Student Responses to Blackboard in the High School Curriculum

Summary Sheet

	Agree	Disagree	
1.	**83%**	**4%**	I consider myself knowledgeable about the use of computer technology.
2.	**84%**	**1%**	I utilized Blackboard on a regular basis.
3.	**87%**	**4%**	I liked using the Blackboard learning environment as a learning tool.
4.	**15%**	**58%**	My parents utilized Blackboard to track my progress.
5.	**59%**	**13%**	Blackboard and the use of e-mail helped facilitate better communication between me as a student and the teacher.
6.	**99%**	**0%**	The announcement area was a helpful tool for keeping track of my homework and classwork assignments.
7.	**99%**	**0%**	The online gradebook was helpful in keeping track of my quarterly average.
8.	**94%**	**1%**	Receiving immediate feedback on test and quiz scores was a positive feature of Blackboard.
9.	**64%**	**15%**	Online reading assignments were preferable to photocopied handouts.
10.	**94%**	**1%**	Learning to use Blackboard was easy
11.	**80%**	**12%**	Compared to paper/pencil tests, I preferred the use of Blackboard online testing.
12.	**61%**	**19%**	I prefer writing Document Based Questions (DBQs) online rather than with traditional paper/pencil.
13.	**68%**	**15%**	I prefer writing Thematic Essays online rather than with traditional paper/pencil.
14.	**62%**	**16%**	I liked watching UnitedStreaming videos online.
15.	**61%**	**10%**	Blackboard, as technology-based instruction, helped motivate me to complete my homework assignments.
16.	**80%**	**4%**	Blackboard helped me to be a more organized student.
17.	**93%**	**1%**	Blackboard was useful in helping me organize and prepare when I was absent from class.
18.	**17%**	**58%**	Other course in which I was enrolled utilized Blackboard.
19.	**83%**	**9%**	I would like to have had Blackboard as a resource for all of my classes.
20.	**52%**	**7%**	Using Blackboard has helped me prepare for college and/or professional life after High School.
21.	**93%**	**1%**	I would recommend the continued use of blackboard as a course management tool.

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Student Responses to

Blackboard in the High School Curriculum

By
David Besozzi

Burnt Hills-Ballston Lake High School

Fall, 2006

Blackboard

Student Responses to Blackboard in the High School Curriculum

Introduction - What is Blackboard?

The Burnt Hills–Ballston Lake Central Schools currently receive access to the Blackboard Learning System through our affiliation with the Northeast Regional Information Center (NERIC). Blackboard training and support are facilitated by Steve Janover who describes the Blackboard Learning System in the following way:

> *Blackboard is a web-based online course creation tool and management system that is widely used in higher education. It possesses an easy-to-use interface that allows the user to integrate existing materials from numerous popular applications, including Word, Excel, PowerPoint, graphic files, and web pages created in HTML. The interface also provides a secure environment for district curriculum and online materials: requiring username and password authentication. The interface incorporates some unique tools such as a built-in discussion board and digital drop box for file transfers. The software allows the user to easily create a web-based course or module with minimum effort. Blackboard permits an instructor to create online assessments and record test results in an online grade book.*

Learning Context

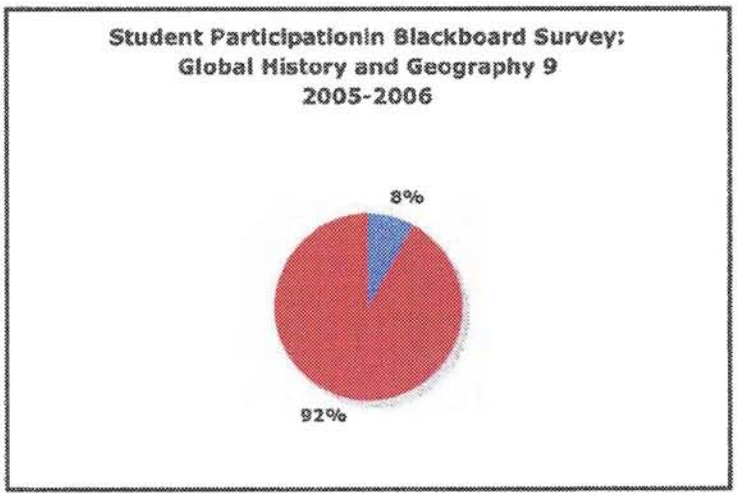
During the school year 2005-2006, the Blackboard Learning System was utilized as part of an ongoing effort to infuse technology into the instruction and assessment of the courses I teach at the Burnt Hills–Ballston Lake High School. Beginning in September of 2004, a small pilot program was initiated with one section of Global History and Geography 9. In February of 2005, that pilot program was expanded to include two additional sections of Global History and Geography 9. During the initial pilot program, the Blackboard Learning System was utilized in a limited way: a skeletal structure was created including an announcement area with homework assignments, course requirements area, contact area, and unit folders with notes and PowerPoint presentations. During the spring semester of 2005, additional areas were created and utilized: online unit tests, online writing assignments, UnitedStreaming Video, and an online course grade book. These early initiatives resulted in a much wider application of the Blackboard electronic interface and greater student involvement with web-based technology related resources.

Following the successful pilot program of 2004-2005, I decided to fully utilize the Blackboard Electronic System as a major component of both the Global History and Geography course and the Psychology elective. As a result, during the summer of 2005, web-supported courses were developed and refined using Blackboard. These web-based course resources were fully implemented at the start of the year in September, 2005. Throughout the 2005-2006 school year, students made extensive use of

Blackboard as part of their daily studies. The following type of resources were employed: online homework and assignment announcements, unit tests and quizzes, DBQ and Thematic essay writing exercises, video viewing via UnitedStreaming, student-teacher communication by e-mail, and an online password-protected grade book review (available 24 hours a day, seven days a week).

Throughout the 2005-2006 school year, it was anticipated that students would need to have the opportunity to assess their participation in the Blackboard initiative. As a result, a survey was constructed to collect data that could be used to evaluate the success of the initiative and measure student reaction to the technology based resources utilized throughout the year. This report will highlight the major points of interest that emerged as part of the survey assessment.

The information contained in this report currently consists of data collected from the three Global History and Geography 9 courses I taught during the 2005-2006 school year. These three courses comprised 75 students, of which 69 (92%) participated in the online survey.



The survey was not required and students received no credit for their participation. An additional survey was conducted with the students of Psychology, but awaits further evaluation (spring 2007).

Rationale

The Burnt Hills-Ballston Lake School District's own Technology Framework establishes the rationale for this initiative:

> *Technology is an invaluable tool for collaboration and sharing. Through the use of interactive technologies, BHBL constituents will be linked in a collaborative and vibrant learning environment that prepares our students for the future.*

In the 21st century, understanding and using technology will be an integral part of virtually every aspect of daily life. It is the school system's responsibility to prepare students for this future. The classroom is the primary place where this preparation will occur; therefore, every classroom must be equipped with diverse technologies to support teaching and learning. Every teacher must be knowledgeable and skilled in the use of these technologies in daily instruction.

The Burnt Hills–Ballston Lake Central Schools have invested a great deal of time and effort to ensure that our students and staff meet and exceed the goals outlined in the district's Technology Framework. As stated in the Framework, the need to prepare our students for life in the 21st century requires that students achieve proficiency in technology related skills. The need for a classroom electronic interface, such as the Blackboard Learning System, will help students to achieve that goal. Students at the college level are now utilizing asynchronous learning environments as part of online courses or as a supplemental classroom electronic interface - Blackboard, WebCT, ANGEL, and the SUNY Learning Network, are just a few of the available options to college students. Our focus should be placed on preparing our students for success in the post secondary level of education where these tools and technology are widely being used. Although the use of Blackboard is currently being employed by a small number of teachers in the district, an expansion of its use (or a similar interface) should be considered as part of the long term plan to prepare students for a technology-based future. A district-wide approach would ensure continuity for students across grade level and subject areas and result in a high level of technology-based learning skills that will help students meet, and exceed the goals of the Framework.

The Survey

Near the end of the 2005-2006 school year, students in my Global History and Geography 9 course were asked to complete a survey related to their use of the Blackboard Learning System as a course resource. The survey instrument used was a Likert scale in which the respondents were asked to indicate their degree of agreement with the statement being asked. A six-point scale was used:

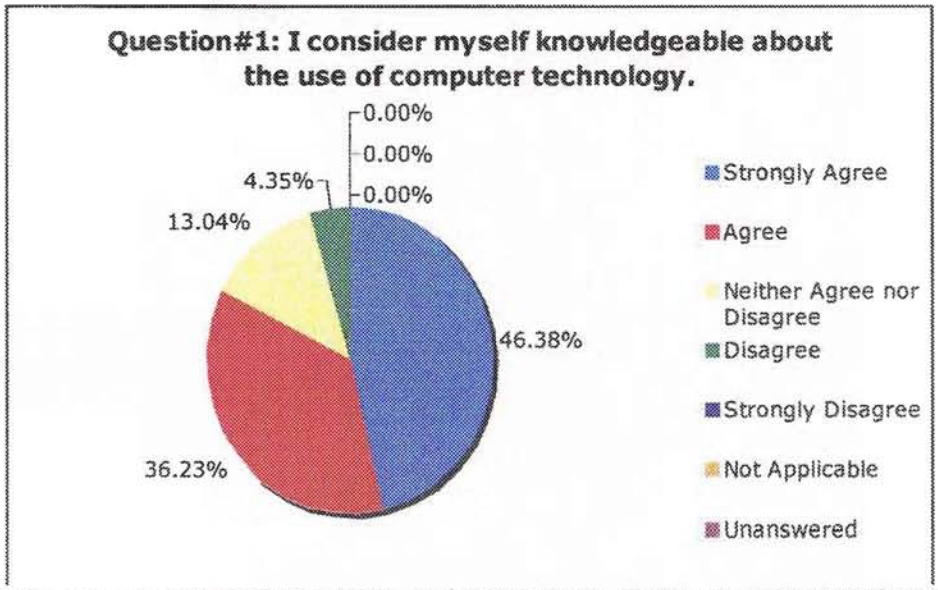
Strongly Agree
Agree
Neither Agree nor Disagree
Disagree
Strongly Disagree
Not Applicable

The survey instrument itself was created in Blackboard and administered via the secure Blackboard-based course website. As a result, the instrument was able to generate a

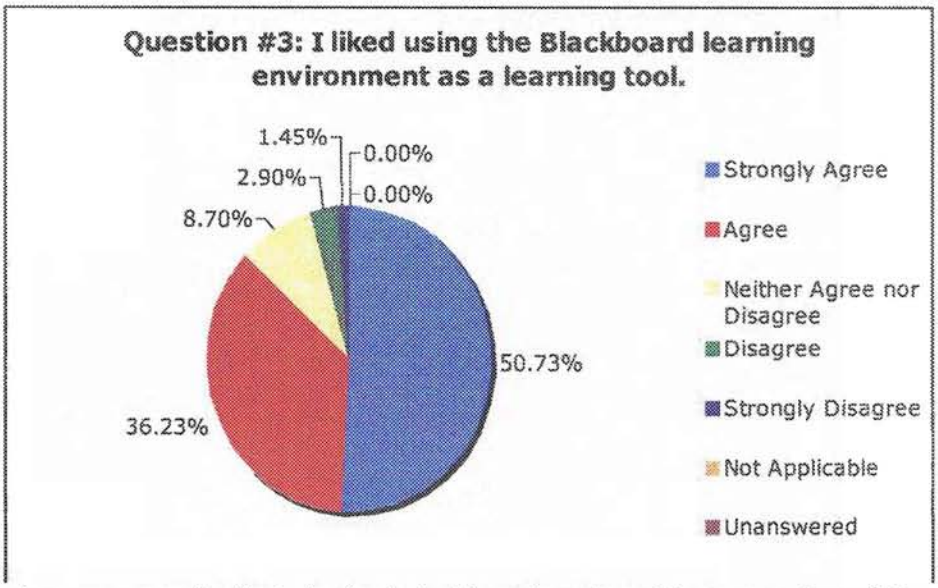
statistical analysis of student responses. This statistical data is the basis for the evaluation and recommendations discussed below.

Evidence of Confidence in Technology Skills

The first question in the survey asked students to state the degree to which they were knowledgeable about the use of computer technology in general. 82.61% of the respondents indicated that they would agree or strongly agree that they were knowledgeable, while only 4.35% disagreed with the statement.



These results suggest that students were familiar with using computer technology either prior to their use of Blackboard, or in conjunction with having used Blackboard throughout the 2005-2006 school year. In addition, students were also asked if they liked using the Blackboard learning environment as a learning tool. 86.96% of the respondents indicated that they would agree or strongly agree that they liked using Blackboard, while only 4.35% disagreed with the statement.

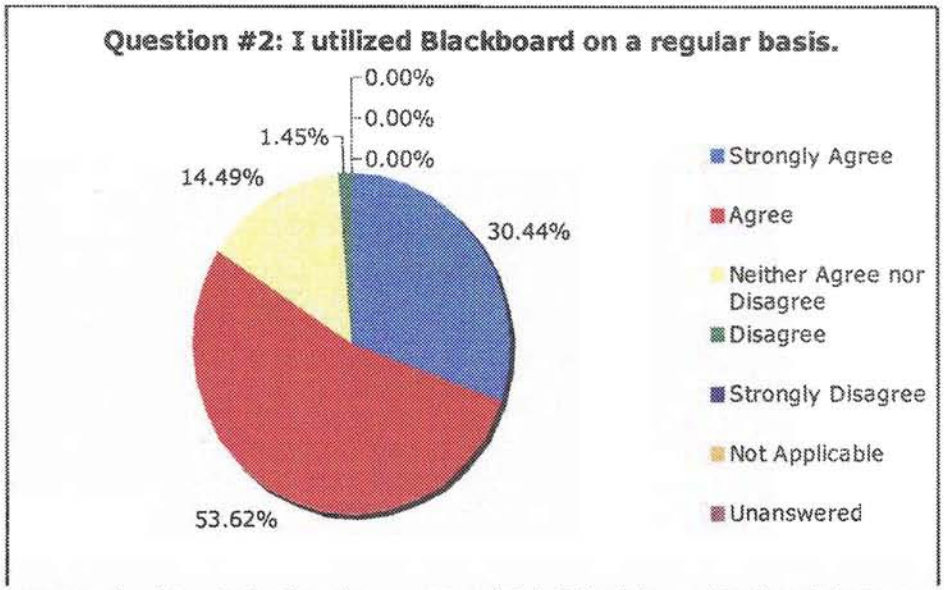


The data above suggests that students held or developed increased confidence in their technological skills and that the utilization of Blackboard contributed to the process of developing those skills.

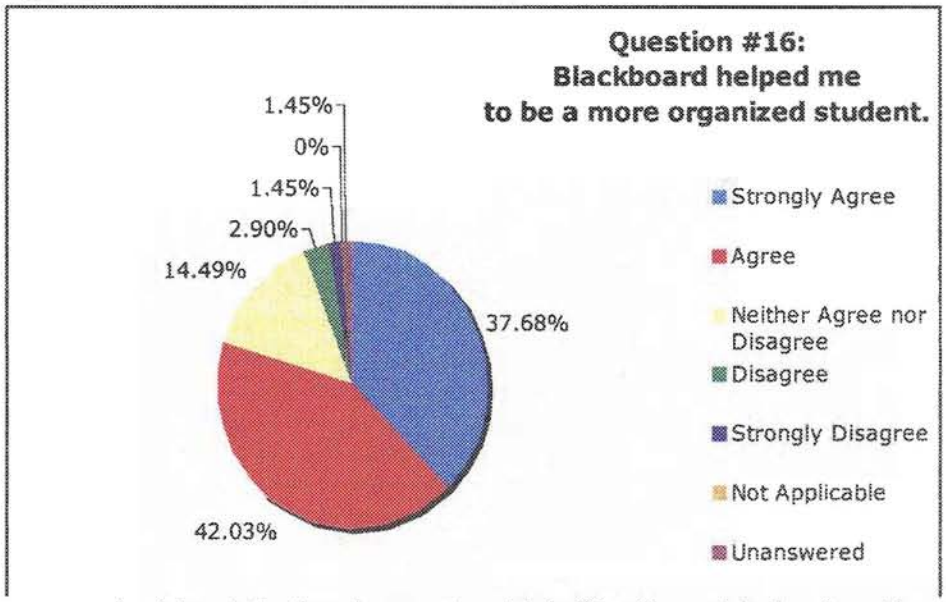
Evidence of Enhanced Student Participation in Learning

One of the goals of this Blackboard initiative has been to provide students with an opportunity to take some ownership in their educational process. The Blackboard learning system provides them with the tools necessary for becoming better organized, keeping track of their homework assignments, and taking responsibility for their studies when absent.

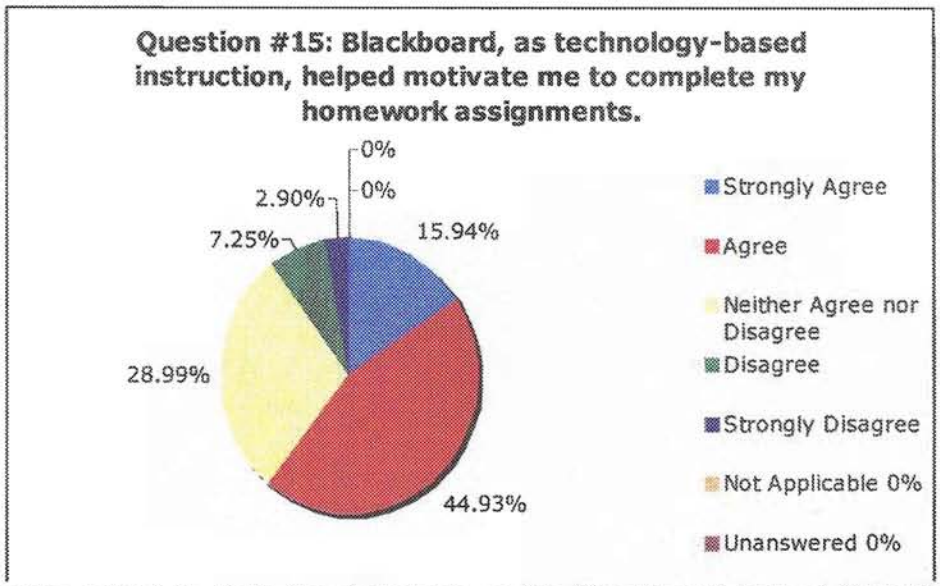
Students were asked to state the degree to which they used Blackboard on a regular basis. 84.06% of the respondents indicated that they would agree or strongly agree that they used Blackboard on a regular basis, while only 1.45% disagreed with the statement.



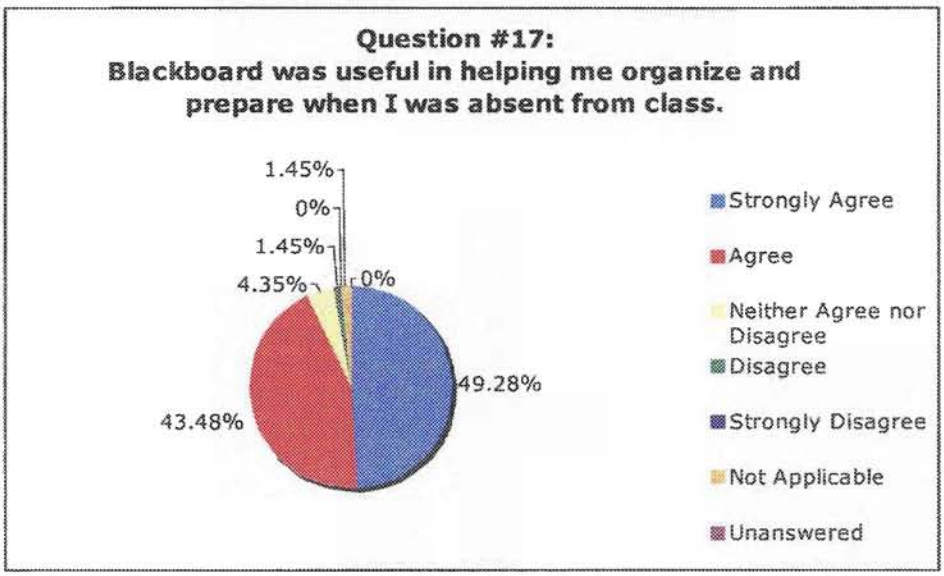
Students were asked to state the degree to which Blackboard helped them to be a more organized student. 79.71% of the respondents indicated that they would agree or strongly agree that Blackboard helped them to be a more organized student, while only 4.35% disagreed with the statement.



Students were asked to state the degree to which Blackboard helped motivate them to complete homework. 60.87% of the respondents indicated that they would agree or strongly agree that Blackboard helped motivate them to complete homework, while only 10.15% disagreed with the statement.



Students were asked to state the degree to which Blackboard helped them to organize and prepare when absent from class. 92.75% of the respondents indicated that they would agree or strongly agree that Blackboard helped them to organize and prepare when absent from class, while only 1.45% disagreed with the statement.



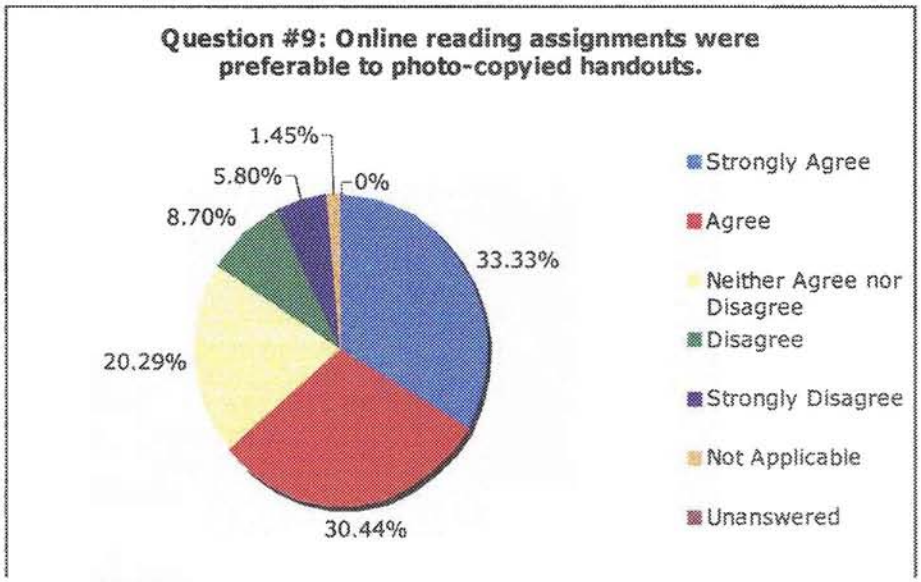
The data above indicates that students used the Blackboard learning system frequently and that it helped them to be more organized about their class materials and assignments. Although the level of motivation for completing homework was not as substantial as the reported use of the system, it did indicate a high level of awareness on the part of student respondents regarding homework related issues. Most importantly, students indicated a very high level of agreement regarding the usefulness of Blackboard as a resource for keeping track of course related assignments when they were absent. In fact, this has generally proven to be a feature of the system that is positively regarded by both students and teachers alike. Overall, student responses

demonstrate that student participation in class related activities has increased, while providing them with the resources necessary for developing the management skills that will help them to become more responsible and independent learners.

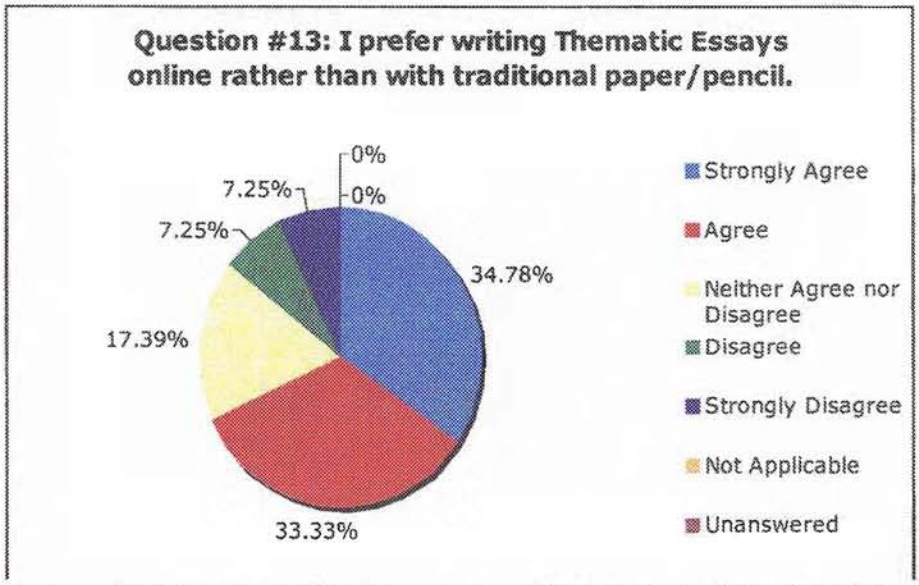
Evidence of Student Interest in Specific Tasks on Blackboard

The Blackboard learning system allows for a variety of assessment techniques, including, essay writing, test taking, and other computer or web based activities. Throughout the 2005-2006 school year, students were asked to participate in these electronic assignments and assessments. The use of computer-based writing for Regents style essay assessments was one area that was worthy of further exploration. Computers offer students tools that can enhance the quantity and quality of their writing. Additionally, with Document Based Questions, the ability to employ stunning color graphics, maps, and even video clips, has the potential to engage student interest in an activity that does not usually generate much enthusiasm. Furthermore, the availability of video materials through the UnitedStreaming website allows for an opportunity to further enrich student learning by providing them access to a vast collection of on-line videos. Finally, traditional worksheets and readings were easily converted to electronic format and made available to students in the Blackboard course web site. As a result, the Blackboard initiative resulted in less photocopying, less waste, and less cost.

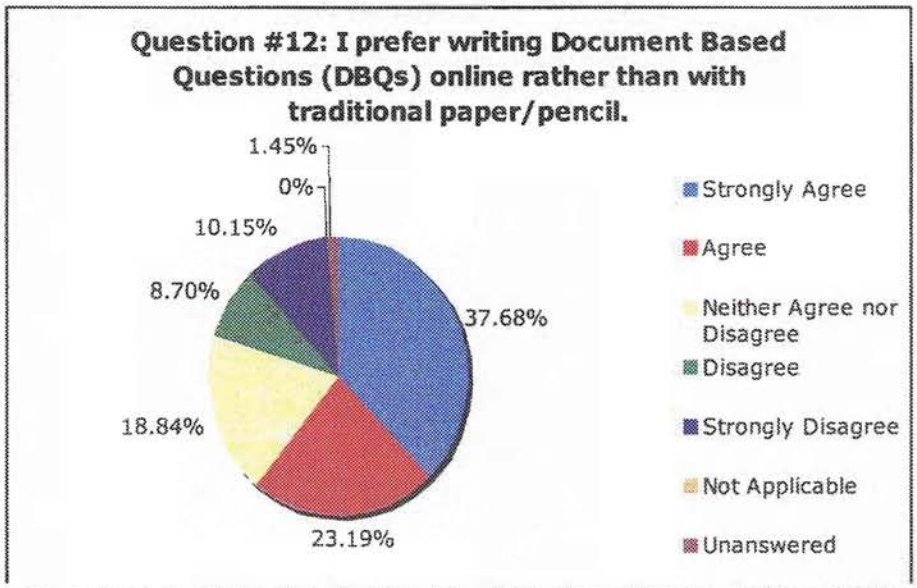
Students were asked to state the degree to which online reading assignments were preferable to photocopied handouts. 63.77% of the respondents indicated that they would agree or strongly agree that online reading assignments were preferable to photocopied handouts, while only 14.49% disagreed with the statement.



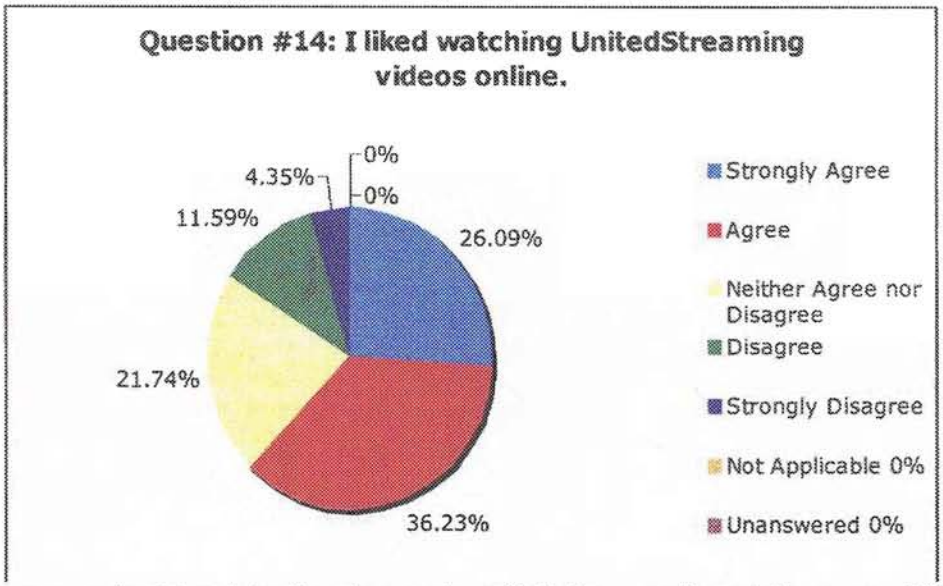
Students were asked to state the degree to which they preferred writing Thematic Essays online rather than with traditional paper/pencil. 68.12% of the respondents indicated that they would agree or strongly agree that they preferred writing Thematic Essays online, while only 14.49% disagreed with the statement.



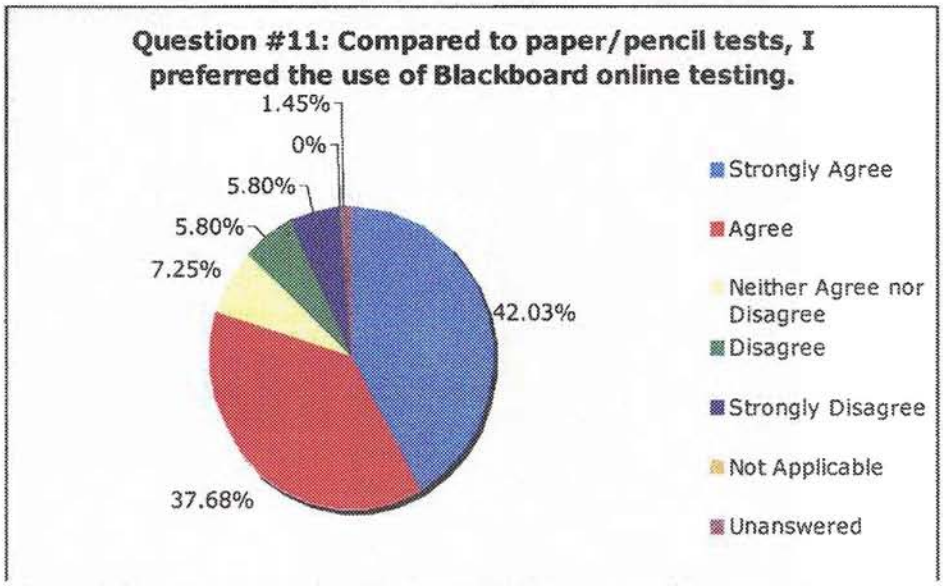
Students were asked to state the degree to which they preferred writing Document Based Questions (DBQs) online rather than with traditional paper/pencil. 60.87% of the respondents indicated that they would agree or strongly agree that they preferred writing DBQs online, while only 18.84% disagreed with the statement. However, 18.84% neither agreed nor disagreed with the statement.



Students were asked to state the degree to which they liked watching UnitedStreaming videos online. 62.32% of the respondents indicated that they would agree or strongly agree that they liked watching UnitedStreaming videos online, while only 15.94% disagreed with the statement. However, 21.74% neither agreed nor disagreed with the statement.



Students were asked to state the degree to which they preferred the use of Blackboard online testing to paper/pencil tests. 79.71% of the respondents indicated that they would agree or strongly agree that they preferred Blackboard online testing, while only 11.59% disagreed with the statement.



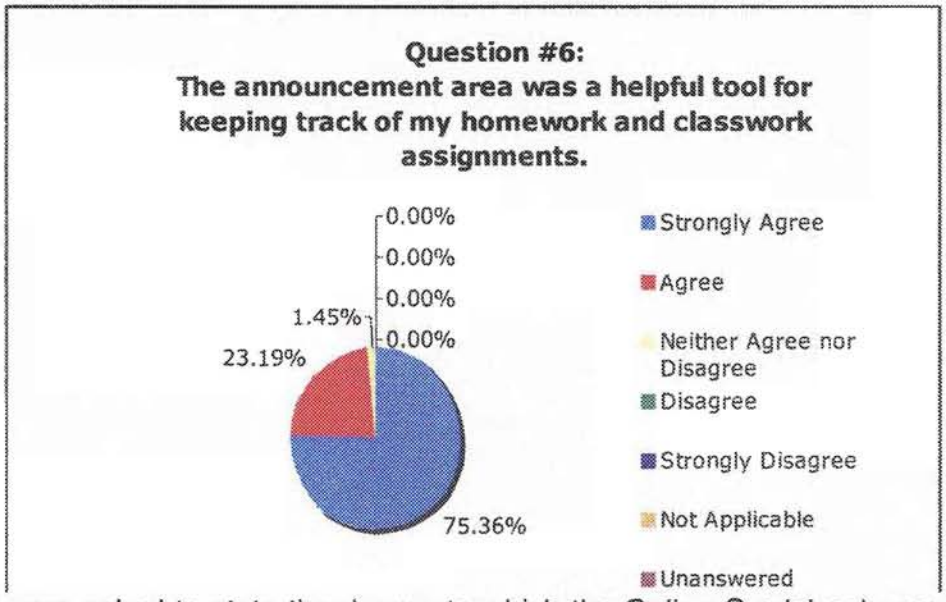
The data above indicates a moderate level of interest on the part of students regarding essay writing and test taking. I suspect that the traditional task of essay writing is simply not interesting for most 9th grade students. However, a response of two-thirds does not constitute a lack of interest. The data also suggests that students may be less inclined to read via a computer monitor or that they may simply be tactile in their need to read a page, packet or book. The response to the question about video may be related to technical difficulties encountered while using UnitedStreaming. The 2005-2006 school year was the first year that I used the UnitedStreaming video service extensively. Students without cable or DSL high speed were forced to have to view the videos at

school during learning labs or after school. This issue is still an ongoing concern and needs to be addressed further during the 2006-2007 school year. The high level of agreement regarding online testing is related specifically to Regents-style multiple-choice style tests conducted on Blackboard. Students have voiced their preference for this type of assessment in the past, and their responses in the survey confirm my observations. The quality of the graphics, ease of use, and immediate feedback, are all features that students have described as positive aspects of the Blackboard system. Although overall student responses do not reflect a high level of interest in these tasks, it is worth noting that their affirmative responses far out weigh the negative, and given 80% agreement on test taking, it is reasonable to suggest that Blackboard and its assessment features, contributed to maintaining and increasing that interest.

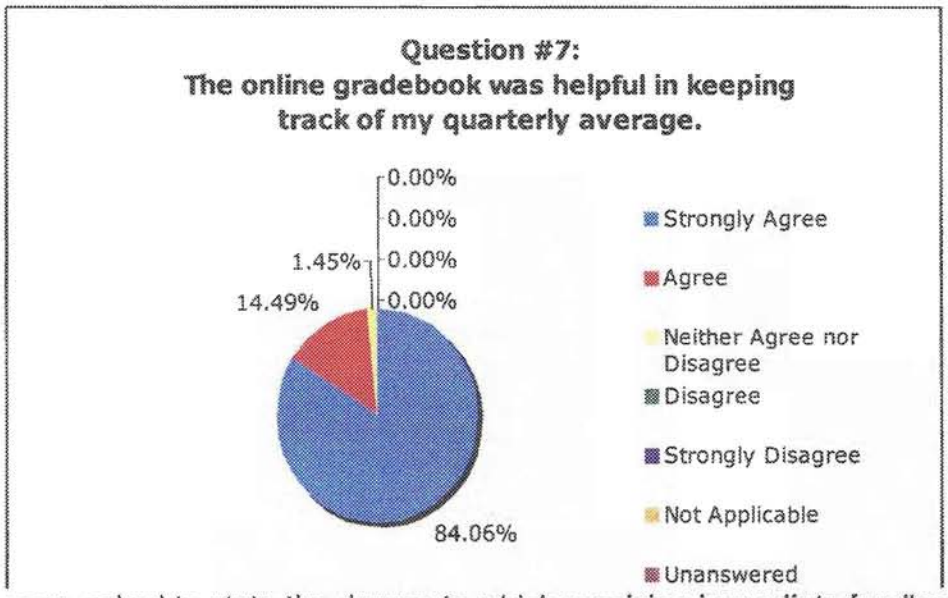
Specific Student Feedback on Blackboard Features

Three primary features of Blackboard have been assessed separately from all others: the Announcement Area, Online Gradebook, and immediate feedback feature of test and quizzes. It was expected that these features would be looked upon favorably by students. The data collected confirms this expectation.

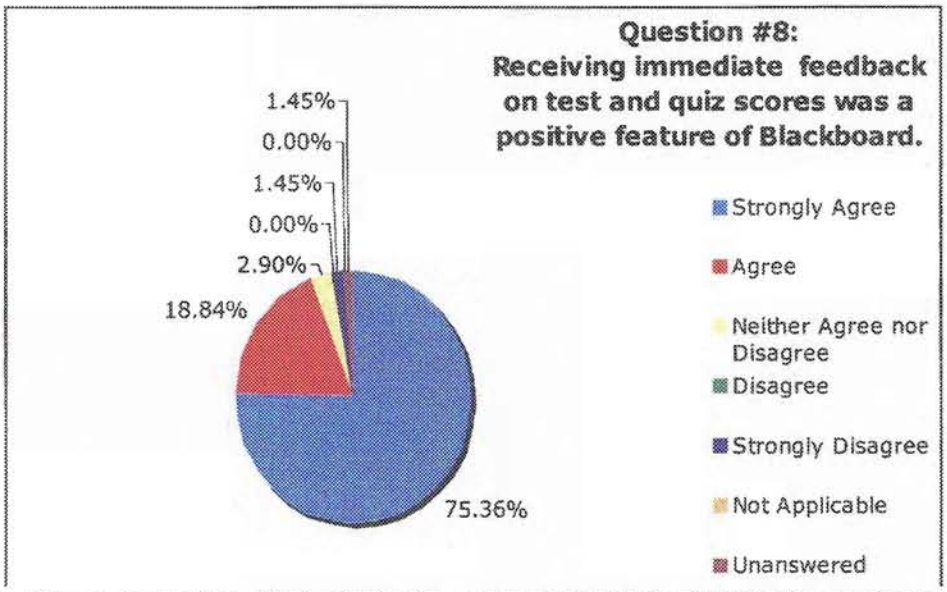
Students were asked to state the degree to which the Announcement Area was a helpful tool for keeping track of their homework and class work assignments. 98.55% of the respondents indicated that announcement area was a helpful tool, while 0.00% disagreed with the statement.



Students were asked to state the degree to which the Online Gradebook was helpful in keeping track of their quarterly grades. 98.55% of the respondents indicated that gradebook was helpful, while 0.00% disagreed with the statement.



Students were asked to state the degree to which receiving immediate feedback on test and quiz scores was a positive feature of Blackboard. 94.20% of the respondents indicated that immediate feedback was a positive feature, while 1.45% disagreed with the statement.



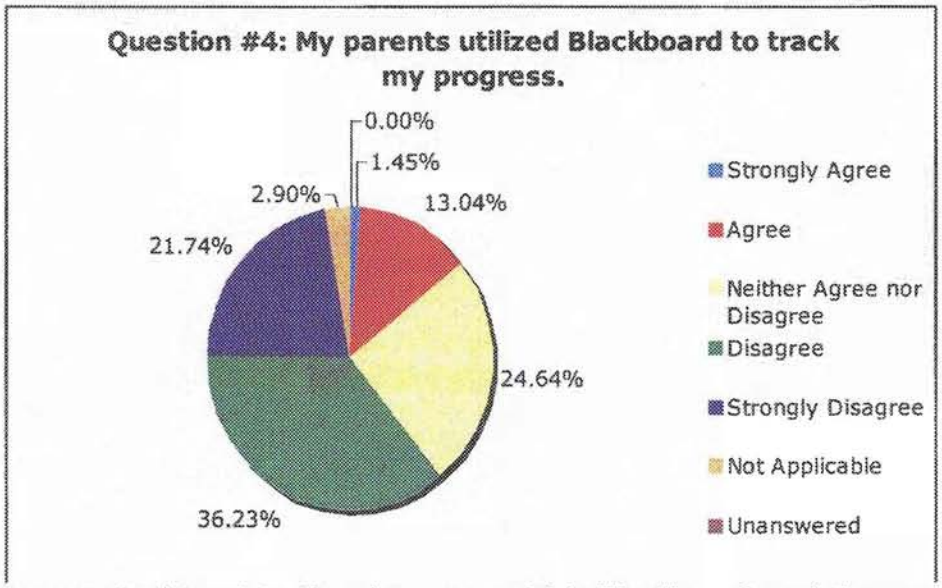
The data above indicates that students overwhelmingly found these features to be useful. In fact, it is the Announcement Area and the Online Gradebook which consistently appear in the Blackboard tracking statistics as the two most frequently visited places on the course website. The Announcement Area alone plays the most significant part in helping students to stay in touch with daily class activities, assignments, and homework. The gradebook, coupled with the immediate grading and posting of grades into the online gradebook, help to keep students informed about their progress. The immediate feedback they receive helps them to be more responsible for planning and coordinating their studies, both inside and outside of class. The gradebook

is available 24 hours a day, seven days a week, as a result they, and their parents, can track their daily progress. These three features alone make the Blackboard System a positive addition to any course being taught.

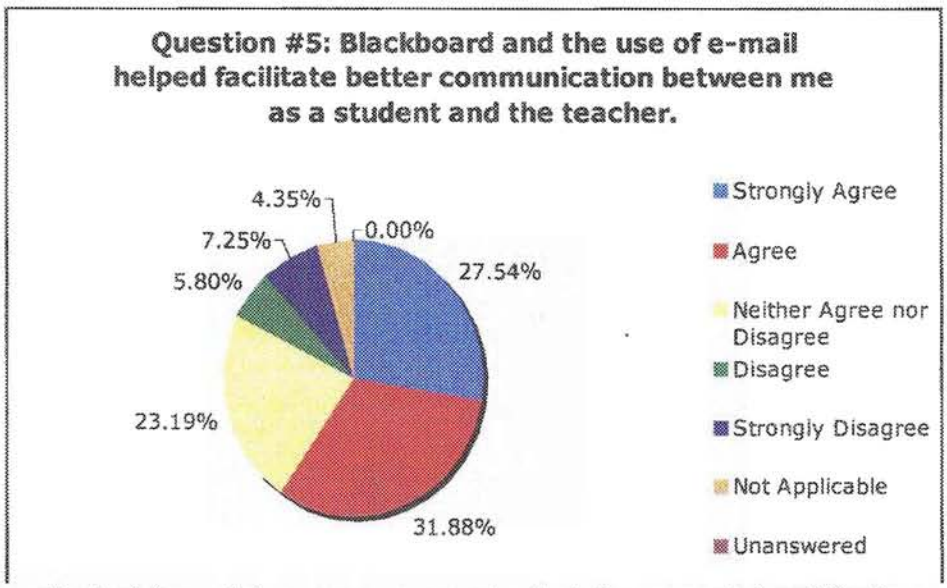
Areas Needing Evaluation

The survey data identified two specific areas that are in need of further evaluation. Parental use of the Blackboard system and student use of e-mail. Both of these issues were areas that had been initially targeted as important parts of the initiative to implement Blackboard in 2005-2006.

Students were asked to state the degree to which their parents utilized Blackboard to track their progress. 14.49% of the respondents indicated that their parents used Blackboard to track their progress, while 57.97% disagreed with the statement. 24.64% neither agreed nor disagreed.



Students were asked to state the degree to which Blackboard and the use of e-mail helped facilitate better communication between themselves and the teacher. 59.42% of the respondents indicated that Blackboard and the use of e-mail helped facilitate better communication, while 13.4% disagreed with the statement. 23.19% neither agreed nor disagreed.

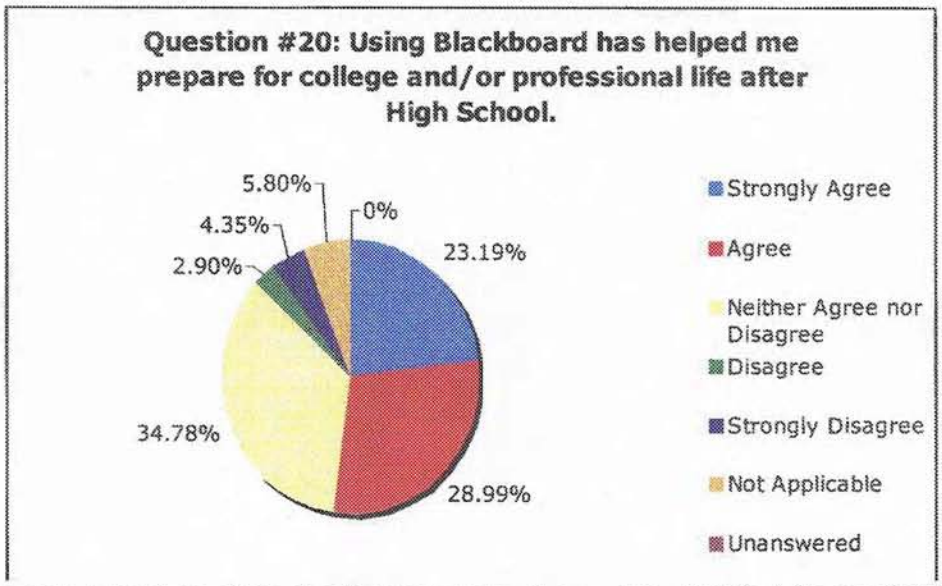


The data collected from this survey suggests that the parental notification sheet that was sent home failed to accomplish its purpose - to notify parents of the existence of Blackboard and the necessary login information required by parents to access their child's account. Future efforts will need to include direct communication with parents regarding information about accessing Blackboard and a basic tutorial on its features. Although e-mail was used by many students, some students did not use e-mail as a means to communicate with the instructor. Although Blackboard offers several options for managing e-mail within the Blackboard course management area, the system to date is somewhat cumbersome and still requires a student to provide an active e-mail account. Acquiring accurate information from students regarding their e-mail address is not always possible. Hence, the full utilization of those features is best postponed until a more reliable process can be established.

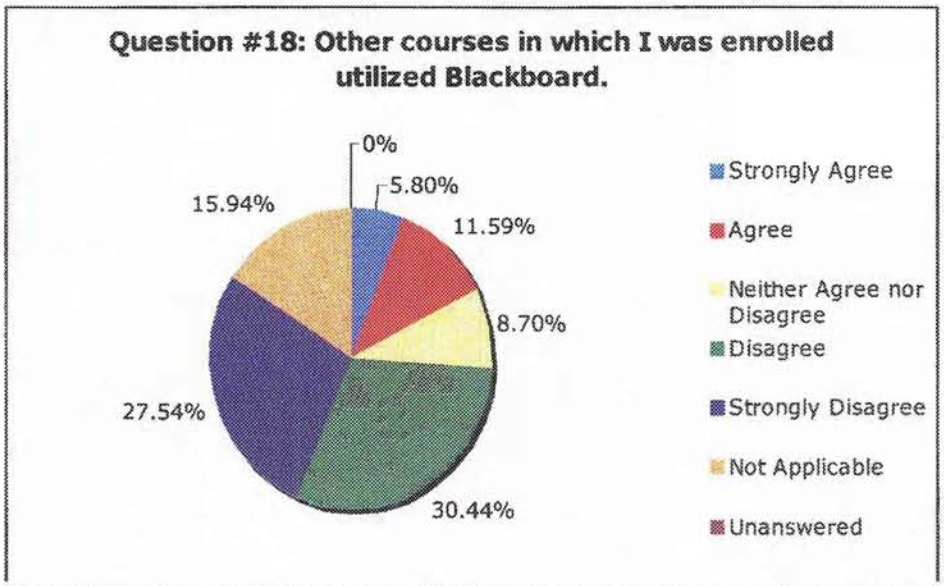
Recommendations for Continued Use and Expansion of Blackboard in the High School

Students were provided the opportunity within the survey to express their thoughts about Blackboard as a school wide resource and their recommendation for its continued or expanded use. The data below reflects their concerns.

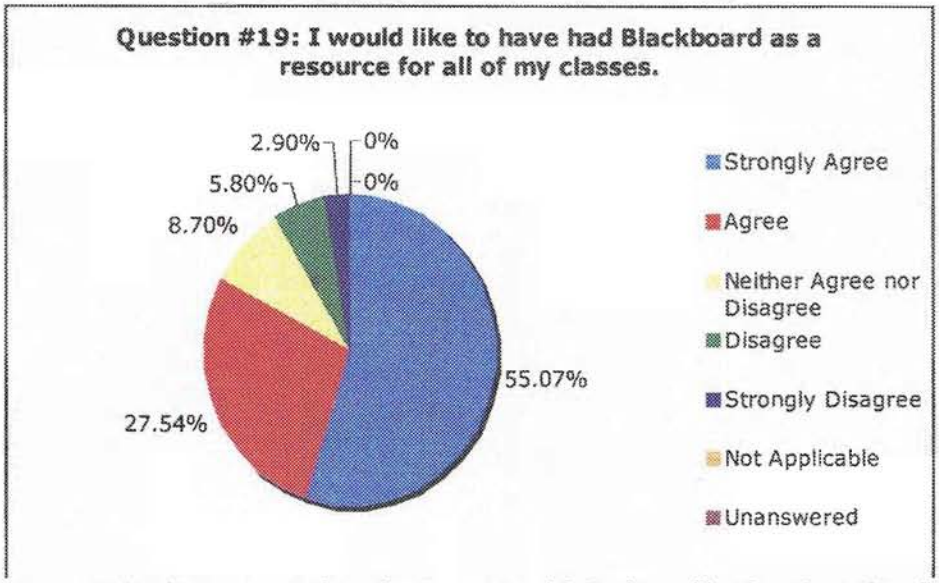
Students were asked to state the degree to which using Blackboard had helped them prepare for college and/or professional life after High School. 52.17% of the respondents indicated that Blackboard had helped them prepare for college and/or professional life after High School, while 7.25% disagreed with the statement.



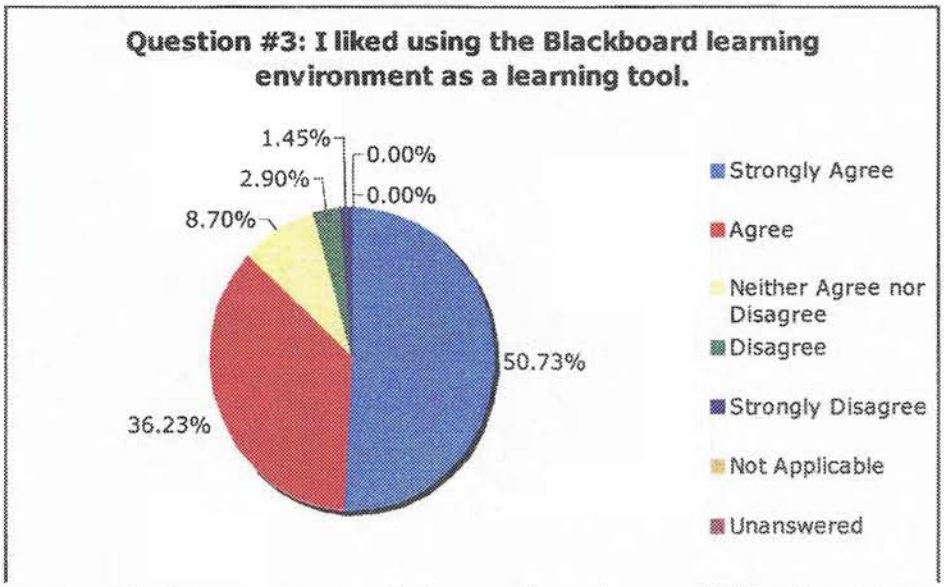
Students were asked to state if other courses they were enrolled in used Blackboard. 17.39% of the respondents indicated that Blackboard was being used in other courses, while 57.97% disagreed with the statement. 15.94% chose not applicable.



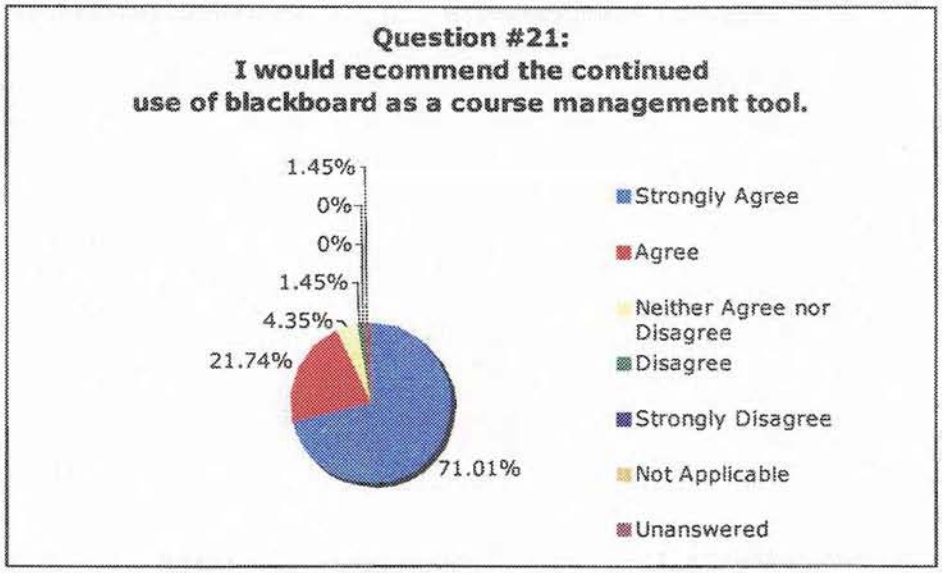
Students were asked to state if they would like to have Blackboard as a resource for all of their classes. 82.61% of the respondents indicated that they would like to have Blackboard as a resource for all of their classes, while 8.70% disagreed with the statement.



Students were asked to state the degree to which they liked using the Blackboard learning environment as a learning tool. 86.96% of the respondents indicated that they liked using the Blackboard learning environment as a learning tool, while 4.35% disagreed with the statement.



Students were asked to recommend the continued use of Blackboard as a course management tool. 92.75% of the respondents recommended the continued use of Blackboard as a course management tool, while 1.45% disagreed with the statement.



The data above clearly indicates that students found Blackboard to be a worthwhile resource. They recognized that it has value in the classes in which they are asked to employ its use. They also recognized that in classes where it isn't an available resource, they are at a disadvantage. Although they do not recognize the significance of Blackboard as a preparation tool for their post-secondary educational endeavors (they are 9th graders after all), they are aware that their post-secondary life will involve technology in one form or another. Most significantly, the students expressed overwhelming support for continuing the use of the Blackboard learning system. They enjoyed using it as an educational resource and would very much like to see it offered as part of their overall educational experience.

Conclusion

The responses from the student survey clearly indicate that the Blackboard initiative in my Global History and Geography 9 course has been a successful attempt at infusing curriculum and assessment with an e-learning approach to instruction. The Blackboard learning system has facilitated that approach in many ways. Student reaction to the web-based technology is overwhelmingly positive and supportive of its continued use and expansion. Although there are some areas that need further exploration, and additional piloting of the system needs to occur across other disciplines, this initiative has laid the foundation for moving instruction and assessment in the Burnt Hills–Ballston Lake school district closer to achieving the district goals of preparing our students for life in the technological world of the 21st century.