Analysis of using discussion boards in online classes, within the Human and Behavioral Sciences department, at Westchester Community College

Introduction

The purpose of this performance analysis is to discover and close the gap between optimal and actual use of discussion boards in online classes within the Human and Behavioral Sciences department, at Westchester Community College. The department offers courses in both a traditional classroom and distance-learning format. The primary tool for collaboration is the discussion board. The discussion board enables threaded, asynchronous discussions.
The distance-learning program enables students to take courses at their convenience and eliminates the need to travel. This is a major factor in the success of the distance-learning program. However, some students and professors have expressed that they miss the face time and inter-subjective dialogue that takes place in a traditional classroom setting. Some students have also expressed that there were occasions when the professor seemed unresponsive. The main goal is to improve the quality of online classes using the tools provided, in an effort to encourage students to take more online classes.

Audience Analysis

The audience is a sample group of professors. This is a highly educated and high achieving group possessing Masters degrees and Doctorates. One may assume that this group has a positive attitude towards learning. All of the professors have already attended technical training on Blackboard, the online delivery system, and have experience conducting classes in a traditional classroom setting. However, not all professors are entirely comfortable with using online technology for delivering classes. Many are unclear about how to translate traditional classroom teaching techniques into an online format using the tools provided.

Sources of Analysis

This analysis was informed by several sources, including extant data. Stakeholders were identified and interviewed, observed and surveyed. The stakeholders are the Distance Learning Instructional Specialist, professors and online students. See Appendices for details of interviews, surveys, direct observation and data sources.

Gap Analysis

The current situation appears satisfactory. Student comments indicate a high opinion of online classes. However, survey results also indicate that there is room for improvement.

Optimal Performance	Actual Performance (based on Appendices B, C, D, & E)
Professors utilize best practices 100% of the time (using tools available in Blackboard).	100% of the professors are unclear what the best practices are.
Professors conduct discussion groups in a collaborative manner that removes the sense of isolation, that helps students and professors feel connected, and helps students feel connected to each other.	Students have complained of occasions when the professor seemed unresponsive. Students and professors have expressed that they miss the face time and inter-subjective dialogue that takes place in a live classroom setting. Sample comments from the survey suggest that professors either do not use the discussion board for collaborative activity or have difficulty articulating an approach for conducting collaborative activity. "Unfortunately (or maybe fortunately), I do not have them collaborate much."
100% Student Retention.	8% of the sample population surveyed indicated that they would take another online class only if improvements were made.
Students are motivated to promote online classes to other students.	50% of the students indicated that there is room for improvement. They may not be inclined to recommend online classes to others.
Students are 100% satisfied with the use of discussion boards in online	50% of the students indicated that there is room for improvement. Sample comments suggest that students want to

classes.	see more professor and student involvement.

Causes and Drivers

The causes/drivers and recommended solutions have been analyzed using the Individual Performance Model, where MOT=motivation (specifically value and confidence); S/K=skills and knowledge; ENV=environmental (tools, time, policies, etc); ORG=organizational support or incentives.

Cause/ Driver	Recommended Solution	MOT	S/K	ENV	ORG
Lack of feedback on performance. Q: "Do the professors get feedback on their performance?" A: "No. The survey is for generally identifying what is and isn't working in the online course environment in general."	• Observe professors, survey students and schedule regular feedback with professors to adjust performance				X
Lack of defined expectations for using discussion boards. Q: "Where would you like to see an improvement?" A: "The professors could have a better understanding of conducting the discussion groups and how to get them to perform better."	• Provide professors with information about best practices			X	
Lack of guidance. Q: "Are the professors aware of existing quality standards and published best practices for course strategies?" A: "There are no best practices for conducting a discussion board."	• Provide performance support in the form of "Best Practices" job aids of strategies, application examples and sample templates that professors can use to engage online learners • Engage professors in a simulation of discussion boards using a best practices approach for online collaboration as a confidence building exercise • Continue to encourage discussions with other faculty who use discussion boards • Continue to encourage the mentoring system		X	X	
Lack of consequences for non-performance. Q: "What are the consequences to the professors for unsatisfactory performance?" A: "None that I am aware of."	• Implement consequences such as restricting the number of online classes a professor is permitted to teach until the desired performance is achieved	X			X
Non-performance is rewarding. "Takes time to monitor". Professors can save time by not monitoring as	• Devise a reward system to ensure that desired quality is rewarded	X			X

Cause/ Driver	Recommended Solution	MOT	S/K	ENV	ORG
often and take on additional online work, which pays more.					
Performance is punishing. "The large number of students makes it a bit daunting to use discussions frequently - takes time to monitor, students often digress from the actual purpose of the assignment, many students do not participate." "The speed of the software/server is too slow to allow for quick response to all of the students served."	• Keep classroom size manageable • Assign online teaching assistants • Encourage students to participate and stay on track by applying best practices • Provide adequate technical resources	X		X	

Solution Summary

Based on the above analysis, using the Individual Performance Model, it is clear that lack of skills and knowledge is a contributing factor to the performance gap. In any case, training is not indicated here because the audience has already attended technical training for Blackboard. They are also experienced teachers and do not need to be trained in how to conduct a class. However, they may find job aids of best practices beneficial in informing their strategy for online collaboration. There is no need to commit these best practices to long-term memory prior to application since repeated use will achieve that end. Also, engage the professors in a simulation of discussion boards, using a best practices approach for online collaboration, as a confidence building exercise.

Role of Job Aids

There is a definite need to support professors as they transition from teaching in the traditional classroom to the online classroom. Job aids are recommended so that the approach to teaching online is informed by a clear theoretical framework. Job aids could be helpful to 1) inform professors of "Best Practices" strategies and applications that can be used to engage online learners and 2) build confidence in the application of these best practices. The content of the job aids should by guided by the philosophy that the use of discussion boards should be "learner-focused, promote active learning, guided discovery, and the construction of new knowledge, and provide a variety of options that encourage reflection, interaction, and collaboration among students and faculty." (Connecticut Community College. (2006). Effective Teaching Practices for Web-Enhanced, Hybrid and Online Classes.)

Conclusion

The student responses indicate a high degree of satisfaction with the distance- learning program overall. However, sample comments from both students and professors indicate that there is room for improvement in regards to discussion boards and online engagement in general. Out of a sample group of 13 students, 92% of the students said they would take another class online. 8% would only take another class if improvements were made. An 8-10% reduction in repeat student registration for an online course over time may be a loss worth noting. This adds up to a potential loss of $1110 for each non-resident student and $444 for each resident student, per class, that decides not to enroll in an online class due to a sub-optimal experience or expectation of one. The application of the suggested solutions can help student retention and promote the distance-learning program.

Appendix A: Extant Data

Literature review: of distance learning best practices within the education industry.

Palloff, R., & Pratt, K. (2007). Building Online Learning Communities: Effective Strategies for the Virtual Classroom

SUNY Learning Network. (1999). Provides a best practices checklist. Retrieved from http://sln.suny.edu/sln/public/original.nsf/0/45674d44a55ee91c85256c1600635a56?OpenDocument

Las Positas College. (?). Best Practices in Designing Online Courses. Provides examples of discussion boards. Retrieved from http://lpc1.clpccd.cc.ca.us/lpc/blackboard/best_practices/

Blackboard. (2003). Ten Principles of Effective Teaching and Practical Examples for the Classroom and Blackboard. Retrieved from http://blackboard.bradley.edu/faculty/Recommended_Ef_Use_BB/RecommendedEffUseOfBb.pdf

Connecticut Community College. (2006). Effective Teaching Practices for Web-Enhanced, Hybrid and Online Classes. Retrieved from http://www.commnet.edu/academics/blackboard/faculty/docs/Effective_Teaching_Practices_for_Web-enhanced_hybrid_online_classes_1a.pdf

Curriculum Innovation and Technology Group, (2004). Discussion Board Best Practices Guide. Retrieved from http://citg.babson.edu/docs/DB_best_practices_v2.pdf

Appendix B: Direct Observation

Direct observation of a professor conducting an online class using the discussion board revealed that the professor was not formally trained in online collaboration strategies. He therefore had designed his own approach and strategy for conducting discussion board forums based on inferences from the tool and guidance from his mentor. However, the professor had attended Blackboard technical training.

Appendix C: Transcripts from Interviews

Participant 1 - Distance Learning Instructional Specialist

1. Question: Where would you like to see an improvement?
   Answer: The professors could have a better understanding of conducting the discussion groups and how to get them to perform better. Based on student feedback, we feel that it will help lessen the sense of isolation and help students and professors feel more connected and if run properly, help students feel more connected to each other.
2. Question: What are some typical complaints or criticisms of this program from students/ professors?
   Answer: The professors complain that they lose face-to-face time online and some students complain of feeling isolated. The chat tool is available, but we don't recommend it as a solution to this problem because it is clunky and one of the main reasons students go online is because they can't be there for a scheduled chat at a particular time. They want the freedom to go online when it is convenient for them.
3. Question: Do you have documentation of performance such as student surveys or feedback? May I see them?

Answer: Yes we collect student evaluations. No, this will raise the issue of confidentiality since the survey questions are open ended and some students have named names.

4. Question: What improvements would you like to see in the online courses? What do you consider to be an optimal student experience for each online course?
   Answer: I would like to see the professors applying best practices to get their discussion groups performing better. I think it will help the students feel less isolated. For instance, I would like to see the professors assigning roles, a moderator, leader, note taker and facilitator. Perhaps they can add a rubric to the discussion group so that students have a guide to what is expected of them in the course.

5. Question: Can you show me examples of discussion boards that work and don't work for your standards that may exist?
   Answer: I recommend reading **Communication and Collaboration in the Online Classroom: Examples and Applications (JB - Anker)**.

6. Question: What sort of training and resources are made available to professors in regards to developing and delivering their courses online?
   Answer: They receive training on Blackboard and a mentor to coach them.

7. Question: What tools are available to professors for conducting online courses?
   Answer: All the tools that come with Blackboard including discussion boards and the chat feature, which isn't working as well as we'd like. We don't encourage the professors to use chat because some of the feedback from the students is that one benefit of taking the courses online is that they can log on and participate at any time.

8. Question: Are the professors aware of existing quality standards and published best practices for course strategies?
   Answer: There are no best practices for conducting a discussion board.

9. Question: Do the professors get feedback on their performance?
   Answer: No. The feedback is for generally identifying what is and isn't working in the online course environment in general.

Participant 2 - Professor

1. Question: Do you know of online learning best practices in the SUNY system?
   Answer: Never heard of it. I was not informed of any.

2. Question: Do the professors get feedback on their performance?
   Answer: No, we only hear directly from students if they have a complaint. We get a mentor to get us started with Blackboard, but no formal evaluation takes place.

3. Question: How do you think professors could provide students with a better online learning experience?
   Answer: I try to monitor the discussion boards and respond to students everyday.

4. Question: What are the consequences to the professors for unsatisfactory performance?
   Answer: None that I am aware of.

Appendix D: Professor Surveys

This survey was taken from a sample group of 8 professors. It measures the general level of professor ability, approach and attitudes regarding discussion boards as the primary tool for conducting online classes. The following responses were reproduced exactly as written.

Questions	Responses
1. Do you know how to use the discussion board?	Multiple Choice • Yes. 100% (8 professors) • No. 0.0% (0 professors)
2. Do you use the discussion board as part of your online class?	Multiple Choice • Yes. 100% (8 professors) • No. 0.0% (0 professors
3. If yes, how do you use it?	Comment Box • "students select news articles and respond and rank their value\"

		• "Students are given a topic--an historical question that involves taking a position--and a 48 hour period in which to make a response. All students then read all the responses and have a 48 hour period in which to agree or disagree with at least one initial response and say why." • "For discussion assignments and for students to interact" • "Students post and reply on topics I create." • "Discussion assignment where students have to analyze a news story chosen by them that relates to the theoretical material covered in class. In addition, each student must respond critically to at least one other student's posting." • "Required postings that are graded including an original and response posting. Also, a running BLOG on each topical issue for the class." • "Discussion of controversial topics in adolescent psychology and human sexuality." • "There is a discussion question on each chapter in the text that we cover."
4.	Is there anything preventing you from engaging your students with the tools provided?	Comment Box • "No" • "no" • "I don't think so" • "no" • "The large number of students makes it a bit daunting to use discussions frequently - takes time to monitor, students often digress from the actual purpose of the assignment, many students do not particpate." • "The speed of the software/server is too slow to allow for quick response to all of the students served." • "no" • "I'm not sure what this question is asking. The Blackboard System is adequate for this task."
5.	When you need to engage your students in collaborative activity online, how do you go about it?	Comment Box • "I put the question in the discussion area along with the requirements involved." • "n/a" • "I do not have collaborative assignments" • "Using the Discussion tool in Blackboard." • "Unfortunately (or maybe fortunately), I do not have them collaborate much - except for the discussion assignment mentioned above." • "i don't do collaborative work." • "I do not use online collaborative activity in

		my online classes" • "Through the use of the discussion board, email, and chat room."
6. Do you utilize alternative tools or teaching methods in your online class outside of what is provided by the college?		Comment Box • "Yes, I use quizzes/tools provided by other websites that they can easier click out to" • "no" • "My textbook has a companioon website which I utilize- and students utilize" • "no" • "No, I do not." • "The college doesn't supply anything that i use except the blackboard software interface. i develop all my teaching materials myself or use tools provided by the textbook publisher" • "I use a database of articles provided by the publisher." • "I only use the Blackboard System."
7. Do you have suggestions on improving the use of online discussion boards? (Two respondents skipped this question.)		Comment Box • "I think breaking the class into groups is helpful; this allows everyone to speak his/her mind without too much redundancy." • "no" • "My suggestions involve only specific functions of Blackboard." • "Should be used more." • "I really haven't thought about this as I do not use discussion boards frequently." • "What I find helpful are discussions with other faculty who use discussion boards to find out how they use them."

E-mail Text

Hello,

I am currently enrolled in a class through San Diego State University for a Masters in education. One of my assignments is to do a performance analysis of a situation where there is a discrepancy between optimal and actual performance. For this project, I have chosen to examine the use of discussion boards in online learning environments.

You are receiving this email because you are professors that teach in an online learning environment. Please take a few minutes to fill out a quick survey about your use of the online learning environment at:

http://www.surveymonkey.com/s.aspx?sm=uAU66ErQUFXnc0pcQ0CRfQ_3d_3d

This survey is **anonymous**. The survey will be open until noon Sunday Oct. 26th.

Please fill out this survey even if you have never used the discussion board.

Thanks for your time. Please let me know if you have any questions of concerns.

Appendix E: Student Surveys
This survey was taken from a sample group of 13 students. It measures the general level of student satisfaction with online classes and discussion boards in particular. The following responses were reproduced exactly as written.

Questions	Responses
1. How would you rate the online classes?	Multiple Choice • I prefer them over classes held in classrooms. 69.2% (9 students) • I would take classes in either setting. 38.5% (5 students) • Not as good as classes held in classrooms, but I take them because they have their advantages. 15.4% (2 students) • Poor, I avoid them. 0.0% (0 students)
2. Are you are getting enough support to complete your assignments and prepare for exams?	Multiple Choice • Yes, it is excellent. 76.9% (10 students) • Yes, there is room for improvement, but I get by. 23.1% (3 students) • No, the quality of my work has suffered as a result. 0.0% (0 students)
3. Do you find the discussion boards in the online classroom to be helpful?	Multiple Choice • Yes. 53.8% (7 students) • Yes, but there is room for improvement. 46.2% (6 students) • No.0.0% (0 students)
4. If you were unsatisfied with how discussion boards are being used in the classroom, what would you do to make improvements? Ten respondents skipped this question.	Comment Box • "I am satisfied!" • "I wish that the professor was more involved on the discussion board and not just the students." • "I think that some teachers need to reevalutate how they use discussion boards. Many of them try to replace classroom discussions by having everyone post the answer to the same question and respond to x amount of posts. However most students do not say any more than 'I agree with what you said' they miss the whole point of the DISCUSSION. I know it is hard to replicate a classroom descussion online, but maybe there is a way for teachers to better set up their questions."
5. Would you take another online class?	Multiple Choice • Yes. 92.3% (12 students) • Yes, if improvements are made. 7.7% (1 students) • No. 0.0% (0 students)
E-mail Text: Hello, I am currently enrolled in a class for a Masters in Educational Technology. One of my assignments is to do a performance analysis of a situation where there is a discrepancy between optimal and actual performance. For this project, I have chosen to examine the use of discussion boards in online learning environments. You are receiving this email because you are students that may have taken an online class. Please take a few minutes to fill out a quick survey about your experience in an online learning	

environment at:

http://www.surveymonkey.com/s.aspx?sm=0mL9ZTKd_2bk_2f3UZZoQNFl1w_3d_3d

This survey is anonymous. The survey will be open until noon Sunday Oct. 26th.

Thanks for your time. Please let me know if you have any questions or concerns.