

Choosing Between Blackboard and Moodle for Coastal Carolina University

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Coastal Carolina University (CCU) is a mid-sized academic institution located in the southeastern United States. CCU has approximately 13,000 undergraduate and 1,500 graduate students enrolled in 49 undergraduate degrees, 42 masters' degrees, and 2 doctoral degrees. The university offers more than 500 online courses and several fully online degree programs. Given the priority university leadership has placed on expanding these programs and the number of online courses in each academic department, this expansion is expected to continue. All of the university's online courses are housed in the university's LMS. The university also offers approximately 3,500 face-to-face courses, of which approximately 1,700 courses utilize the LMS in some capacity ranging from grade management to course content hosting. Serving as more than a mere a course repository, the LMS is the backbone of online course offerings at the university and impacts approximately half of the university's face-to-face courses, as well.

Since 2010, the university has utilized Blackboard Learn 9.1 as its LMS solution. Blackboard Learn comprises the university's course management system and allows university faculty, staff, and students to access course materials and submit assignments either on or off campus. Although it initially chose a managed hosting plan, CCU has self-hosted Blackboard since 2011. To host Blackboard, CCU has 5 application servers, 4 database servers, and 4 files storage servers, all of which are configured as redundant systems. A redundant system has more than one of the same capacity components to immediately take over the system function if the primary component fails (National Instruments, 2008). The daily operations, updates, and maintenance of Blackboard Learn 9.1 is currently supported by a team of 2 application administrators and a half-time programmer. Blackboard Learn integrates with the campus student information services (SIS), single sign-on service, and other computerized systems that track and

store user data at the university. The integration of Blackboard Learn with the other campus systems has been relatively successful and overall system downtime has been minimal over the last 9 years.

The university is nearing the end of a three-year contract with Blackboard, Inc., which expires on July 1, 2016. In July 2015, Blackboard announced its intention to migrate all of its LMS services to a cloud-based platform, which it has dubbed Blackboard Ultra. Blackboard has stated that it will support Learn 9.1 indefinitely, although the initial announcement was that it would support Learn 9.1 for one year after the release of Blackboard Ultra. So far, the development of Ultra has been plagued by delays and technical issues, and the LMS administrative team does not feel confident that Ultra will be ready for a successful implementation in 2016. There are further concerns that Blackboard would not be contractually obligated to support past platforms once the current contract is over without significant renegotiations of the terms of the contract, and that once the LMS migrates to the cloud-based Ultra, the university will have significantly less control over the operations (such as scheduled downtimes, upgrades and updates) of the LMS. Given the uncertain future of Blackboard Learn 9.1 support and the leadership's discomfort with a cloud-based LMS, the university is concerned about renewing its contract with Blackboard and has decided to explore other LMS options. The university leadership has formed an LMS selection committee which includes members of leadership, faculty, and the LMS manager and has been tasked with performing an analysis to determine the feasibility of renewing its contract with Blackboard or switching to an alternative LMS.

After extensive analysis and a time-intensive review process, the task force has narrowed the university's choices to maintaining its contract with Blackboard or migrating the university's

course management functions to Moodle. While Blackboard Learn 9.1 is a proprietary, subscription-based product of Blackboard, Moodle (Modular Object-Oriented Dynamic Learning Environment) is an open-source platform that requires no licensing fees for its basic functions. Since Moodle's development in 2002, Moodle users have grown to over 68 million in number, making it the most widely used LMS platform in the world (Moodle, 2012). Moodle has an extensive, well-established network of users who share support information with the Moodle community at large. Created by Martin Dougiamas at Curtin University in Western Australia, Moodle is designed to facilitate a constructivist approach to learning (Moodle, 2012).

Needs Analysis & Solution

The LMS at Coastal Carolina University functions as more than a simple course repository. It records and stores many aspects of students' learning activities, including grades, attendance, assignments, and assessments. As such, it is imperative that the LMS platform used by the university provide seamless integration with university SIS and other administrative systems. The university leadership has also placed a premium on controlling scheduled downtimes and upgrades to the LMS. Critical functions of the LMS from the university's perspective are identified in Table 1.

Table 1

LMS Features Critical for Meeting University Needs

Feature	Relevance to University Needs
Intuitive User Interface	More user-friendly, intuitive interface for the LMS means higher user satisfaction and lower frustration

SCORM compliant to facilitate existing course migration	A SCORM compliant LMS would make moving the thousands of courses and course content simpler and less time consuming.
Video assignment submissions supported	The Online Accelerated Program offered by the Nursing School at CCU uses video assignments extensively, so this function must be supported in the LMS
Intuitive communication tools for instructors and students	Communication and presence is one of the most overlooked aspects of online courses, and by choosing an LMS that has intuitive tools for communicating, the university will increase the chances that instructor-student and student-student communications are emphasized and utilized.
Supports importing tests from Microsoft Word	Faculty members often prefer to create their tests in Microsoft Office applications. Importing these documents smoothly into the LMS is an important function for faculty members' satisfaction with the LMS. This integration could be accomplished through a third-party application, such as Respondus.
Supports PC and Mac users	There are many Mac as well as PC users on campus. The LMS needs to support both types of users to be effective.

Includes basic analytics, at minimum ability to track student activity in courses	Faculty often utilize the tracking of student activity within courses to settle grade disputes and other student-related issues. The LMS needs to provide this function.
Supports current university SIS (Banner)	The LMS needs to integrate easily with other campus-wide systems, such as Banner. This functionality allows the university registrar other offices to regulate appropriate student access to courses and other LMS functions.

Implementing a new LMS, especially after using the same platform for 9 years, is not a small undertaking. The selection committee is aware that it will take a significant effort to migrate the university's assets, courses, and systems to a new LMS and will incur some additional costs. Table 2 details which aspects of platform cost will affect the university's selection of an LMS.

Table 2

Cost Details Impacting University LMS Selection

Cost	Relevance to University Needs
Cost of implementation	All university expenses are encompassed in the annual budget. The cost of implementation will need to be considered and approved in order for the funds to be allocated. The funding available for implementation of the LMS is very limited.

Cost of maintenance	The university currently maintains a budget item to cover the expenses of maintaining the LMS. The goal of university leadership is to decrease or at least not increase the budgeted amount for LMS maintenance regardless of the option chosen.
Cost of training	End users of the LMS require ongoing training. The implementation of a new LMS would require additional resources, funds for which would need to be approved and budgeted.
Cost of training	Includes time involved in training. Training would include faculty and staff using the LMS for course delivery, online learning support staff, the LMS administrative team, and the student IT support organization.
Downtime for implementation	Due to the number of online programs offered at CCU, the window to implement a new LMS would be extremely limited and time sensitive. Any extensive downtime for the system is required to take place during the Winter Break (approximately December 15 – January 10).
Reliability of LMS, minimal unscheduled downtime	Given the large number of users impacted by unscheduled downtime, it is imperative to the university that the LMS be reliable and have minimal unscheduled downtime throughout the academic calendar.

Ability to control downtime, updates, and upgrades internally	Due to the rapid growth of online programs at CCU that follow nontraditional academic schedules, the selection committee has prioritized university control of downtime, updates and upgrades associated with the LMS platform.
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Recommended Solution

CCU needs a robust LMS solution that can support its growing online presence. Based on this analysis, the LMS selection committee is recommending that the university migrate to Moodle. Moodle and Blackboard Learn 9.1 offer very similar features and user experiences, as well as comparable prices of operation. The two platforms are differentiated by the level of support available for each one and the level of autonomy the client organization is afforded by each one. Moodle is an open-source platform, which means there is no vendor-supplied support plan, although an extensive online presence and network of active administrators is available, as well as third-party Moodle support services which can be purchased in the future. Blackboard Learn's licensing fees include software support, but the tenuous nature of Learn 9.1's future makes organization autonomy an uncertain proposition. The recommended solution for CCU is Moodle due to the similarity of features without a proprietary agreement and the level of control that Moodle will allow CCU to retain over its content, user information and system operation.

Cost-Benefit Analysis

Purpose

The purpose of this cost-benefit analysis is to determine whether CCU should continue to utilize Blackboard Learn 9.1 for its LMS or migrate to Moodle.

Overview

The following is a brief overview of the comparison between Blackboard and Moodle.

- Responsible organization: CCU
- Project title or decision question: Maintain Blackboard Learn 9.1 or Migrate to Moodle
- Description: This analysis examines the costs and benefits of continuing to use Blackboard Learn 9.1 versus implementing Moodle.
- Operational status: Blackboard is currently operating as the LMS at CCU.

Description of Alternatives Considered

The technical, functional and operational characteristics of Blackboard Learn and Moodle in relation to the university's requirements are detailed in Table 3.

Table 3

Description of Alternatives Considered

Characteristics	Blackboard Learn	Moodle
Technical	<ul style="list-style-type: none"> • CCU has chosen a self-hosted option for Blackboard Learn. The LMS team maintains and operates 4 load-balancing servers. The servers are owned by the University and do not have any further associated costs other than maintenance 	<ul style="list-style-type: none"> • Implementing Moodle requires at least one dedicated IT specialist and requires servers and hardware unless a hosting service is also chosen. Due to the fact that CCU owns four servers utilized for Blackboard, it is assumed for the purposes of this analysis that CCU will host Moodle in house as well. An

Characteristics	Blackboard Learn	Moodle
	and existing staff to program and monitor them.	additional IT specialist is recommended, given the loss of software support and the increase in CCU's responsibility for researching support issues, functionality, and upgrades.
Functional	<ul style="list-style-type: none"> • Course management tools and repository for faculty course materials. • Integrates course administration, documentation, tracking, reporting, and delivery of courses. • Allows university to offer online courses that are assimilated into the university's administrative structure. 	<ul style="list-style-type: none"> • The purpose of implementing Moodle at CCU would be to replace the functionality of Blackboard Learn 9.1 at CCU.
Operational	<ul style="list-style-type: none"> • Blackboard Learn 9.1 is licensed software which is priced based on FTE 	<ul style="list-style-type: none"> • Software support is not provided by Moodle, and existing support is largely in the form of online

Characteristics	Blackboard Learn	Moodle
	<p>(full time equivalent, an industry-standard way to measure student population).</p> <ul style="list-style-type: none"> • Software support is included in the Blackboard license. The level of support is determined by the University's contract with Blackboard. • Blackboard licensing fees include the Blackboard Learn mobile application and support. 	<p>forums shared by a large community of Moodle users.</p> <ul style="list-style-type: none"> • Moodle mobile application is included in the basic Moodle installation. • Moodle is not anticipating a major shift in software or delivery methods in the near future.

Table 4 provides further detail of the functional features of both Blackboard and Moodle. The table lists the features deemed most desirable for CCU by the selection committee, and compares Blackboard and Moodle in terms of those features.

Table 4

Comparing Functional Features of Blackboard Learn and Moodle

Feature	Blackboard Learn	Moodle
Grade management	Yes	Yes
Student roster/attendance management	Yes	Yes
Assessment implementation	Yes	Yes
Discussion forums	Yes	Yes
Lesson planner	Yes	Yes
Collaboration management	Yes	Yes
File exchange	Yes	Yes
Internal messaging (live chat, wikis, etc.)	Yes	Yes
Mobile application for instructors and students	Yes	Yes

From a functional standpoint, both platforms offer very similar features. Moodle, designed to create a constructivist learning experience, was found to be slightly more user friendly and intuitive for both faculty and student users in focus groups conducted by the LMS selection committee on campus. The comparison revealed that the systems are differentiated by their

operational aspects. The two have distinctly different pricing models (Moodle is open-source while Blackboard is proprietary) and support services available (Moodle has no vendor-supplied support service vs. Blackboard's vendor-supplied support services).

Costs

Continuing to use Blackboard Learn 9.1 entails the following costs:

- There are no development costs for Blackboard Learn 9.1, as the servers are already in place and are adequate to cover expected growth for the next 3 years.
- Operational costs are \$170,000.00 and include annual salaries for an LMS manager at \$75,000.00, one LMS administrator at \$55,000.00, and a half-time programmer at \$35,000.
- There are no non-recurring costs expected as a result of maintaining Blackboard Learn 9.1.
- Recurring costs are \$55,320.00 and include licensing fees for a one-year contract, payable to Blackboard.

A migration to Moodle entails the following costs:

- Development costs associated with Moodle would include training costs for the current LMS team to transition to Moodle as well as staff time to migrate courses from Blackboard to Moodle. Moodle offers free training modules and migration would be done on campus during normal business hours, so the university would bear the cost of staff salaries, though other job functions may suffer during the migration.
- Operational costs are \$225,000.00 and include annual salaries for an LMS manager at \$75,000.00, one current LMS administrator at \$55,000.00, one

additional LMS administrator or IT specialist at \$55,000.00, and a half-time programmer at \$35,000.

- There are no non-recurring costs expected as a result of implementing Moodle as an LMS at CCU.
- There are no recurring costs expected as a result of implementing Moodle as an LMS at CCU.

Benefits

The benefits of continuing to utilize Blackboard Learn 9.1 are:

- Maintaining Blackboard as the LMS will not require system downtime for implementation.
- Blackboard provides an advantage in the event of staff turnover and is already in use by faculty and staff.
- Software support is included in the Blackboard license, although the level of support is limited, given CCU's status as self-hosting.

Benefits of migrating the university's LMS functions to Moodle are:

- Moodle implementation will not require a licensing fee. This would result in a cost reduction for licensing fees.
- A recurring benefit of implementing Moodle is that the costs remain stable; the only costs are those associated with support staff salaries, whereas Blackboard licensing fees increase every year. Under current N.C. government employment policies, staff salary annual increases are minimal or nonexistent.

Comparative Cost/Benefit Summary

There are a variety of costs involved with the implementation and maintenance of the university's LMS. Table 5 details these costs. The development costs are none for both platforms, since both have been developed outside of the university. Operational costs are comprised of the salaries of support personnel. Non-recurring costs include costs affiliated with the implementation and initial training, including software for developing training, required for initial deployment of the LMS. Licensing fees are included in recurring costs. The annual cost as well the cost per full-time equivalent student (FTE) is provided in the summary lines of the table. The cost of both Blackboard Learn 9.1 and Moodle are detailed in Table 5 to provide a basis of cost comparison for the two platforms.

Table 5

Comparative Cost Summary

	Blackboard Learn 9.1	Moodle
Development Costs	\$0.00	\$0.00
Operational Costs	^a \$170,000.00	^a \$225,000.00
Non-recurring Costs	\$0.00	\$0.00
Recurring Costs	^b \$55,320.00	\$0.00
Total Estimated Annual Cost	\$225,320.00	\$225,000.00
Estimated Annual Cost Per FTE	^c \$15.02	^c \$15.00

Assumptions:

^a State salaries will not increase from 2015 to 2016.

^b Costs based on figures for Blackboard licensing for the University of North Carolina Charlotte (Lievertz, 2012).

^c The university's estimated FTE for 2016 is 15,000.

In choosing which LMS to implement, the CCU LMS selection committee considered the comparative benefits of Blackboard Learn and Moodle. These comparative benefits are detailed in Table 6. The benefits identified are specifically relevant to the needs of CCU rather than generalizable. The main benefits of Blackboard learn are that (1) it is the incumbent system and (2) it includes a degree of software support with its licensing fees. The main benefits of Moodle

are that (1) it does not require licensing fees and (2) it maintains control of the LMS and its content on in-house servers and with campus staff.

Table 6

Comparative Benefit Summary

	<i>Blackboard Learn 9.1</i>	Moodle
Expected benefits	<ul style="list-style-type: none"> • Will not require system downtime for implementation. • Provides an advantage in the event of staff turnover due to the availability of Blackboard support. • Already in use by faculty and staff. • Includes software support plan. 	<ul style="list-style-type: none"> • Will not require a licensing fee. • Costs will remain stable; the only costs are those associated with salaries, whereas Blackboard licensing fees increase every contract period. • CCU retains control of platform environment and storage.

Recommendations Based on Comparisons

The following are the recommendations for proceeding with the LMS selection process for the university based on the cost and benefit comparison. The selection committee recommends that CCU migrate to Moodle as its LMS platform for the following reasons:

- Blackboard Learn and Moodle offer similar functionalities and represent virtually equivalent costs; however, Moodle represents a stable choice that will not involve migrating to a cloud-based platform in the near future.
- Moodle is the most widely used LMS in the world with a significant online presence and community of users to provide support and information on the platform.
- Moodle represents a contract-free option for CCU that will allow the university to have exclusive control of the LMS operations, content, and scheduled downtime.
- Migrating to Moodle allows CCU to maintain its self-hosting configuration.

Implementation Strategy

As part of the decision-making process, the selection committee carefully considered the effort, time and expense involved in implementing a new LMS at CCU. Since this was a major factor in the decision, the implementation requirements for Moodle are detailed here in an effort to further explicate the recommendations of the selection committee for CCU to migrate to the Moodle platform.

Overview

Implementing Moodle will impact the LMS administrative team, the administrators of the various redundant servers currently housing the LMS, the networking administrators, and all of the faculty, staff and students who currently utilize the LMS for courses and other content housed within the LMS. The implementation will also impact SIS processes, as well as course management processes such as grading and content management. Resources impacted by the migration to Moodle include the servers currently used to house Blackboard Learn. The effort

will extensively involve the LMS administrative team, which consists of the LMS manager, the existing LMS administrator, the half-time programmer, and an additional LMS administrator (who will be hired to support the Moodle migration)

Technology

The LMS migration to Moodle will impact the SIS systems, such as Banner. Given the level of experience of the LMS administrative team (both of whom were at the university when it migrated to Blackboard Learn in 2010), the integration of Moodle with the SIS systems is anticipated to be relatively smooth from a technical standpoint. The hardware required to implement Moodle, 5 application servers, 4 database servers, and 4 files storage servers, is already in place at CCU and will supply a redundant configuration for optimum system stability. The software required for the implementation is available free online from Moodle.com. The LMS administrative team will add an additional administrator to support this migration. The team will need to complete training for Moodle and will be required to develop new training or identify free existing training for other impacted staff, faculty, and students on campus.

Management

Responsibility for carrying out the implementation of Moodle at CCU will rest with the LMS administrative team. The LMS manager will bear primary responsibility for deciding how to implement Moodle and determining the specific timeline. The LMS administrators will be responsible for supporting the LMS manager in these efforts, as well as providing training for IT personnel, faculty and staff. More specific details regarding the roles and responsibilities of the LMS team are detailed in Table 7.

Table 7

LMS administrative team roles and responsibilities

LMS administrative team member	Roles and responsibilities
LMS manager	<p>Functions as primary manager of the LMS.</p> <p>Additional responsibilities in relation to the LMS migration include:</p> <ul style="list-style-type: none"> • Design implementation plan. • Identify planning committee members. • Serve on planning committee. • Make configuration decisions for Moodle based on CCU user data and LMS functionality requirements. • Enforce policies and procedures for migration of data from Blackboard to Moodle as determined by the planning committee. • Serve as point person for data migration from Blackboard to Moodle. • Devise detailed testing schedule. • Identify testing participants in conjunction with LMS administrator.

LMS administrative team member	Roles and responsibilities
	<ul style="list-style-type: none"> • Advertise scheduled downtime for Moodle deployment to campus community. • Be available for troubleshooting throughout the deployment of Moodle.
LMS administrator 1	<p>Functions as primary administrative support person for the LMS.</p> <p>Additional responsibilities in relation to the LMS migration include:</p> <ul style="list-style-type: none"> • Serve on planning committee. • Support LMS manager for data migration from Blackboard to Moodle. • Design testing scenarios for testing phase. • Identify testing participants in conjunction with LMS manager. • Document testing results. • Serve as point for testing Moodle prior to going live.

LMS administrative team member	Roles and responsibilities
	<ul style="list-style-type: none"> • Be available for troubleshooting throughout the deployment of Moodle.
LMS administrator 2 (to be hired prior to planning phase)	<p>Functions as secondary administrative support person for the LMS.</p> <p>Additional responsibilities in relation to the LMS migration include:</p> <ul style="list-style-type: none"> • Serve on planning committee. • Support LMS manager for data migration from Blackboard to Moodle. • Develop faculty and staff training on Moodle. • Develop and provide scripts for helpdesk support staff. • Be available for troubleshooting throughout the deployment of Moodle. • Liaise with on-campus student technical support services to assist with training customer representatives for Moodle support.

LMS administrative team member	Roles and responsibilities
Programmer (half-time)	<p>Functions as the primary programmer for the LMS application servers. Additional responsibilities in relation to the LMS migration include:</p> <ul style="list-style-type: none"> • Serve on planning committee. • Serve as a consultant to the LMS manager throughout the implementation process. • Assist LMS manager with integration phase of Moodle implementation and ensure university systems are fully functional and integrated. • Participate in testing phase of Moodle implementation.

In carrying out the implementation of Moodle, there are six steps that the LMS manager will follow to ensure a successful implementation (Foreman, 2013a).

Step 1: Plan. The LMS manager will begin the process by planning the implementation of Moodle. Moodle may have resources to assist with this planning, or the LMS manager may find some resources provided by other institutions who have undertaken similar migrations from Blackboard to Moodle. As part of the planning phase, the LMS manager will identify a committee to assist with planning decisions and processes. The committee members will be

identified by the LMS manager in conjunction with the Director of Online Programs. The committee will consist of the Director of Online Programs, 4 faculty members (two of whom have 3-5 years of online teaching experience, one of whom has one year of online teaching experience, and one of whom uses the LMS for face-to-face courses), two staff members (each of whom acts as the administrator/course instructor for online program orientations housed on the LMS), one student representative, and the LMS administrative team members.

Step 2: Configuration. The LMS manager will need to make configuration decisions based on CCU's specific LMS user data and operations and the LMS's data fields, functionality and capabilities. The configuration decisions impact user profiles, domains and audiences, administrator security roles, course catalog and metadata, course and curriculum structures, evaluations and assessments, competencies, notifications, and reports (Foreman, 2013a).

Step 3: Integration. In order for the LMS to function properly as a component of the university's course management system, it must integrate with a number of other university systems. These systems include:

- SIS which contain user accounts and profiles
- Single sign-on (SSO) which allows users to access a variety of university systems, such as financial aid, the registrar, and the LMS with a single sign on rather than logging in individually to several systems.
- Portal systems which is concerned with how users access the LMS. LMS access can be through the deep links directly to the course web pages, or through application programmer interfaces (API) which allow the IT department to access data and functionality of the LMS (Foreman, 2013a).

- Enterprise search systems (which allows users to search only information on the enterprise site) can include LMS information (Foreman, 2013a). Whether or not to include the LMS in the CCU enterprise search system will be a decision for the LMS manager or the LMS implementation team.

Step 4: Migration. Migration of courses from Blackboard to Moodle will be an integral part of the Moodle implementation. The LMS planning committee will decide how far back to go when migrating the courses to Moodle, and these decisions will be enforced by the LMS manager in executing the migration. The idea is to migrate as little data as possible to minimize errors and problems with the implementation (Foreman, 2013b). In addition to migrating course data, the migration will also include migrating user data. The courseware will also need to be migrated. The complexity of this step will be significantly lessened by following the IMS Global standards for academic course migration. Once the course information and user data is migrated, the LMS manager can perform a transcript migration which will map the course and user data to each other, if necessary.

Step 5: Testing. The goals of testing the system are to ensure that Moodle is fully functional, that the courses migrated to Moodle are fully functional and complete, that user data has successfully transferred to Moodle from Blackboard, and that the resulting configuration of Moodle is behaving as planned (Foreman, 2013b). The LMS administrative team will be responsible for designing tests for users. A detailed schedule will be developed by the LMS manager, and testing results will be carefully documented. The LMS administrator will serve as the testing lead to record bugs and interview testers. Test users should be sampled from end-users. Once the extensive testing procedure has been completed, Moodle will be ready to go live.

Step 6: Go live. Taking Moodle live will be the final step of the implementation (Forman, 2013b). The “go live” date should ideally take place during a time when courses and users are not active, such as Winter break. The LMS administrative team will prepare scripts for the helpdesk support staff to assist end users with the new LMS. The LMS manager will advertise the scheduled downtime to the university community well in advance to avoid issues during the transition from Blackboard to Moodle. The LMS administrative team, as well as the various server administrators will be available for troubleshooting throughout the deployment of Moodle.

Risks and Challenges

The LMS migration project at CCU is subject to some risks and challenges that are potentially significant. The two challenges that carry the most risk are the relatively short deadline for this extensive project and the implementation of an effective change management process. The Blackboard contract expires at the end of the university’s fiscal year, July 1, 2016. This means that the Moodle implementation has to be accomplished in less than 8 months, and LMS implementation projects have been known to take much longer. The change management process will determine to what extent the end-users buy-in to the new system and are willing to adopt the new technology. The end-users’ reaction to the new system can be the difference between the Moodle project being a success or a failure. The other challenges, such as the large amount of data to be migrated and the risk of technical difficulties during Moodle deployment, will have a lesser impact on the success of the project, though they may cause delays. Table 8 lists all of the potential risks and challenges associated with the Moodle implementation project and the proposed strategies to mitigate them.

Table 8

Risks and Challenges

Risks and Challenges	Strategies for Mitigation
Courses in the current LMS may have “bloat” from being copied over from semester to semester.	Have faculty members build courses from scratch in Moodle. They can download the components of their courses, then use the components to build a fresh course in Moodle.
Moodle may experience technical difficulties while going live.	Plan to go live during a period when campus is closed, such as Winter Break.
Many faculty members maintain a large number of old courses on Blackboard.	Advertise data limits and dates of migration well in advance. Provide faculty with job aids on how to download course materials that do not meet the threshold for data migration.
Faculty and students may be resistant to a new platform	A Change Management plan should be created and implemented to ensure the successful implementation and adoption of Moodle at CCU (Rogers, 2003).
LMS migration project may require more time to complete than the current deadline allows.	LMS implementation team will provide a plan in advance and will address timeline concerns. The university leadership could hire additional staff to assist with migration, or they could extend the current contract with

Risks and Challenges	Strategies for Mitigation
	Blackboard and delay the go live date for Moodle.

Despite these risks and challenges, the committee wholeheartedly recommends Moodle as the LMS solution for CCU. The LMS implementation team is experienced with implementing a new LMS and with the change management process, and the LMS selection committee is confident that they are up to the challenge of implementing Moodle at CCU. By identifying the potential risks and challenges and the strategies that can be used to mitigate them, the LMS implementation team will be able to overcome these obstacles and make the Moodle implementation a success.

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