

MIT 530: Evaluation and Change in Instructional Development

Needs Assessment Report

How to effectively support online course teaching with the faculty Online Teaching Success Problem

Submitted by

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April 12, 2007

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Executive Summary

The University of North Carolina Wilmington has its eye on the future. To keep itself competitive, to expand its global market, and to meet the ever-increasing needs of its students, the university adopted online course delivery available campus wide in the summer of 2003. E-Learning is the right product for responding to the tendency of human beings to need access to education anytime and anywhere. With its convenience and popularity among learners, online learning has become a new avenue for course delivery and the new arena for higher educational institutions to compete for students' enrollment and course participation.

Since UNCW's online course offerings have seen tremendous year over year growth and whose numbers continue to increase, an Office of e-Learning was instituted in order to support online course delivery across the campus. Because of the amount of growth within UNCW's online course community, and because UNCW's online course platform will be shifting to WebCT Vista in the Fall of 2007, the Office of e-Learning became concerned about the level of support they were currently providing the faculty versus the level of support which may be needed. The problem of how the Office of e-Learning could successfully meet all of their goals for delivering technical support and training to online teaching faculty with such a limited staff is what this report will address.

A team of graduate students from UNCW's Master of Instructional Technology program conducted a training needs assessment on behalf of the Office of e-Learning. After small group meetings and interviews, analysis of extant data, and delivery of a survey tool to the faculty who are currently teaching online, the team measured the findings and results to provide their recommendations to the Office of e-Learning. The team took into serious consideration the available resources and constraints, actual vs. optimal performance, causes and feelings toward the problem within the Office of e-Learning, and the current attitude, needs, and teaching habits of online teaching faculty before they developed their solutions.

Twenty-nine surveys were administered and 21 responses were received for a 73% return rate. The results showed that faculty prefers using the Help option for problems they encounter while preparing lessons. The solution that the team developed is for the Office of e-Learning to be proactive with Outreach to faculty. They need to send out regular email bulletins with tips and facts about WebVista. The Help option needs to be a one-stop solution for faculty. This would decrease the amount of questions/problems that faculty would need assistance with from the Office of e-Learning. Workshops and brown bag lunches that focused on topics that dealing with technical difficulties, migration, multimedia options would also be effective in aiding faculty feel confident about using WebVista.

Contained in the report that follows are the introduction to the project, the needs assessment process, and the team's recommendations for the Office of e-Learning.

Introduction

The most significant contribution the Internet makes is to revolutionize the way human beings learn. E-Learning is the right product for responding to the tendency of human beings to need access to education anytime and anywhere. With its convenience and popularity among learners, online learning has become a new avenue for course delivery and the new arena for higher educational institutions to compete for students' enrollment and course participation.

To keep competitive and meet the increasing needs of faculty and students, UNCW initiated online course delivery with WebCT Campus Edition in Summer II, 2003, and set up a special e-learning office to support online course delivery across the campus. The Office of e-Learning has two professionals dedicated to online learning and support for faculty teaching online courses.

The problem that the Office of e-Learning has is how they can successfully meet all of the demands of the online teaching faculty with such a limited staff. The department stays so busy giving assistance to

faculty, that they are never able to get to the point where they can anticipate faculty needs. Being proactive, rather than reactive, is very important to the Office of e-Learning. However, with the limited staff and current faculty training/support policies in place, this need is not being met and this problem has developed for the Office of e-Learning. The purpose of the needs assessment is to determine how the Office of e-Learning can reverse this trend with their limited staff.

The stakeholders consist of the Office of e-Learning, Client Services, and any faculty teaching online courses and administrators who control the budget, staffing, and other decision making positions. The Office of e-Learning staff members are important stakeholders because their job is to ensure that the training and technical assistance needs of online teaching faculty are met. Client Services is a major stakeholder because e-Learning is a part of their department. If e-Learning is unable to successfully deliver sufficient training or assistance to faculty, Client Services will need to know and understand why, and ultimately is responsible for finding solutions. The online teaching faculty members are the primary clients of the Office of e-Learning. Faculty are dependent on e-Learning for proper training and technical assistance.

Since 2003, the number of fully online courses and blended courses has ascended quickly from 50 to 169 in Spring 2007, three times the original number. The educational programs that WebCT courses cover are growing, up to 18 programs throughout the university. As for statistics, for Fall 2006 there were a total of 2,010 courses offered to students, which accounted for a total of 39,437 student seats filled at UNCW. Of the courses being offered, there were 98 courses designated as fully online with 1,371 seats registered and 57 designated as online with class meetings with 1112 seats registered for a total of 145 courses and 2,483 seats. For Spring 2007, there are a total of 169 courses offered that are designated as either on-line or blended with a total of 3,796 seats.

Needs Assessment Process

Description of Needs Assessment Methodology

Two different models were used to guide planning and conducting the needs assessment for the situation with our client (the office of e-learning): Allison Rossett's Training Assessment (TNA) Model, and Mager and Pipe's Performance Analysis Model (1970) (see Appendix A). Rossett's model emphasizes the complete process, techniques and tools to collect data involved in the Needs Assessment. Mager and Pipe's Performance Analysis Model places emphasis on analysis of performance problems, the solutions for which may or may not be related to training, by answering a series of questions with yes or no presented in the form of a decision tree or flow chart. Mager and Pipe's model is used for developing the data collection instrument related to the problem. So, the model that guides us to plan and conduct needs assessment process is mainly Rossett's Training Needs Assessment (TNA) model. The major steps involved in the needs assessment are below:

- Gain access to client
- Identify problem
- Analyze context
- Determine purposes
- Select appropriate data collection techniques and instruments
- Develop stage planners
- Develop needs assessment plan
- Implement plan
- Explain and communicate results

The training needs assessment began February 7 (the first meeting with our client) and completed on March 22 (Appendix B). The data collection instruments used included interviews, survey, and small group meetings. Interview was used to collect problem context for the purpose of the actual and optimal. Survey was used to collect more real data for possible causes of the problem, feelings, and actual. Small group meetings was used to collect the process data for possible causes of the problem, feelings, and optimal. The data collection techniques used included extant data analysis and needs assessment

(Appendix C). Extant data analysis is intended to collect data for actual and optimal; and needs assessment is designed to collect deeper and wider data for actual, causes, feelings, and solutions. There were three stages which occurred in the needs assessment plan.

The needs assessment team consisted of four UNCW graduate students, Elizabeth Bailey, Tammy Clark, Danielle Wallace, and Aixia Zhang. Each team member had individual roles and responsibilities as well as collaborative work sessions.

In the **Needs Assessment Plan**, Elizabeth was responsible for the description of the model, as well as for editing the work of the entire NA Plan. Tammy was responsible for the purpose of needs assessment, TNA Planner stages two and three, and the development, finalizing, and online delivery of the faculty survey. Aixia was responsible for the description of the problem and context, the development of TNA Planner purposes and techniques/instruments, and TNA Planner stage one. Danielle was responsible for the time line table and cover letter.

In the **Needs Assessment Report**, Elizabeth was responsible for the executive summary, description of data analysis methods and process, recommendations section, and editing work of the entire NA Report. Tammy was responsible for the data collection section and the results of analysis. Aixia was responsible for the description of needs assessment methodology, and Danielle was responsible for the introduction.

In addition, for the data analysis and findings section, Elizabeth, Tammy and Aixia worked together for data input and analyzing within SPSS. Elizabeth was in charge of output and explanation of the results of SPSS. Elizabeth, Tammy and Aixia still reviewed and gave feedbacks for work in each team's charge. Tammy was the main contact with our client throughout the training needs assessment process.

Our needs assessment plan was developed for one of prior problems of E-learning office based on the context analysis: how to how to effectively help faculty successfully with transition from WebCT CE to WebCT Vista, as well as successfully with online course teaching, with more programs and more courses requested to be offered via WebCT Vista. Its purpose was to seek out the optimal performance, actual occurrences, feelings about the problem, causes of the problem, and possible solutions for the concern about how to provide effective support for faculty teaching online courses successfully. Based on the purpose above, the specific TNA stage planner was developed to implement the needs assessment process. The final needs assessment plan was completed through communicating the findings and results of needs assessment and survey with Pasty, the main stakeholder of the needs assessment project.

Data Collection

Description of Process:

In the first stage of the data collection process it was determined that an informal interview with our client, who is the only full time staff member in Client Services and who is responsible for all faculty support for Blackboard VISTA 4 would be the most effective tool to use. The purpose of the interview was to ask leading questions to find out what was currently happening in the department, what the overall feeling was, and the perceived causes of the problem. The other purpose of the interview was to gather additional sources of information and determine what additional tools could be used effectively for the needs assessment.

From the interview it was determined that the next step was to obtain extant data for analysis of what requests and problems the faculty records from all help tickets and requests that were submitted and problem areas identified from the data provided.

From the extant data results our team along with our client agreed upon using a survey as a tool to collect specific Blackboard VISTA 4 information (Appendix D). The recipients of the survey were 29 faculty members currently teaching online using Blackboard VISTA 4, which was found through the extant data. A cover letter (Appendix E) was designed to provide the purpose of the survey and instructions. The survey (Appendix D) and cover letter were distributed electronically via the web on (or shortly after) March 3, 2007. Of the 29 surveys administered, 21 responses were received for a 73% return rate.

During the planning stages it was decided, if necessary, a few faculty members selected from the survey list would be interviewed. It was decided by the team that the results of our survey were conclusive and further interviews were not necessary.

Description of the Instruments:

Informal group interview – our team met with the staff member of Client Services in a face to face meeting to identify purposes for the needs analysis. Questions were asked to find the actual performance, optimal (or desired) performance, existing feelings by stakeholders and their clients, and the perceived causes and possible solutions to the problem of successfully meeting all of the demands of online teaching faculty with such a limited e-Learning staff.

Extant Data – Remedy is a computer based help and support system for staff and faculty that is used through out the UNCW campus for technology issues.

Faculty Survey – A survey was designed to address the tools used, the ease of use and the preferred training methods. The survey consisted of 11 forced-choice items regarding use of course tools, and support and training. One rating scale item about preference for Blackboard Vista 4 course training and support, and one open-ended item concerning any other area of need they may have in the Blackboard environment.

Data Analysis and Findings

The collected data was analyzed qualitatively and quantitatively depending on the type of data collected at various stages. They are as follows:

Stage 1: The first stage was carried out through a group interview with the Office of e-Learning in order to discover the optimals and actuals with regard to effectively supporting UNCW faculty teaching online courses.

The results of the content analysis from an interview with an e-Learning staff member indicated that a majority of support requests from faculty teaching online courses are those requests pertaining to how to design, how to deliver, or how to manage via WebCT, although some training for such is provided. The Office of e-Learning staff feels that, with the support requests piled on top of their regular daily demands, their workload is very overwhelming and they are not able to meet all of the duties which are required of them.

With the complete implementation of WebCT Vista throughout the university by Fall 2007, and with more programs and more courses requested to be offered via WebCT Vista, not to mention with one server shared with other four universities, there will be more and more relevant instructional training and support for faculty teaching online courses as well as troubleshooting requests. According to the Office of e-Learning, there will not be new staff hired there. With the growing challenges, the main concern of our client is how to effectively help faculty successfully transition from WebCT CE to WebCT Vista, as well as successfully teach online courses.

Stage 2: The second stage of the training needs assessment process consisted of perusing extant data in order to analyze records of job requests and telephone troubleshooting tickets from UNCW faculty regarding online course teaching. The extant data was extremely helpful in that it gave us the names of the faculty who would be surveyed in stage three of the training needs assessment.

Stage 3: The third and final stage of the training needs assessment consisted of delivering a survey questionnaire to the UNCW faculty who are currently teaching online courses and gathering information on knowledge, attitude, and skill. The results of the survey were entered into SPSS (Appendix F), after which frequency analysis were administered. The data analysis results of the faculty survey are reported below:

Results of Data analysis

Organizational Tools



• Calendar: 11 of 21 (52%) respondents indicated that they use the calendar tool very frequently, 6 (29%) expressed that they never use the calendar tool. 12 (57%) find the calendar tool easy to use. 7 (37%) of the respondents selected the Help menu as their venue of choice for training for the calendar tool, although 5 (26%) did choose workshop, online training, and one-on-one training as preferences.

Search Tool







Search: 15 (71%) of the respondents indicated that they do not use the search tool, where 4 (19%) showed they frequently used the Search tool. 10 (48%) do not use the search tool and 7 (33%) found it easy to use. 10 (53%) selected the Help menu as their venue of choice for training for the search tool.



Syllabus



• Syllabus: 14 (67%) of respondents indicated that they use the syllabus tool frequently and 12 (57%) find it easy to use. 7 (37%) selected the Help menu as their venue of choice for training for the syllabus tool, although 6 (32%) did prefer a workshop for training.

Communication Tools



Announcements



• Announcements: 11 (52%) of the respondents indicated that they use the announcements tool frequently and 15 (57%) find it easy to use. 8 (42%) selected the Help menu as their venue of choice for training for the calendar tool with 6 (32%) having a preference for workshops.





• Chat: 10 (48%) of the respondents indicated that they do not use the chat tool, although of those who do use it, 10 (48%) find it easy to use. 8 (42%) of the respondents selected the Help menu as their venue of choice for training.

Discussions



Discussions



• Discussions: 13 (62%) of the respondents indicated that they use the discussions tool frequently and 13 (62%) find it easy to use. 7 (37%) selected the Help menu as their venue of choice for training for the discussions tool.



• Mail: 15 (71%) of the respondents indicated that they use the mail tool frequently and 16 (76%) find it easy to use. 6 (32%) selected the Help menu and 6 (32%) selected workshops as their venue of choice.





• Who's Online: 9 (43%) of the respondents indicated that they use the who's online tool frequently and 14 (67%) find it easy to use. 9 (47%) chose the Help menu as their venue of choice for training.

Student Learning Activity Tools







• Assessments: 14 (67%) of the respondents indicated that they use the assessments tool frequently and 10 (48%) find it easy to use. 6 (32%) selected the Help menu and 6 (32%) selected a workshop as preferences for training and support.



• Assignments: 16 (76%) of the respondents indicated that they use the assignments tool frequently and 14 (67%) find it easy to use. 7 (37%) selected the Help menu as their venue of choice for training and support.

Content Tools

Learning Modules



Learning Modules



• Learning Modules: 16 (76%) of the respondents indicated that they use the learning modules tool frequently and 14 (67%) find it easy to use. 7 (37%) selected the Help menu as their venue of choice for training for the learning modules tool.



• Content: 10(48%) of the respondents indicated that they do not use the local content tool at all, although of those who do 12 (60%) find it easy to use. 11 (58%) selected the Help menu as their venue of choice for training.

Media Library

100 [.] % of response			-	
0.	3	2	1	0
Frequency	24	19	5	52
Ease of Use	33	10	0	57





• Media Library: 11 (52%) of the respondents indicated that they do not use the media library tool at all, although 12 (57%) who do use it find it easy to use. 11 (58%) selected the Help menu as their venue of choice for training.

Survey Comments

Survey 13 is an open-ended item asking areas in WebVista that faculty needs support. Seven comments were collected and they revealed the following: two of the comments were positive and expressed appreciation for the outreach they have experienced from the Office of e-Learning, as well as for Vista being a vast improvement over Blackboard. One of the comments indicated technical difficulties with having to log in and out each time the respondent uploads something. The remainder of the comments were complaints of migration issues, one not liking that the Vista system can go down without having a way to back up the course, one needing Vista to be faster and more Mac-friendly with multi-media formats, and one regarding Vista being so time consuming and difficult that he or she abandoned Visa altogether.

Recommendations

Based on the results of data analyses, the needs assessment team recommend the following solutions which are prioritized taking into account the factors of limited staff members in the Office of e-Learning.

- Provide proactive outreach to faculty through emailed news bulletins regarding tips and facts for using Vista. This solution will answer questions before they are needed while creating a more comfortable environment for the faculty to switch to Vista and dispelling the fears the faculty may have in entrusting their material to the Vista system. (For instance, provide instructions up front on how to back up a course or that the Office of e-Learning can help faculty migrate to the new system.)
- 2. Ensure Help menu is a comprehensive solution as a one-stop-shop for help since it is by far the most popular spot for faculty to get timely help within Vista.

3. Provide periodic workshops and/or brown bag luncheons for faculty to learn the functions within Vista and to share their own experiences with their colleagues. Example topics could focus on technical difficulties, migration issues, and multimedia options.

Appendix A



Performance Analysis Model Mager & Pipe (1970)

Appendix B

Week of February 26, 2007	Online Surveys developed.
March 12, 2007	Online Surveys delivered to faculty. Faculty will have until March 16, 2007 to complete.
March 19, 2007	Comparative research completed and analyzed.
March 16, 2007	Surveys completed and analyzed.
March 22, 2007	Report Completed.

Appendix C

TNA Planner Techniques and Tools					
Stage	Technique	Tools and Sources			
1	Needs Assessment	Interview group meeting with faculty instructional supporter in the office of e- learning (Actuals and Optimals)			
2	Extant data	Analyze records of job requests and telephone troubleshooting on online course teaching from faculty. (Actuals and Optimals)			
3	Needs Assessment	Survey- to determine that what kind of supports for faculty teaching online courses are needed and feelings and knowledge/skills of faculty regard to using WebCT and WebVista; (possible causes of problem, Feelings, and Actuals)			

Appendix D

Blackboard Vista 4 Training and Support Survey

Use of Course Tools

For questions 1-5, please mark the frequency that you use each online course tool in the course/courses you are teaching.

1. Organizational Tools						
	Frequently	Occasionally	Rarely	Never		
Calendar						
Search						
Syllabus						

2. Communication Tools							
	Frequently	Occasionally	Rarely	Never			
Announcements							
Chat							
Discussions							

Mail		
Who's Online		

3. Student Learning Activities						
Frequently Occasionally Rarely Never						
Assessments						
Assignments						

4. Content Tools						
	Frequently	Occasionally	Rarely	Never		
Learning Modules						
Local Content						
Media Library						
SCORM						
Web Links						

1. Student Tools						
	Frequently	Occasionally	Rarely	Never		
My Files						
My Grades						
My Progress						
Notes						

6. Please rate the ease of use for each course tool from easy to difficult.						
	Easy	Neutral	Difficult	Do Not Use		
Calendar						
Search						
Syllabus						
Announcements						
Chat						
Discussions						
Mail						
Who's Online						
Assessments						
Assignments						
Learning Modules						
Local Content						
Media Library						

Support and Training

Please indicate which training and support methods you have used on each of the VISTA course tools listed?

7. Which training and support method have you used MOST OFTEN on each of the following Organizational Tools?								
	Online Tutorials Workshop One on One Help Menu							
Calendar								
Search								
Syllabus								

8. Which training and support method have you used MOST OFTEN on each of the following Communication Tools? Online Tutorials Workshop Help Menu One on One Announcements Chat Discussions Mail Who's Online \square \square

9. Which training and support method have you used MOST OFTEN on each of the following Student Learning Activities?

	Online Tutorials	Workshop	One on One	Help Menu
Assessments				
Assignments				

10. Which training and support method have you used MOST OFTEN on each of the following Content Tools?				
	Online Tutorials	Workshop	One on One	Help Menu
Learning Modules				
Local Content				
Media Library				
SCORM				
Web Links				

11. Which training and support method have you used MOST OFTEN on each of the following Student Tools?				
	Online Tutorials	Workshop	One on One	Help Menu
My Files				
My Grades				
My Progress				
Notes				

Final Comments

12. On a scale of 1-5, 1 prefer the most and 5 prefer the least, please rate your preference for

Blackboard Vista 4 course training and support?					
	Prefer the Most	Prefer	Neutral	Do not Prefer	Prefer Least
Online					
Tutorials					
Workshop					
One on One					
Help Menu					

13. Please share your comments with us regarding what other areas of need you may have in the Blackboard environment.

Appendix E----Cover Letter

Dear Faculty Member:

With the changing of UNCW's online learning system from WebCT Campus Edition to Blackboard Vista 4, the Office of e-Learning is embarking on a project to discover the faculty's online course training and support needs. Assisting me on the project is a team of graduate students in the Masters in Instructional Technology program.

As a faculty member who teaches an online or web-enhanced course, we are asking you to participate in a short survey. Your input will be extremely vital in helping our team because it will contribute to our understanding of your experience and preferences. We are counting on your feedback so that we may better meet your needs.

The short online survey will take around 5-8 minutes to complete.

To access the survey, please visit the following URL by March 15th: http://appserv01.uncw.edu/DASAPPS/SelectSurveyASPAdvanced/TakeSurvey.asp?EID=52MB871B865 BK48mB39mB265BJ16

This is an anonymous survey and your response will be kept confidential. If you have any questions or concerns, please feel free to contact me at the email address below.

Thank you very much for your time and for participating in this survey.

Patricia (Patsy) Gonzalez-McQuiston UNCW ITSD Client Services 910-962-7826 Fax 910-962-7804 mcquistonp@uncw.edu

Appendix F

Organizational Tools



<u>Results</u>

Frequency of use: Frequent

Ease of use: Easy

Preference for training: Help menu

Calendar Tool





<u>Results</u>

Frequency of use: Do not use

Ease of use: Do not use

Preference for training: Help menu

Search Tool



Organizational Tools



Results

Frequency of use: Frequent

Ease of use: Easy

Preference for training: Help menu and workshops

Syllabus



Communication Tools



Announcements

<u>Results</u>

Frequency of use: Frequently

Ease of use: Easy

Preference for training: Help menu

Announcements



Communication Tools



Chat



Results

Frequency of use: Frequently

Preference for training: Help menu

Ease of use: Easy

Frequency of use: Never

Ease of use: Easy

Preference for training: Help menu



Discussions



Discussions



Communication Tools



<u>Results</u>

Frequency of use: Frequently

Ease of use: Easy

Preference for training: Help menu and workshop





Who's Online







Student Learning Activity Tools



Results

Frequency of use: Frequently

Ease of use: Easy

Preference for training: Help menu and workshop

Assessments



Assignments







Content Tools



<u>Results</u>

Frequency of use: Frequently

Ease of use: Easy

Preference for training: Help menu and workshop

Learning Modules



Local Content







Content Tools



<u>Results</u>

Frequency of use: Never

Ease of use: Do not use

Preference for training: Help menu

Media Library

