# Blackboard Management and Professional Development Strategies to Augment Teaching and Learning

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**Abstract**

In committing to provide a learning management system (LMS) that integrates supplementary uses for campus constituents, a university must analyze the opportunities and challenges associated with technology advancements. In addition to the primary uses of a learning management system, university administrators, faculty and staff have incorporated a diverse array of applications for Blackboard©. This paper introduces the innovative uses of an LMS among the campus community. The LMS resources available include the Content System, Electronic Reserves, e-Portfolios, Building Blocks, and Professional Development and Training provisions.

**Keywords**: Blackboard, learning management system, technology, integrative approaches Blackboard Management and Professional Development Strategies to Augment Teaching and Learning

## Introduction

A learning management system may be used for a variety of purposes on a university campus. Primarily, the Blackboard® (Bb) Learning Management System (LMS) has been used significantly to support the teaching and learning process in higher education (Amey & VanDerLinden, 2003). As Blackboard® developers implement additional resources and tools into the current structure of the learning management system, the software changes. As the design and usage transform, so do the extensive uses of the system (Morgan, 2006). This change has already begun among the faculty, staff, and administrators at California State University, Fullerton.

The purpose of this article is to convey the variety of ways that Blackboard® is utilized among the colleges, departments, administrators, faculty, staff and students at the university. After completing comprehensive analyses of the data available in the Blackboard® Content System, other layers of the LMS will be discussed.

First introduced to the campus as an alternative to WebCT in 2000, the Blackboard® LMS was not well received. The lack of enthusiasm among faculty was due primarily to the previous familiarity of the existing LMS and the instability of the new LMS when it was initially available. Change is difficult to manage, and those loyal users of Web CT did not adapt to the new LMS format. However, when WebCT was no longer available, the transfer to Blackboard® was inevitable. As new modifications became available in Blackboard®, such as the Content System, building blocks, and scheduled upgrades, the campus administrators adapted the changes and made the resources an available priority for those who teach on the campus.

The most apparent modification that occurred to the Blackboard® system was that it was added to the locally developed University Portal. This integration and availability of Blackboard® from the University Portal addressed the need to maintain the web based program within the context of the existing software that was implemented campus-wide. A single sign-on through the portal provided students, staff, and faculty streamlined access to the Bb LMS. In addition to the change in the user interface, the LMS is used to support teaching and learning. The Community System, Content System, Electronic Reserves, Electronic Portfolios, Building Block Usage, and the Training and Professional Development implementation all comprise the multi-layered approach to the comprehensive use of the Blackboard® LMS. The remainder of this paper details the specific uses of the aforementioned Blackboard® areas among the campus faculty, staff, and administrators.

**Community System**

The addition of the Community System within Blackboard® provided a web based site where participants could utilize any of the LMS features to collaborate and communicate with members. Unlike the courses created in Bb, the communities do not expire and enrollment is open to faculty, students, and staff. The Community System was first available in spring 2006. By the summer 2008 semester, 199 communities had been created for faculty, staff, and student organizations on campus. In an effort to introduce the use of the Community System to faculty, the Faculty Development Center offered a Technology Institute during the summer 2006 semester that featured the use, implementation, and creation of the Community System to faculty. This institute offered faculty who participated hands-on training and a monetary stipend. The faculty learned how to use and implement the Community System in an individual manner that supported their research interests, teaching, or departmental needs. The training program offered was well received, as demonstrated by the workshop attendance and subsequent feedback. The training sessions were filled to capacity with interested participants. As a result of offering the stipend and the training, additional faculty and administrators were able to view the potential for using the Blackboard® Community System as a method to create an online community.

The training and the implementation of the Community System supports the teaching and learning process. Numerous organizations on campus have taken advantage of this collaboration tool including the departments of Student Affairs, New Student Orientation, Help Desk, Library & Information Commons, various steering committees on campus including Western Association of Schools and Colleges, Dean of Students, Division of Financial Aid, Computer Lab, and Information Technology Committees. Students readily make use of the Community System as well. Biology Graduate Students, Student Tutoring Center, Student Doctorate of Education Organization, and the Freshman Program Online Community are among the many student organizations that have created a community.

The Student Affairs Division on campus uses the Community System as an information repository for incoming students and as a method of contacting and supporting new student services. It is used as a collaboration tool to maintain contact with and provide information to new students on campus. Numerous departments on campus are using the Community System to collaborate among administrators and faculty. One prime example is the use of a Community System to manage the paper work associated with the accreditation process. By using a Community System, the documents are readily available and located in a secure and accessible location. Another department uses the Community System to survey their incoming students about their technology competencies and ability levels. One other method for incorporating the Community System is as a course collaboration tool among faculty. This is an information repository where syllabi, handouts, documents, articles, and grading policies are all centrally located and available to faculty. Students readily use the Community System to communicate with other students, search for possible employment and internship opportunities, and receive current information about their majors.

Further use of the Community System includes communities created to share emerging technologies among faculty and staff. As noted by Gustafson (2004), students expect to learn in an environment that supports modern and sophisticated technologies. In order for faculty to meet the expectations of their students, they too need to be educated about emerging technologies that are beneficial to the education process. One newly created community was created based on podcasting. The community was created to share web resources, articles, and host discussion forums about podcasting challenges and success stories in the classroom. The individuals who received training in podcasting are dynamically enrolled

into the podcast community where additional resources and directions were available to aid in the creation process. Another technology that was introduced and distributed using the Community System was the Respondus Users' Community. This community provided interested users the opportunity to enroll in the community using the self-enroll option. Once part of the community, faculty members were able to download the Respondus software and view tutorials and supplemental materials related to the use and implementation of the software.

Campus-wide event planning and committees, such as WASC Committee and the Campus Web Designers group, actively engage in the use of a community system. The feature enables the committee members to plan, share, and distribute information and resources. The tools alleviate the need to schedule information only meetings, and the committees are able to read, plan, and discuss prior to attending a face-to-face meeting using the online collaboration tools available.

Another use of the Blackboard® Community System is that offered by the Department of Modern Languages. This department uses the system to display content in various language formats including Chinese, Japanese, Spanish, French, Italian, Arabic, Korean, Persian, Portugese, Vietnamese and German. Most of these languages are supported by Bb and create a dynamic environment where students and faculty may practice learning a foreign language by sharing audio and video files.

**Content System**

Another feature available at the university is the Content System, which includes a virtual hard drive that enables faculty to upload and store files. The virtual drive is available to all members of the campus community. Presently, each student has a storage capacity of 50 megabytes, and staff and faculty may store up to 75 megabytes. Provisions are in place to expand the storage quota up to one gigabyte upon request.

Various department personnel use the content system to share and manage institutional content among staff members. For example, the College of Engineering and Computer Science is using it to distribute sensitive documents among senior staff members. The university library is also utilizing the Content System to upload and share content in a secure environment.

Many university administrators use the virtual hard drive as a secure platform to store and develop departmental documentation. The files may be of a sensitive nature, and with the added layers of security featured in the virtual hard drive the system provides a secure drive for administrators to use. Faculty, staff, and students find that the use of the virtual hard drive is advantageous. This is clear by looking at a steadily rising number of users storing content on their virtual drives and an increasing number of requests for more space.

The area is a free space to place personal and educational related content. By placing files within the virtual hard drive, faculty can create links to multiple courses. This makes modifying files simple and results in a streamlined process with no redundancy of content. Furthermore, faculty may make the content available to off-campus individuals or groups by sending them content "passes." Staff members take advantage of the virtual hard drive as a place where they may share documents within work groups and for storage space. Students use the space to store their projects, assignments, documents. The storage space eliminates the need to carry and transfer files using flash drives or CDs. Students who are taught about the virtual hard drive in their courses have expressed appreciation to their instructors for informing them of this resource. Students use the virtual drive to collect and store research papers along with documents that they will place into their collective portfolios.

**Electronic Reserves**

The electronic reserves or e-reserves was implemented at the university though the library, which has replaced its previous e-reserves system with the Blackboard® E-Reserves. This enables faculty to seamlessly integrate their reserves into their Bb courses. Every semester, library staff place content on E-Reserves for over 200 courses, which is made available using the Blackboard system. Having the E-Reserves content available on Bb eliminates the need for the library to maintain additional resources to store this content elsewhere and provides seamless access to students through Blackboard®. A variety of formats are available through the e-reserves, including videos, audio recordings, journal articles, e-books, and links to the library databases.

### Electronic Portfolios

An additional element that is widely used in Blackboard® is the electronic portfolio feature. The e-portfolio tool enables users to create a self contained electronic version of their files that may be exported for future use. They may share their portfolios with users on campus or make it available to future employers or coworkers, etc., off campus. With the new version of Blackboard®, a community may create personal e-portfolios or basic e-portfolios, each of which has unique characteristics.

The e-portfolio tool is used by the campus community, including students, staff, and faculty. Although the primary purpose was intended for use among students, this tool is quite versatile and enables various constituencies to incorporate the instrument for numerous purposes. Students use the tool to fulfill course requirements and create a self contained web page that displays evidence of their learning throughout the semester. Students can create multiple e-portfolios. They may create e-portfolios for future and current employers, courses, and graduation requirements to demonstrate their abilities and to display their competencies. Faculty members format their e-portfolios to demonstrate progress for the retention, tenure, and promotion process. Additionally, faculty members may compile their course syllabi, current curriculum vitae, and a professional or personal homepage using the e-portfolio tool. Staff members realize that they are able to continuously update their resumes using the e-portfolio tools. Work related projects can be created in a web based format that staff can quickly email and share with others. Furthermore, staff may display their professional development milestones in the form of e-portfolios.

### Building Blocks

As technologies continue to advance and change the way that we complete tasks (Roblyer, 2006) Blackboard® developers continue to modify the available offerings to meet changing needs of universities. This includes the addition of building blocks that are used to enhance the purposes of Blackboard®. Two primary areas that have been utilized at the university are the community and assessment building blocks used to increase functionality. The beta testing of building blocks such as Elluminate® or I-Linc® enable faculty to test the software and collaborate with their students online using audio and video. Should faculty elect to support these products after the conclusion of the trial period, the university will seek out the necessary provisions to acquire the software. Another building block in the testing stages is a Podcasting Building Block, which adds the ability for instructors to add podcasts seamlessly within their Blackboard® course.

### Professional Development

Blackboard® LMS training for faculty takes place at the Faculty Development Center (FDC), which provides training and support for faculty and staff using Bb. In addition to basic introductory training about the functionality of Blackboard®, the consultants at the FDC offer advanced trainings about pedagogy and three certificate programs that are delivered, managed, and supported through the Bb LMS. Launched first during the fall semester 2006, more than 78 faculty members have registered to participate in the certificate program. The newest of these certificate programs is the Blackboard Certificate Program. The purpose of the program is for individuals to learn about pedagogy associated with teaching in a web based environment. The Blackboard Certificate Program consists of ten sessions, the creation of a training course, and a formal presentation and the conclusion of the program.

The Teaching and Learning Academy Certificate program (TLAC) allows participants to complete workshops and lectures related to the teaching and learning process. The program has been operational for over 8 years, and recently the inclusion of a Blackboard® community has promoted communication among those individuals participating in TLAC. As noted by Nichols (2004), establishing an online community where faculty may collaborate virtually is an essential component in building positive e-learning practices among individuals. The TLAC program coordinator uses a Blackboard community to communicate with instructors. The TLAC participants receive updates and supplemental resources that support content reviewed throughout the workshops.

The Online Teaching Certificate program is facilitated through a Blackboard® course and the Community System. All of the content related to the Online Teaching Certificate is distributed and demonstrated using Blackboard®. This program is unique because it provides participants with the opportunity to participate in an online course and learn about instructional strategies related to the virtual environment. As detailed by Grasha and Yangarber-Hicks (2000), providing faculty with concrete learning experiences

can be a valuable experience for their future teaching practices.

## Conclusion

In conclusion, it is obvious that Blackboard® has come out of the box for the university community. It is being utilized not only to enhance teaching and learning within and outside the realm of a classroom, but also for the secure distribution and sharing of content and other information, communication, and establishing web based communities. Furthermore, it is used to promote and introduce other technologies on campus, such as podcasting, audio and video conferencing, new software, assessment tools.

As described in this paper, the Blackboard® LMS has many uses that support teaching and learning. It would be beneficial to utilize this resource for multiple purposes since Blackboard® is readily available, simple to use with training, and can be used to support faculty, staff and students on campus.

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