

## SELECTING A COURSE MANAGEMENT SYSTEM

Selecting and implementing a course management system

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### ABSTRACT

*Institutions of higher education are embracing the role of the Internet as a medium to promote on-demand communication between faculty and students. As such, online course management systems have become an efficient and effective means of facilitating learning outside the classroom. To ensure that a course management system meets the needs and goals of an institution, it is vital that the selection and migration of content to an online courseware platform is done systematically. This article highlights key stages in the selection and migration process. In addition, practical recommendations are provided focusing on sensitivity to an institution's culture, resources, political climate, and goals for quality and growth.*

### Selecting and Implementing a Course Management System

In the emerging age of higher education, technology is rapidly transforming the manner in which information is stored, transmitted, and retrieved (Apps, 1994). Institutions of higher learning are experiencing a paradigm shift which embraces the online learning community that meets the needs of diverse and dispersed learners. As such, many institutions are utilizing course management systems to facilitate online, on-demand communication between faculty and students. As technology functions to enable student learning in ways not previously possible, "effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally" (Kelly, 2000). With the reported growth and increasing demand in e-learning, institutions are searching for a systematic approach to select online courseware platforms.

A variety of reasons exist for institutions to migrate to an online courseware provider. An institution may either be integrating course management technology for the first

time or may have an operational e-learning solution and be searching for a new online courseware platform. Typically, the need to select an online course management system falls into one of four general categories:

*1.Promotion of e-Learning* - Programs that have not utilized a course management system previously may be looking for options to allow for the introduction and integration of a facilitated educational delivery system.

*2.Program Growth* - In some cases, a program's success may simply outpace the current course management provider's capabilities or features. In these cases, it becomes necessary to seek out providers that can meet the unique needs of an established program.

*3.Due Diligence Technology Review* - A reality with today's changing technology is the need to stay updated with technologies available. As new technologies become available, an institution may need to examine the availability of the emergent features within various course management systems.

*4.Inaccessible Technology* - The technology market is rapidly evolving. As a consequence of this growth, course

management providers may merge, be purchased by another company or may simply dissolve in the competitive market.

The expanded selection of competitive online courseware platforms allows a university to become a new type of e-learning consumer, in the position to require a variety of features and functionality in the online courseware platform. Institutions should be systematic in how they approach the selection and migration of content to the online courseware platform, and this article outlines one institutions journey through migrating to a new online courseware platform.

The process of selecting an online course management system can be timely and cumbersome, but the importance of the task mandates that it be done with diligence and planning. Key stages in the selection process include:

1. Conduct a needs analysis,
2. Develop a request for proposals (RFP),
3. Evaluate RFP responses,
4. Conduct campus visits,
5. Select finalist and complete negotiations, and
6. Create implementation and user education plan.

## **Conduct a Needs Analysis**

The first step in selecting a platform entails conducting a needs analysis within the institution to evaluate program strengths and weaknesses. The focus at this point is not on the isolated capabilities of the course management system, rather the unique needs of the university that dictate what type of course management features are needed for a particular environment or program. When completing the needs analysis, one must examine the

features of the course management system, hosting capabilities and service/support.

The number of course management systems available is matched only by the range of different features offered by each system, variations in whether the course management system is hosted by the service provider or by the institution, and options in service and support. One of the first steps in preparing to select a course management system is to evaluate system features and capabilities as mandatory, optional, or unnecessary for the needs of the institution. In our analysis, we identified 88 individual features targeting 6 major areas: course features, testing features, grade book, course authoring tools, other services, online campus administration. The individual features considered are listed in Appendix A.

During this analysis, it is important to consider the type of program (supplement, hybrid, or online), current and projected program enrollment, number and type of courses offered, instructional technology department capabilities, budget, institutional goals and mission, and faculty/student experience with online systems. With the wide range of potential stakeholders that are impacted by the course management system, it is essential to involve all parties early in the evaluation process. The collaboration between faculty, administration, students, and computer services will ensure that the final course management product can be effectively implemented while promoting maximum educational benefits.

## **Develop a Request for Proposals**

The request for proposals should identify the unique and specific needs of the institution, highlighting the desired courseware features and functionality, in addition to administrative program support needs.

After completing the institutional needs analysis to specify

the desired features and functionality, we recommend creating a matrix of the specific features, services and capabilities for which the potential course management systems will be evaluated. Two resources we found helpful in creating a comprehensive list/matrix include the Western Cooperative for Educational Telecommunications (WCET)

EduTools (<http://www.edutools.info/course/>) and the Learning Management System Evaluation Framework by Fred Beshears ([http://istsocrates.berkeley.edu/fmb/articles/lms\\_eval/index.html](http://istsocrates.berkeley.edu/fmb/articles/lms_eval/index.html)).

In reviewing application software providers, it is important to also consider the technical support and services the institution will need from the courseware. Such items may include:

- Migration of content and initial training of online instructors,
- System architecture and reliability
- Custom application and course development
- Helpdesk support and services
- Vendor experience and qualification
- Research and development future initiatives

The institution must consider the scalability of their program and the ability of a course management system to accommodate the needs of continued growth, to ensure the platform selected will be able to grow with the institution as enrollments in their program grows. Those selecting a course management system should review the system architecture and reliability to determine redundancy, average downtime, and back up servers available. If the institution will need assistance in course development, it would be appropriate to investigate the system's support and resources available, their cost, and options for including such support in contract negotiations. For large

institutions with high enrollments, helpdesk support may be a necessity and the course management system should clearly outline the services available. It is equally critical for institutions to consider the financial viability of a company that offers course management systems, and to review the vendor qualification and experience in the field. Examining these topics will help reveal 1) which companies are likely to survive the volatile technology market, 2) which companies invest in the future through research and development, and 3) which companies maintain a reputable product to service the needs of institutions in higher education.

## Evaluate RFP Responses

RFP responses were evaluated by a committee selected to include faculty from a range of disciplines, online administrators, financial administrators, support staff, instructional technology personnel, and students. The evaluation focused on key dimensions relevant to the development and implementation of an online course: 1) Overall Platform Evaluation, 2) Intuitiveness/Ease of Use, 3) Navigation, 4) Reliability/Performance, 5) Course Communication Tools, 6) Course Assessment Tools, 7) Gradebook/Feedback Tools, 8) Content Creation, 9) Student Support Services, 10) Faculty Support Services, 11) Administrative Features/Reporting, 12) Other Requirements, and 13) Overall System Opinion. Each dimension was rated from 1 (did not meet expectations) to 5 (exceeds expectations). The dimensions and complete rating criteria are found in Appendix B.

## Conduct Campus Visits

Once the top 3 to 5 finalists have been selected, you will want to invite each company for a campus visit to demonstrate the capabilities of their course management system. The goal of the campus visit is to examine ease of use, usability limitations, and intuitive functioning. The

campus visit gives evaluators the advantage of comparing usability issues when the system is being operated by an expert user who is familiar with the capabilities, functions and features of that particular course management system. The campus visit entailed the following:

- *Vendor Presentation:* The vendor presentation allowed each vendor to display their strengths and provide an executive summary.
- *Guided Demonstration:* To ensure a fair comparison between course management systems, it is important to provide explicit directions for the guided demonstration. Our guided demonstration of course functions and features consisted of a live demonstration that provided evaluation and comparison of the following course authoring capabilities: 1) Course Setup, 2) Lecture Creation, 3) Multimedia Upload 4) Groups, 5) Threaded Discussion, 6) Tests, 7) Gradebook, 8) Chat/Whiteboard, and 9) Administrative tasks. A disk, with necessary content, was provided to each course management vendor upon arrival at the university. A university laptop computer containing no additional programs or plug-ins was used for the demonstration. Appendix C provides a complete description of the guided demonstration directions.
- *Hands-On Session:* Conducted in a live course for faculty, administrator, and student groups, the hands-on session also provided an outlet for specific user groups to test the system and provide feedback about the experience and the usability/functionality of each system.
- *Question and Answer Session:* Any remaining questions or concerns were addressed in the Q&A session
- *Conclusion:* The campus visit concluded with the

vendor wrap up of their product.

Each requested demonstration component was evaluated as not shown, minimal functionality, acceptable functionality or superior functionality.

## **Select Finalist and Complete Negotiations**

The institution created one point of contact for vendors to direct all questions or concerns. Questions and answers were distributed to all vendors to ensure all vendors had the same information, and a vendor conference call was held to address questions/issues vendors had prior to submitting their RFP response. The RFP committee evaluated the proposals and completed a vendor proposal comparison matrix, to create a quantitative comparison of features based on the RFP matrix.

All vendors completed a self-evaluation based on the matrix provided in the RFP, which identified specific features and functionality the institution was seeking. Members of the student user group, administrator user group, and faculty user group all completed evaluation forms to record their feedback. The RFP committee completed a guided demonstration evaluation and an overall vendor evaluation form. All feedback and evaluation results were combined, tallied, and evaluated by the RFP committee. After the results were tabulated, the RFP committee made a unanimous decision and drafted a recommendation that was sent to the university's executive staff. Negotiations with the selected course management provider were completed by the executive staff.

## **Create Implementation and User Education Plan**

Once a new online courseware provider is selected, migration of course content from the previous platform can start immediately if this issue has been covered in the RFP process. The courseware platform provider takes the lead on migration, gathering background information on

each course from the home institution and constructing a migration plan with a target “live” date. As the institution's previous platform provider has likely archived several terms/semesters worth of content, negotiations surrounding the original contract often need to take place between the institution and the previous platform provider to determine how much of the content can be transferred and how this transfer will occur. These negotiations should specify the IT configurations needed to transfer the content, and associated costs, as well as the extent of administrative support provided by the institution for the copying and saving of content. It is during this period of transfer from the old to the new platform that the home institution must create copies of all content that it would possibly need in the future. Cases of grade appeals, online classroom conduct issues, etc., should be reviewed to ensure that all relevant documentation is copied from the platform.

The impending migration of content can provide ideal circumstances for the home institution to critically evaluate the quality of its existing online curricula. Depending on the online curriculum model used by the institution, the content prior to migration may have been housed in individual instructor's course shells, with a new version of the course essentially being offered each term, or the content may have been in a singular “master” version duplicated from each term to ensure consistency. Frequently, the former model is the one in place, and the home institution is faced with reconstructing a “master” version of each course that can be migrated to the new platform, as most online courseware providers will not migrate years and years' worth of online course iterations. A point of contact, a subject-matter expert, must be established for each online course so that the new platform's migration team can troubleshoot any content copying issues with informed individuals. As online operations at some institutions take place in spheres removed from face-to-face operations,

the evaluation of existing online content can provide an opportunity to establish unified academic oversight procedures.

Because the online course content must be critically reviewed in preparation for migration, it is essential that the implementation plan include ample time for content matter experts, including experienced online instructors and academic department personnel, to determine the action steps needed to create high quality “masters” for each course offered online. Many institutions conclude that large-scale course re-development needs to take place prior to migration, a process which involves the selection and training of new course developers. If the time frames allow, this re-development is most conveniently undertaken pre-migration, with the new online courseware platform providing new course shells for the developers to use and be trained within. However, it may not be possible to re-develop content prior to migration, meaning that the institution must be willing to suspend curricular quality improvements until after the platform has been implemented and users become comfortable with it. Either way, the shift to “master” versions of courses, versions that are duplicated from each term for the instructor to customize, is often a difficult transition for institutions whose instructors are used to having total freedom over the content in their courses.

Implementing a new online courseware platform represents a cultural shift just as much as a technological one. For this reason, the user education plan created must be comprehensive and take a broad view of change management, a view that includes users' affective reactions to the new technology in addition to considering the technical skills that must be taught. The shift from instructor copies of courses to singular “master” copies represents one area of attention in change management

and is perhaps most effectively dealt with in terms of the institution's goals for academic quality and continued accreditation. Rationales for the decision to shift platform providers, and make changes to curricular structures, must be clearly and repeatedly transmitted via an inclusive communications plan. Involving upper-level administrators in academic affairs, as well as academic departmental representatives, in communicating with instructors is key to affirming that the decision to change platforms is about the shared values effective teaching and learning.

Prior to or coinciding with the migration of content, it is essential to launch a wide-spread communications campaign, diverse in method and voice, to build excitement surrounding the technology implementation. Considering the target audiences for communication will determine the best methods, the overarching goal being to provide ample opportunities for stakeholders instructors, students, and administrators to ask questions, air concerns, and make suggestions regarding training. One model for a communications plan would combine asynchronous communications (e-mail and discussion boards) with synchronous opportunities (live chats and conference calls). Because it is difficult to ask questions about a platform the user has not experienced, the communications plan should also include an online training module or "guided tour" through the look and feel, features and functionality, of the new platform. During the RFP review or as part of contract negotiations, the home institution should request a demonstration course (the same one used during the campus visit or one modified to include the institution's branding) that can be used to acquaint users with the platform. As this demonstration course should be made available several semesters in advance of the platform implementation date, it is perhaps most helpful to have a demonstration course that simply provides an overview of the platform and does not

require the user to begin training, recognizing the short shelf-life of training that is not immediately applied.

The centerpiece of the user education plan will be the mechanisms used to train individuals to actually use the platform, and ideally, this training will begin within a month of the platform's "live" date (of course, the administrators within the institution's online program will have been trained prior to this date). Recommended requests to the new platform provider include a student orientation course and an instructor training course, each of which can be customized by the home institution to include course policies and procedures. Detailed specifications for what these courses will accomplish (learning objectives) and include (text, graphics, interactive multimedia) should be clarified prior to delivery to avoid the possibility of extra costs for revision time. Again depending on the model of the institution, a separate training course may be needed for course developers, a course different in content from the instructor one, with an emphasis on course authoring, content locking (if applicable), and the terms and conditions of course development contracts. Courseware platforms often provide technical support different in kind and scope for course developers, and this support should be discussed during the RFP and contract negotiation period.

Regardless of the particulars of the user education plan, the constant must be open communication. Training on a new technology in isolation, and without immediate opportunities to translate new knowledge into practice, often leads to poor performance and a lack of the user buy-in that is so critical for maintaining morale through a time of change. Accompanying each training resource (demonstration course, instructor and developer training courses) should be contact information for individuals at the home institution and from the new platform provider who can answer questions and provide "desk-side

coaching” for users who need it.

## **Conclusion and Recommendations for Other Institutions**

Even the most comprehensive and detailed RFP process cannot ensure a positive experience and outcome. Many pitfalls and frustrations result from an over-reliance on the RFP process and a lack of attention to how that process will work at a given institution. Leaders of the RFP process must at all points be sensitive to the particulars of their institution's culture, political climate, and goals for quality and growth. With this in mind, the following recommendations are offered to guide an institution's execution of an RFP process:

### **Communication and shared governance:**

When compiling an RFP review board, it is necessary to include both primary and what may be considered *secondary* stakeholders to ensure that a diversity of perspectives is represented in the process. Primary stakeholders usually include institutional administrators, representatives from enrollment and student services, board members, and online faculty and students. Expanding the stakeholders will guarantee broader representation across the institution and thus a potentially more successful implementation process. Broad representation of faculty and students on an RFP board is often difficult to achieve but nonetheless absolutely critical to an effective review process. In addition to including faculty members who are open advocates of an institution's online learning program, it is also important to represent the new or resistant faculty member or academic departmental representative. The same is true in determining student representation. A “token” student cannot represent with any degree of validity what is ahead for the student user of a new platform. Include both experienced and new online students, even if this involves

conferencing in distance students via phone, as well as a representative from the institution's student governmental organization. This last student representative is important as many online platform implementations involve not only the fully-online course but also the supplemental courseware used in face-to-face courses and to administer electronic student evaluations. In addition to securing the potential for a more supported implementation, broad representation on an RFP review board also protects against one vendor or one campus group setting the agenda for the process or dominating negotiations. The more individuals on the review board, the more intense the negotiations, so selecting an effective review board leader/mediator becomes even more important.

### **Extra-platform features and considerations:**

Understandably, the focal point of negotiations with a vendor is the features and functionality of the product. However, extra-platform components are often the most important to the successful implementation of a new courseware. Build into the RFP and RFP review process ample opportunity to learn about the platform's technical services and support in the areas of content migration and user support (help desk, support for course developers, administrative reviewers, face-to-face students using the platform, etc.). Have a clear sense of your users' potential technical support needs so that, if necessary, support over the basic helpdesk package can be negotiated. Likewise, involve the IT department to determine if the institution's existing technology infrastructure can support the processes surrounding implementation including the uploading of student and faculty information as part of each term's scheduling and to decide if the vendor or the institution will host the servers on which the information is kept. During these negotiations, the possibility for single sign-on access to institutional resources (online enrollment,

library, and courseware resources) can also be determined.

Another extra-platform component that is frequently overlooked is the track record of the vendor its business plan, financial viability, user ratings, pricing schedule, etc. Request this information (often packaged as an annual financial report for stockholders) as well as investigate other institutions using the platform. Perhaps the "bottom line" of these extra-platform considerations is a reminder *not* to focus solely on the bottom line when selecting a vendor. Focusing more on price than value can result in the selection of online courseware that only meets the immediate, not future, needs of the institution.

## **Institutional needs:**

To ensure the most productive experience with vendors, it is important for the institution to make its unique needs clear. Too often, RFP boards overlook the necessity of educating vendors about the institution's culture and particular goals. Provide background information on the institution including its mission and vision, history, student and faculty demographics, and strategic planning goals so that vendors can customize their presentations and packages. This information will enable vendors to determine what other online processes they can support (i.e. institutional research and assessment), as well as whether or not their product will be able to meet the institution's goals for program growth. Overlooking platform scalability can mean stunting the growth of an online program. Overlooking the particulars of an institution's culture and demographics can mean a contentious relationship between platform provider and user.

Perhaps the most important institutional need is in the area of user education. An institution must have accurate knowledge of the various user groups affected by the platform transition, specifically the technology skill level,

aptitude, and comfort with change of its users. The time frames for migration and training that seem feasible to platform providers and to online learning administrators may be completely out of sync with the reality of the users. Surveying online instructors and students is a time-consuming but necessary step before implementation time frames are determined. Additionally, communication across the institution is critical to ensure that the implementation of the new platform does not coincide with other new technology adoptions or institutional initiatives also requiring significant time investments from the same groups of users.

## **References**

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## **Appendix A**

### List of Features by Major Area

#### **Course Features**

- Course Home/Introduction Page
- Course Announcements
- Notification of New Content/Posts (from students or instructor)
- Calendar (course-related events added by instructor and personal or custom events)
- Web-based Course Email tool (for instructor & students w/ no use of email client required)
- Threaded Discussion Area

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- Chatroom
  - Whiteboarding
    - w/ Math/Science Symbols
    - w/ Foreign Language Symbols
  - Unit-Based Design (ability to arrange content based on units containing the lecture, quiz, threads, readings, etc. for a given week)
  - Feature-Based Design (ability to arrange content based on features so that all exams are in one area, all lectures are in another area, etc.)
  - Student Journal (private for student view only)
  - Student Journal (viewable/gradable by instructor)
  - Course Content Search
  - Web References
  - Equation Editing tools for students
  - Course Map
  - Content Pages
  - Online Glossary
  - Ability to Setup student groups (with auto creation of Threads, Chatrooms, Email groups, etc.)
  - Can lessons/exams be assigned to a specific group?
  - All portions of course content/tools/authoring areas can be accessed in 2 clicks or fewer.
  - Single browser window needed (no need for multiple browsers to be open to access threads, gradebook)
  - Student submission of assignments (dropbox) w/ variety of extensions allowed
- Testing Features**
- WYSIWYG Editing for test question creation (ability to Upload images, audio files, etc.)
  - Multiple Choice
  - True False
  - Matching
  - Many Multiple Choice
  - Short Answer
  - Fill-in-the-Blank
  - Essay
  - Password Protection
  - Auto-Grading (objective questions only)
  - Instructor Feedback by question
  - Instructor Feedback for overall exam
  - Test Question Pooling/Randomization
  - Exam Question Import Tool
  - Practice Exams
  - Ability to Grade content items directly in the Gradebook and to provide individualized feedback to students
  - Test Preview
  - Timed Tests
  - Browser Lock Down during testing
- Gradebook**
- Student tracking (page loads and time on page)
  - Time/Date stamp of gradable items
  - Ability to Create Custom Gradeable Items
  - Can gradebook be edited while course is being offered (addition/deletion of assignments, weighting)
  - All Content Items Show in Gradebook as gradable

items (threads, tests, journal, chat sessions, student document uploads)

- Ability to weight grades
- Final Grade Calculation (updated & available to student throughout course session)
- Gradebook Data Export Tool

## Course Authoring Tools

- WYSIWYG Editing Tools
- Equation Editing tools for instructor authoring
- Course Setup Wizard
- Authoring mode navigation has same navigational layout as the course itself
- Image/Document Upload Wizard
- Instructors can revise/edit the course during the course's offering
- Instructor can toggle to student view without logging out
- Course Look and Feel Customization
- Timed Release of Content/Units
- Group Management Tools
- Duplication of All Course Content from term to term (lectures, quizzes, thread topics, etc.)
- Duplication of Specific Course Items from term to term
- Ability to upload streaming media files directly into the course

## Other Services Offered

- Online Evaluation Services
- 24x7x365 Helpdesk Support

- University-specific toll-free helpdesk phone number
- Free Online Faculty System Orientation/Training courses
- Free Student Orientation Course
- Online, context-sensitive, user manual for students
- Backend Integration of Student Enrollment Data
- Backend Integration of Courses/Multiple Sections
- Online, Interactive Faculty Tutorial/Courses
- Online, context-specific, user's manual for instructors

## Online Campus Administration

- Automatic browser update notification
- Course listings that display current courses & archival of past courses
- Ability to create and edit terms/date settings
- Ability to create new course offerings
- Ability to make changes directly to online campus informational pages (WYSIWYG Editing)
- Ability to review user logins (instructors and students) from the administrator's interface
- Ability to view login and system usage of students and instructors from the administrative interface
- Does the login page have a password/user id look up feature?
- Ability to create multiple user roles based on permission to campus/term/course levels
- Ability to modify student data from one interface and have change replicate through system
- Supports Recent Browser Releases
- Multiple Operating Systems Supported (PCs, Macs)

- University Owns Courses/Content

## Appendix B

### Overall Platform Evaluation

#### **Intuitiveness/Ease of Use**

- The layout of the course was appealing
- Course menu and feature layout was easy to understand
- The location and flow of course management features was logical
- Course features and tools were tightly integrated (i.e. threaded discussion, whiteboards, and content authoring tools open within course layout and use consistent navigation)

#### **Navigation**

- Required less than 3 clicks to access course features and functions
- It was easy to tell where I was in the course
- Tasks were performed with speed and accuracy

#### **Reliability/Performance**

- Pages loaded in a reasonable amount of time
- The system was free of error messages & "bugs"
- The system did not crash or freeze up when attempting to perform the functions

#### **Course Communication Tools**

- The course system contained effective asynchronous communication tools (threaded discussion, email)
- The course system contained effective synchronous communication tools (chat, whiteboard)

#### **Course Assessment Tools**

- Allowed easy creation and formatting of new test questions
- Allowed easy import of test bank questions
- Included appropriate test setup and security features (proctor passwords, browser lockdown, preset access dates, timed exams, etc.)
- Tests provided students with feedback and scoring information
- Easy creation and insertion of question pools

#### **Gradebook/Feedback Tools**

- Gradebook setup easy to understand and efficient
- The gradebook included student activity tracking
- Grading of student work from the gradebook was included
- Creation of create custom grading items and modify grading scales

#### **Content Creation**

- The system allowed "live" editing with visual tools (no html required)
- The content editing tools allowed easy upload and inclusion of media files (images, video, audio, hyperlinks)
- Content tools allowed easy building of tables, utilization of special symbols, and formatting tools (bulleted lists, font size/color, and

#### **Student Support Services**

- The system offered online orientation to students
- Help and tips for students were offered throughout the system

## Faculty Support Services

- The system offered online training and documentation to students
- Help and tips for faculty were offered throughout the system

## Administrative Features/Reporting

- The system enabled courses to be set up and displayed according to college, school, and term
- The system included helpful standard reports
- The system allows easy and efficient creation of new terms
- The system allows multiple roles or levels of access for different user types

## Other Requirements

- List other requirements here as appropriate

## Overall System Opinion

- Rate your overall impression of the system and the company's ability to meet the needs of the university's online learning programs

## Appendix C

### Guided Demonstration of Course Functions and Features

The guided demonstration of course functions and features will consist of a live demonstration to provide evaluation and comparison of the following course authoring capabilities: 1) Course Setup, 2) Lecture Creation, 3) Multimedia Upload 4) Groups, 5) Threaded Discussion, 6) Tests, 7) Gradebook, 8) Chat/Whiteboard, and 9) Administrative tasks. We would like you to complete these activities after your general company/system presentation. A disk, with necessary content, will be provided to each vendor upon arrival at the university. A

university laptop computer will be used for the demonstration.

### **Part I: Course Setup**

Step 1: From the course homepage, open the course authoring environment/tool.

Step 2: Create a weekly unit/module.

Step 3: Create the following module items:

- a. Lecture
- b. Discussion
- c. Quiz

Step 4: Set the unit start/end dates for the module.

Step 5: Show your course calendar feature and post an exam reminder for students.

Step 6: Demonstrate how your system allows students to track their progress in completing modules, assignments, and due dates throughout the course.

### **Part II: Lecture Creation**

Step 1: Create a text lecture using "week1.txt" from the disk provided.

Step 2: Paste the text from the document into your text editing tool.

- a. Bold the first line "Welcome to the online classroom!"
- b. Change the size and color of the font.

Step 3: Upload the image located on the disk called "mackay hall.gif" into your system and then insert it into the text.

- a. Resize the image.
- b. Move the image to a different place in the text.

Step 4: Using your platform's equation editing tools, create the equation (located on the disk provided) called "equation.doc" and place in the lecture.

Step 5: Insert a 3 row/3 column table with a maroon 3 pt. border and a gold Background.

- a. Demonstrate creation of a table within a table cell.
- b. Demonstrate adding a column and/or row to the existing table.
- c. Demonstrate edition of an existing table (i.e. resizing columns, changing cell properties, colors).

Step 6: Go to <http://www.whitehouse.gov> and copy the header images and first paragraph of text, and paste it into the lecture.

Step 7: Undo your last action.

Step 8: Copy and paste the text from pc mission-vision.doc into the lecture.

Step 9: Create a hyperlink to an internet site.

Step 10: Does your system have a "full-screen" editing option? If so, please demonstrate.

Step 11: Does your system have a spell check? If so, please demonstrate.

Step 12: Save the lecture.

Step 13: Open up the "student view" of the lecture and click on the hyperlink that you opened. Then navigate back to the lecture.

Step 14: Open up the lecture again in the authoring environment and edit some of the text and then show the changes in the "student view".

### **Part III: Groups**

Step 1: Create two student groups in the course called Group A and Group B. Please show all of the features that are automatically associated with each group.

Step 2: Does your system have the capability to create group-specific assignments,

threaded discussions, tests? If so, please demonstrate how an instructor would assign such an item to a group.

### **Part IV: Threaded Discussion**

Step 1: Create a new weekly discussion thread with at least two discussion topics, and post a starter thread from the instructor.

Step 2: Show how your threads expand/collapse and the student/instructor response window. *(for this part of the demonstration, please use a threaded discussion that is already created in your demonstration course)*

Step 3: Show how your threaded discussion system allows instructors to easily sort threads based on the thread topic, author, date posted, read/not read.

Step 4: Demonstrate/discuss the following:

- a. Instructor edits/reordering of posts
- b. Can students delete their posts?
- c. Can instructors view and grade student posts from the course gradebook?
- d. Printing of posts
- e. Any other features of your threaded discussion system that you feel distinguish your system

### **Part V: Multimedia**

Step 1: Upload the "elearningoverview.ppt" file and link it into the course. Access the slideshow.

Step 2: Upload the "radiotune.mp3" file. Link it into the

course and play it.

## **Part VI: Tests**

Step 1: Create a quiz and demonstrate the following capabilities:

- a. turn exam access on and off using dates
- b. setting options for practice quizzes (multiple access) and exams (one-time access)
- c. set exam time limits
- d. set up a proctor password
- e. auto-grading options for immediate feedback and options for displaying exam information in the course gradebook

Step 2: Using the file "exam.doc", upload the questions into the testing system.

Step 3: Create a multiple choice question where the student can select multiple answers

(format the question as follows).

Question: The university has *campus centers* in the following cities:

- a. Fort Bliss, TX (correct)
- b. Independence, MO (correct)
- c. Shawnee, KS (incorrect)
- d. Charleston, NC (correct)
- e. Barstow, CA (correct)

Step 4: Create a fill in the blank question.

Question: Kansas City is located in:

Answer: Missouri or Kansas

Step 5: Create an essay question of your choosing that incorporates an image/audio file/ video etc.

Step 6: Demonstrate the ability to create a question pool.

Step 7: Demonstrate the ability to insert questions from a question pool into an exam.

Step 8: Demonstrate the ability to create test sections or pages.

Please submit your test question upload format to us in advance. We will prepare a file with several questions in your format and have it ready for you.

## **Part VII: Gradebook**

Step 1: Demonstrate gradebook set up (*you may use a previously created gradebook for this portion of the demo*). Show any items that are automatically created (For example, if you create a discussion thread, will it automatically show up as a gradable item?)

Step 2: Create a custom gradable item called: Extra Credit worth 10 points.

Step 3: Demonstrate student tracking and activity reports.

Step 4: Demonstrate how correcting a quiz grade will impact the final course grade calculation.

## **Part VIII: Chat & Whiteboard**

Step 1: Demonstrate setup of a separate chatroom called "office hours".

Step 2: Enter the chatroom and make some entries, then show us the archived transcript.

Step 3: Demonstrate the following whiteboard capabilities:

- a. document presentation
- b. ability to enter formatted text
- c. free hand drawings

- d. math symbol tool sets
- e. foreign language tool sets
- f. chat/polling/voting feature
- G. Archiving of whiteboard session

## **Part IX: Administrative Capabilities**

Step 1: Create a new student enrollment; enroll a guest lecturer or auditor role into the course.

Step 2: Show the standard reports that administrators can access (enrollments, faculty/student activity, etc.)

Step 3: Show us how to set up a term.

Step 4: Show us an example of a campus with courses in different levels (i.e. graduate/undergraduate, school of business vs. school of education).

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Step 4: Show us an example of a campus with courses in different levels (i.e. graduate/undergraduate, school of business vs. school of education).

### **ABOUT THE AUTHOR**

B.Jean Mandernach, Ph.D. Has served as Associate Professor of Psychology and Online Learning at Park University since 2001. Her research focuses on enhancing student learning through assessment and innovative online instructional strategies. In addition, she has interests in examining the perception of online degrees and the development of effective faculty evaluation models. Jean received her B.S. in experimental psychology from the University of Nebraska at Kearney, an M.S. in experimental psychology from Western Illinois University and Ph.D. in social psychology from the University of Nebraska at Lincoln. Dr. Mandernach may be reached at Jean.Mandernach@park.edu.



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