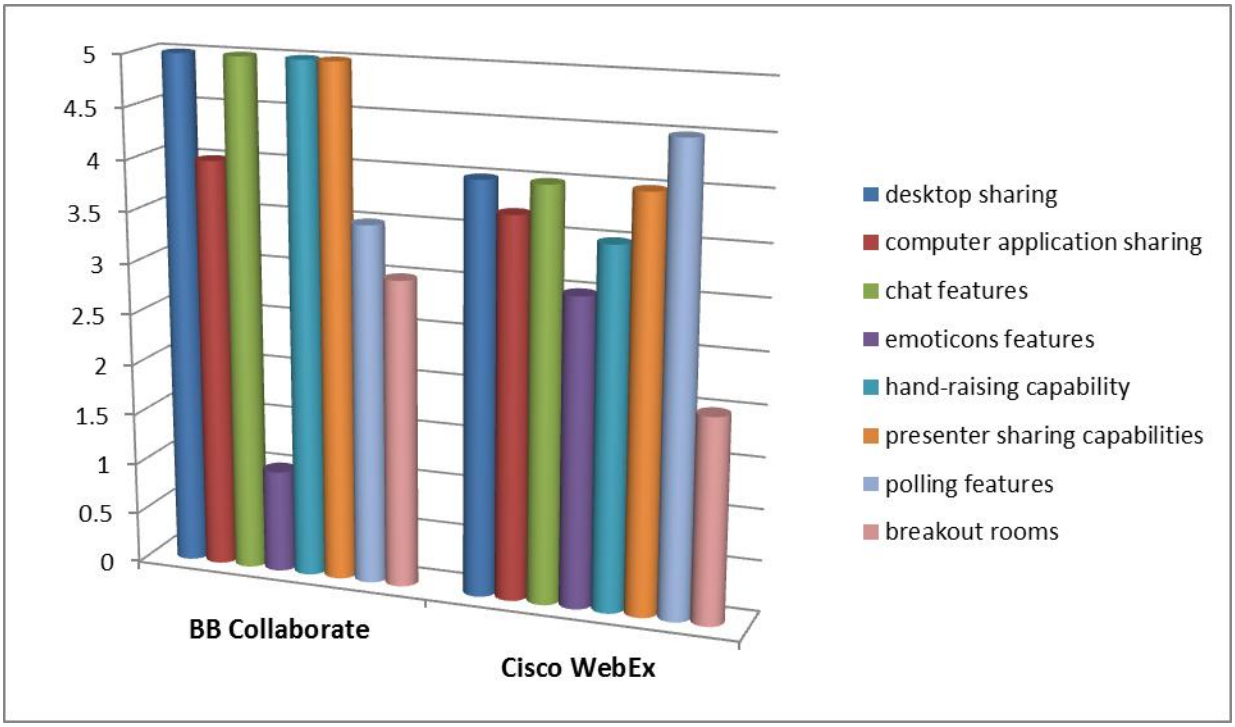
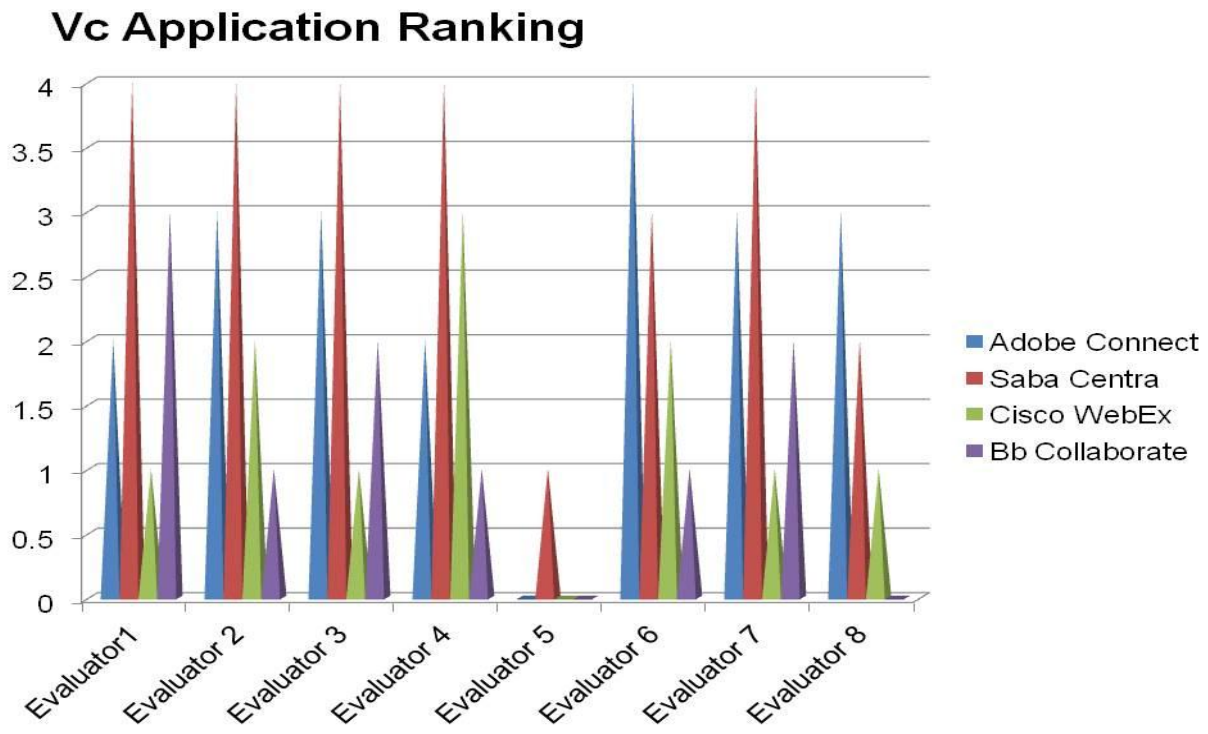


Figure 3. Graduate Responses:



Ranking of Responses:

Figure 4.



This Chart represents the instructors' ranking results for the four VC applications. The question asked the instructors to rank to VC applications from 1-4. Number 1 refers to the most preferred and number 4 indicates the least preferred. Blackboard Collaborate and Cisco WebEx were the most preferred by the evaluators and instructors. Cisco was rated as number 1 by four evaluators and as number 2 by two evaluators while Bb Collaborate was rated as number 1 by three evaluators and as number 2 by two evaluators. Two of the evaluators did not rate Bb Collaborate indicating that they did not see the demo of this application and that it was not provided to them. On the other hand, Adobe Connect and Saba Centra were the least preferred by the evaluators. All five of the evaluators rated Saba Centra as number 4 while one evaluator rated Adobe Connect as number 4 and four of them rated it as number 3. There was only one instructor who did not rate Adobe Connect indicating that this application was not provided.

Results

After collecting and analyzing data from the evaluation, we found the following to be true:

- Instructors preferred Cisco WebEx Training Center and Blackboard Collaborate and received an almost equal amount of votes as the most preferred VC *(see VC ranking table above)*
- Students prefer Collaborate and WebEx (*see student survey results above*)
- WebEx takes a long time to set up breakout rooms (I*nterviews*)
- Blackboard Collaborate has some technical issue (*Observations*)
- WebEx may require additional position at UNCW (*Appendix B - IT rubric*)
- Blackboard Collaborate is integrated with Blackboard Learn 9.1
- Blackboard is more expensive but can be discounted from UNC-GA
- The features are similar in the VC's (*observations, Interviews*)
- WebEx is liked by those who use it now (*Interviews, Appendix A - faculty rubric*)
- Voice tools may be needed from Foreign Languages department (*Interviews*)
- Technical capacities are similar in both VC's *(IT Interviews and Appendix B- IT rubric*)
- The functionality of the VCs are similar, but the look is different

Discussion and Recommendations

After analyzing the results of the evaluation, we recommend Blackboard Collaborate as the VC of choice to replace Wimba Classroom at UNCW. We have studied the features, technical capabilities, integration and hosting capabilities, cost in terms of time, money, and resources, and instructor and student feedback. Blackboard Collaborate best fits the needs of the instructors and students at UNCW. By choosing

Collaborate, the university will not have to create a new VC support position, as Collaborate is fully supported by Blackboard and is integrated with its LMS counterpart, Blackboard Learn. The look and function of Collaborate best suits the learning derived from a virtual classroom to be delivered in UNCW courses.

When purchased in a bundled package, Blackboard Collaborate also comes with Blackboard's instant messaging system and Blackboard Voice Tools. The instant messenger system allows for students and instructors to interact with one another in a live setting through text and audio. Instructor's students are automatically populated within the instant messaging system's contact list, as well as student's classmates. The instant messaging system is great for use student group work, and is even better for instructors to use as a way to keep in contact with students. Many off-campus, online instructors already use instant messaging systems to maintain online office hours where they can be reached via the internet.

The voice tools that come with the Blackboard bundle are useful tools that can be integrated in Blackboard Learn. The voice tools are valuable resources for instructors at UNCW, specifically instructors in the Foreign Languages department. The Voice Email, Voice Board, and Podcaster tools allow students to practice their language of study by listening and responding by speaking the language. These interactive tools add a dynamic to online language courses that cannot be captured by text alone. Considering all of the above reasons, we recommend the purchase of Blackboard Collaborate to serve as the next virtual classroom at UNCW.

Appendices

Appendix A - Technical Staff VC Evaluation Rubric

Each evaluator was sent a copy of the evaluation rubric to be completed. Separate surveys were given to instructors and IT personnel. An email was sent to the evaluators informing to complete the rubric after they piloted their assigned VCs and then return the rubric to the evaluation team. The rubric is being used to help gather feedback from the evaluators as well as to see what features of the VC he/she found useful or not useful. The data gathered from the rubrics will help the evaluation team better understand the importance of specific features of each VC. After all rubrics have been collected, the evaluation team will analyze the data and attempt to rank the VCs in order of instructor preference.

Instructions: This rubric aims at evaluating the Virtual Classroom applications which are being tested to replace Wimba at UNCW (Adobe Connect, Blackboard Collaborate, and Cisco Webex Training Center). Based on your experience with these applications, please fill out the following rubric. In the "answer" column write your feedback for each criterion.

Criteria	Further Explanation	Answer
Integration with Learn	ability to select & move separate items on WB	
PDF Import	For PPT and OpenOffice Presenter should retain animation. Keynote?	
PPT/DOC Import (Office, OpenOffice if poss). Other file imports	Integrated VoIP, dial-in (not dependent on Internet connection)	
Audio Capabilities	live video, multi-student participation	
Video Capabilities	Should also include export capability. Also, what specifically is recorded? Breakout rooms? Chat, Voice, Video? Whiteboard?	
Record/Archive	Playback capabilities and Exportability	

Reusability	Export and uploadable to another site	
Export recording/archive	Firefox, IE, Safari, Chrome,Opera	
Cross-Browser Compatibility	Windows, Mac, Linux	
Cross-Platform Compatibility	iPad, Android, phones(?) App availability?	
Tablet Compatibility	Presenter, and ability to see and control participants' desktop (with approval)	
Desktop Sharability	Max # of presenters per room simultaneously.	
Promote Participants to Presenters	Can you share presenter rights?	
OpenSource	508 compliance.	
Accessibility	On-the-fly polling, Yes/No Polling, multiple choice questions. Display & save the results?	
Polling	Can you poll the class within the VC?	

LDAP Integration	Students must have presenter access to all the collaborative tools if they are sent to a breakout room.	
Ability to Create Breakout Rooms	Can you create breakout rooms for separate groups?	
Ability to Create, Edit and Delete Sessions	Does some other company host it or is it hosted at UNC Wilmington	

Appendix B – Instructor VC Evaluation Rubric

Criteria	Further Explanation	Answer
Product:		
Integration with Learn	Ability to select & move separate items on WB	
Whiteboard Capability	Ability to annotate uploaded documents such as PowerPoint	
PDF Import	For PPT and OpenOffice Presenter should retain animation. Keynote?	
PPT/DOC Import (Office, OpenOffice if poss). Other file imports	Integrated VoIP, dial-in (not dependent on Internet connection)	
Audio Capabilities	live video, multi-student participation	
Video Capabilities	Should also include export capability. Also, what specifically is recorded? Breakout rooms? Chat, Voice, Video? Whiteboard?	

Record/Archive	Playback capabilities and exportability	
Export recording/archive	Firefox, Internet Explorer, Safari, Chrome	
Cross-Browser Compatibility	Windows, Mac, Linux	
Cross-Platform Compatibility	iPad, Android, phones(?) App availability?	
Tablet Compatibility	Presenter, and ability to see and control participants' desktop (with approval)	
Desktop Sharability	Max # of presenters per room simultaneously.	
Application Sharing	Able to share an application from instructor's computer so that students can see	
Promote Participants to Presenters	Are instructors able to pass presenter rights to students?	
Accessibility	On-the-fly polling, Yes/No Polling, multiple choice questions. Display & save the results?	
Polling -	Interactive polling where the instructor can gather on the fly results from students.	
Ability to Create Breakout Rooms	Are instructors able to create separate breakout rooms for groups of students?	

Appendix C – Student Survey
http://www.surveymonkey.com/s/HPCSNLF

In creating, implementing and evaluating the student surveys, there were several challenges. Questions had to be developed that addressed our plan's key questions and that created results that could be evaluated. To keep costs down, the free version of Survey Monkey was used so the number of questions was limited. We created one survey and used one of the questions to determine which VC was being evaluated and we were able to differentiate the data using the answer to that question and pull the data referring to each specific VC. Each survey states which VC it is referring to without identifying the person surveyed, so our data is specific, legitimate, and not skewed. In planning the survey, the evaluation team did not take into consideration that some survey takers would need to take the survey twice if they were part of testing more than one VC. Survey Monkey does not allow for more than one attempt per browser so those completing the survey more than once have to use different browsers. In the future this could be addressed by creating a separate survey for each VC being evaluated. Other than that, the survey was effective in sharing how each person surveyed felt about the features being tested.

Student Survey:

This survey was designed to get the opinion of the end user on just how effective some virtual classrooms really are. Keep in mind that you will serve as the voice for many and your responses will affect how online instruction is delivered to other college students in the near future. We therefore greatly appreciate your feedback and participation!

Please do remember that all respondents to these questions remain completely anonymous and it is absolutely impossible to trace your input back to you in Survey Monkey.

1. Which virtual classroom platform are you most familiar with at UNCW?

2. What type of student are you?

- Undergraduate
- Graduate
- Post Graduate

Other (please specify)

3. How would you rate the following features in the virtual classroom that you chose as being most familiar with? Please rate only those features that you have used. If there are features that you have not used, skip responding to that row and then list that feature below.

	Ineffective	Not very effective	Somewhat effective	Pretty effective	Very effective
desktop sharing					
computer application sharing					
chat features					
emoticons feature					
hand-raising capability					
presenter sharing rights/capabilities					
polling features					

Appendix D
Qualitative Data Results

Coded responses:

- VCs are generally effective (35%)
- WebEx breakout rooms ineffective (12%)
- Hand-raising gets ignored (12%)
- Archives are effective feature (6%)
- Archives ineffective but common (6%)

Responses worth noting:

- "I find that the hand raising feature is sometimes ignored but the sound is actually offensive and annoying that it makes."

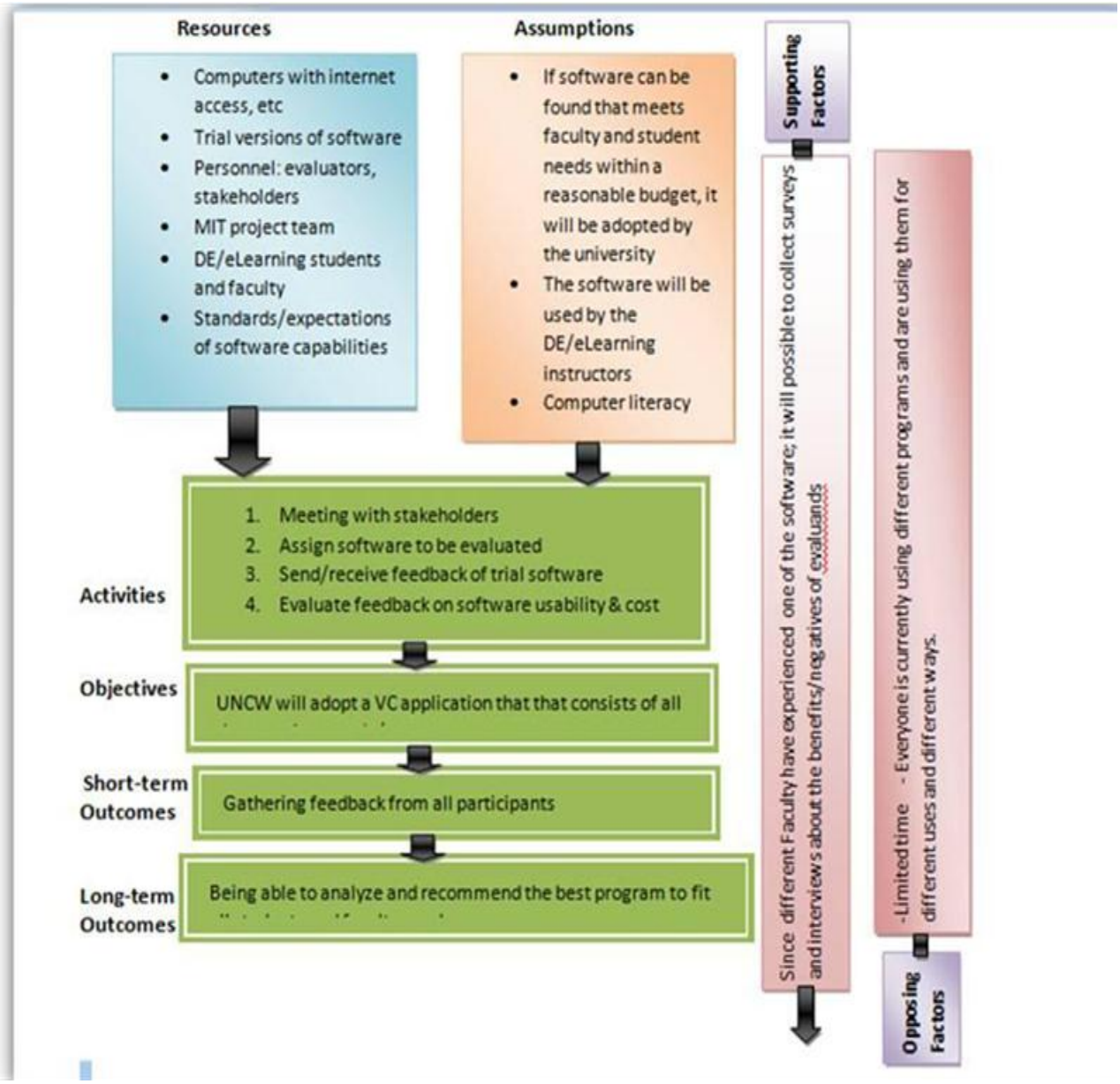
- "We only used it (Collaborate) once, but it worked pretty well. I found that the only problem was that we had to cancel out the pop ups when people entered and left the room or they kept piling up."

- "The camera/video stream was not necessary for this particular situation. Although seeing other people is nifty, I can imagine that the people in the room felt like they were more 'in the spotlight' than the remote attendees, especially when the camera was aimed at the presenter."

Other:

"None of these features are features that I used in my 3 years of online classroom experience. Maybe you don't understand how a virtual classroom works, but basically what I was using was a feature called Wimba classroom. A teacher recorded their lecture/presentation and archived it. We would then watch at our leisure. Therefore, there was no real interaction during the actual class because we never watched it live."

Appendix E
Logic Model



Appendix F
Evaluation Plan

Evaluation Phase	Work done	Completed by
Implementation	● Creation of the technical rubric ● Creation of the trial/instructor rubric ● Creation of the survey instrument ● Creation of the interview questions	● Evaluation team ● Evaluation team ● Evaluation team ● Evaluation team
Implementation	● Pilot of the technical rubric ● Pilot of the trial/instructor rubric ● Pilot of the survey instrument	● Evaluation team, staff ● Evaluation team, instructors ● Evaluation team, students
Implementation	● Distribution of the technical rubric ● Distribution of the trial/instructor rubric ● Distribution of the survey instrument	● Evaluation team ● Evaluation team ● Evaluation team, instructors
Data Collection	● Completion of the technical rubric ● Completion of the trial/instructor rubric ● Completion of the survey instrument	● Technical staff ● Instructors ● Students
Data Collection	● Collecting Results	● Evaluation Team
Analysis	● Analyzing Results	● Evaluation Team
Reporting	● Writing report	● Evaluation Team

Appendix G
Timeline

Start Date: 01/17/12
End Date: 05/03/12

Initial project planning began at the start of the Spring 2012 semester. Initial client and team meetings were conducted 1/19/12 and 1/20/12 to start the evaluation. The evaluation must be complete by 5/3/12 due to the OeL deadline for obtaining a recommendation. The recommendation must be in to the OeL by 5/3/12 due to UNCW's current VC (Wimba Classroom) expiring 7/1/12. Academic Affairs at UNCW will then have over 6 weeks to make a final decision on the purchase of a VC. The timeline for this evaluation also reflects the estimated allowed budget. We are restricted in terms of time and money in the evaluation budget, as the budget cannot be a large piece of an already expensive purchase. The evaluation is broken into three phases that will be combined in the final report.

Task	Duration	Start	Finish
Project Planning	40 hours over 21 days	01/17/12	02/07/12
Meet with sponsor	2 hours over 1 day	01/17/12	01/17/12
Team Meeting	2 hours over 1 day	01/19/12	01/19/12
Conduct VC pilots (instructors and technical staff)	varying hours over 30 days	01/20/12	03/20/12
Introduction and background	8 hours over 5 days	01/20/12	01/24/12
Purpose	8 hours over 5 days	01/25/12	01/29/12
Audiences	3 hours over 3 days	01/30/12	02/01/12
Submit Phase 1	1 hour over 1 day	02/02/12	02/02/02
Decisions	6 hours over 4 days	02/02/12	02/05/12
Key Questions	4 hours over 4 days	02/06/12	02/09/12

Evaluation methods	12 hours over 7 days	02/10/12	02/16/12
Limitations	4 hours over 3 days	02/17/12	02/19/12
Sample	10 hours over 3 days	02/20/12	02/22/12
Submit Phase 2	1 hour over 1 day	02/23/12	02/23/12
Plan Revision	10 hours over 5 days	02/24/12	02/28/12
Data Collection	35 hours over 23 days	03/01/12	03/22/12
Review instruments	4 hours over 1 day	03/09/12	03/09/12
Determine logistics	4 hours over 1 day	03/11/12	03/11/12
Develop timeline	8 hours over 3 days	03/12/12	03/14/12
Develop budget	10 hours over 3 days	03/15/12	03/17/12
Review Data	8 hours over 3 days	03/18/12	03/21/12
Submit Plan	1 hour over 1 day	03/22/12	03/22/12
Conduct Surveys	3 hours over 2 days	03/23/12	03/24/12
Conduct Interviews	2 hours over 2 days	03/25/12	03/26/12
Data Analysis	20 hours over 12 days	03/27/12	04/08/12
Review Data	10 hours over 5 days	04/09/12	04/13/12
Check Data	6 hours over 5 days	04/14/12	04/18/12

Analyze Data	15 hours over 5 days	04/19/12	04/24/12
Report Data	6 hours over 3 days	04/25/12	04/27/12
Prepare final report	12 hours over 4 days	04/28/12	05/01/12
Prepare presentation	8 hours over 2 days	05/02/12	05/03/12
Present results	1 hour over 1 day	05/03/12	05/03/12
Submit Final Report	1 hour over 1 day	05/03/12	05/03/12
Total Hours	265 hours		

Appendix H
Budget

This budget contains all items associated with the design, development, implementation and evaluation for this project. It does not reflect any network or software licensing because those costs have already been covered by general UNCW allocations and trial versions of the VC applications will be used. Office of-Learning staff salary allocations have also not been included because those UNCW staff members are not part of this evaluation team, but instead serve as consultants in addition to being our clients. This budget does reflect however items that are relevant to this project including communication, distribution of information and miscellaneous expenses.

Personnel

Name	Position	Salary
Thomas Hillegass	Lead Evaluator	$3,180
Lisa Lennon	Assistant Evaluator – Communications	$3,180
Thuraya Al Ghafri	Assistant Evaluator – Quality Control	$3,180
Nick Syrpis	Assistant Evaluator – Data Analysis	$3,180

Communications

Expense Category	Price
e-mail	free
Skype	free
Google Docs	free
Survey Monkey	free

Miscellaneous

Expense Category	Price
Printing Supplies (paper & ink)	$42
Conference Room Rentals	free
Travel Expense	NA

Appendix I

Graduate Responses for Cisco WebEx

9 Respondents	*Ineffective* (1)	*Not Very Effective* (2)	*Somewhat Effective* (3)	*Pretty Effective* (4)	*Very Effective* (5)	Mean Score
desktop sharing				7	2	4.2
computer application sharing		2	1	2	2	3.57
chat features				6	3	4.3
emoticons feature	2		2	3	1	3.1
hand-raising capability		2	3	3	1	3.3
presenter sharing rights/capabilities			2	4	3	4.1
polling features				2	2	4.5
breakout rooms		4	2	1	2	3.1

Graduate Respondents for Blackboard

6 Respondents	*Ineffective* (1)	*Not Very Effective* (2)	*Somewhat Effective* (3)	*Pretty Effective* (4)	*Very Effective* (5)	Mean Score
desktop sharing				2	4	4.7
computer application sharing			1	3	2	4.2
chat features				2	3	4.6
emoticons feature	2	1		1	1	2.8
hand-raising capability	1			2	3	4
presenter sharing rights/capabilities			1	1	4	4.5
polling features		2		1	2	3.6
breakout rooms		1	1	1		3

Undergraduate Respondents for Blackboard

6 Respondents	*Ineffective* (1)	*Not Very Effective* (2)	*Somewhat Effective* (3)	*Pretty Effective* (4)	*Very Effective* (5)	**Mean Score**
desktop sharing				2	4	4.7
computer application sharing			1	3	2	4.2
chat features				2	3	4.6
emoticons feature	2	1		1	1	2.8
hand-raising capability	1			2	3	4
presenter sharing rights/capabilities			1	1	4	4.5
polling features		2		1	2	3.6
breakout rooms		1	1	1		3

Bibliography

Russ-Eft, D., & Preskill, H. (2009). Evaluation in Organizations. New York: Basic Books.